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	01 71 33	Protection of Adjacent Construction
	01 71 36	Non-Destructive Concrete Examination
01	73 00	Execution
	01 73 13	Application
	01 73 16	Erection
	01 73 19	Installation
	01 73 23	Bracing and Anchoring
	01 73 26 01 73 29	Existing Products Cutting and Patching
01	74 00	Cleaning and Waste Management
U1	01 74 13	Progress Cleaning
	01 74 16	Site Maintenance
	01 74 19	Construction Waste Management and Disposal
	01 74 23	Final Cleaning
01	75 00	Starting and Adjusting
	01 75 13	Checkout Procedures
	01 75 16	Startup Procedures
01	76 00	Protecting Installed Construction
01	77 00	Closeout Procedures
	01 77 13	Preliminary Closeout Reviews
	01 77 16	Final Closeout Review
	01 77 19	Closeout Requirements
01	78 00	Closeout Submittals
	01 78 13	Completion and Correction List
	01 78 19	Maintenance Contracts
	01 78 23 01 78 23.13	Operation and Maintenance Data
	01 78 23.13	Operation Data Maintenance Data
	01 78 23.19	Preventative Maintenance Instructions
	01 78 29	Final Site Survey
	01 78 33	Bonds
	01 78 36	Warranties
	01 78 39	Project Record Documents
	01 78 43	Spare Parts

01 78 46	Extra Stock Materials
01 78 53	Sustainable Design Closeout Documentation
01 79 00	Demonstration and Training
01 80 00	Performance Requirements
01 81 00	Facility Performance Requirements
01 81 13	Sustainable Design Requirements
01 81 16	Facility Environmental Requirements
01 81 19	Indoor Air Quality Requirements
01 82 00	Facility Substructure Performance Requirements
01 82 13	Foundation Performance Requirements
01 82 16	Basement Construction Performance Requirements
01 83 00	Facility Shell Performance Requirements
01 83 13	Superstructure Performance Requirements
01 83 16	Exterior Enclosure Performance Requirements
01 83 19	Roofing Performance Requirements
01 84 00	Interiors Performance Requirements
01 84 13	Interior Construction Performance Requirements
01 84 16	Stairways Performance Requirements
01 84 19	Interior Finishes Performance Requirements
01 85 00	Conveying Equipment Performance Requirements
01 86 00	Facility Services Performance Requirements
01 86 13	Fire Suppression Performance Requirements
01 86 16	Plumbing Performance Requirements
01 86 19	HVAC Performance Requirements
01 86 23	Integrated Automation Performance Requirements
01 86 26	Electrical Performance Requirements
01 86 29	Communications Performance Requirements
01 86 33	Electronic Safety and Security Performance Requirements
01 87 00	Equipment and Furnishings Performance
04.07.40	Requirements
01 87 13	Equipment Performance Requirements
01 87 16	Furnishings Performance Requirements
01 88 00	Other Facility Construction Performance Requirements
01 88 13	Special Construction Performance Requirements
01 88 16	Selective Construction Performance Requirements
01 89 00	Site Construction Performance Requirements
01 89 13	Site Preparation Performance Requirements
01 89 16 01 89 19	Site Improvements Performance Requirements
01 89 23	Site Plumbing Utilities Performance Requirements Site HVAC Utilities Performance Requirements
01 89 26	Site Electrical Utilities Performance Requirements
01 89 29	Other Site Construction Performance Requirements
01 90 00	· ·
	Life Cycle Activities
01 91 00	Commissioning
01 91 13	General Commissioning Requirements
01 91 16	Facility Substructure Commissioning

	01 91 16.13	Foundation Commissioning
	01 91 16.53	Basement Construction Commissioning
	01 91 19	Facility Shell Commissioning
	01 91 19.13	Superstructure Commissioning
	01 91 19.43	Exterior Enclosure Commissioning
	01 91 19.73	Roofing Commissioning
	01 91 23	Interiors Commissioning
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	01 91 23.73	Interior Finishes Commissioning
01	92 00	Facility Operation
	01 92 13	Facility Operation Procedures
01	93 00	Facility Maintenance
	01 93 13	Facility Maintenance Procedures
	01 93 16	Recycling Programs
01	94 00	Facility Decommissioning
	01 94 13	Facility Decommissioning Procedures

02 00 00	Existing Conditions
02 01 00	Maintenance of Existing Conditions
02 01 50	Maintenance of Site Remediation
02 01 65	Maintenance of Underground Storage Tank Removal
02 01 80	Maintenance of Facility Remediation
02 01 86	Maintenance of Hazardous Waste Drum Handling
02 05 00	Common Work Results for Existing Conditions
02 05 19	Geosynthetics for Existing Conditions
02 05 19.13 02 05 19.16	Geotextiles for Existing Conditions Geomembranes for Existing Conditions
02 05 19.10	Geogrids for Existing Conditions
02 06 00	Schedules for Existing Conditions
02 06 30	Schedules for Subsurface Investigations
02 06 30.13	Boring or Test Pit Log Schedule
02 06 50	Schedules for Site Remediation
02 06 65	Schedules for Underground Storage Tank Removal
02 06 80	Schedules for Facility Remediation
02 06 86	Schedules for Hazardous Waste Drum Handling
02 08 00	Commissioning of Existing Conditions
02 20 00	Assessment
02 21 00	Surveys
02 21 13	Site Surveys
02 21 13.13	Boundary and Survey Markers
02 21 13.23	Archeological and Historic Surveys
02 21 16	Measured Drawings
02 22 00	Existing Conditions Assessment
02 22 13 02 22 16	Movement and Vibration Assessment
02 22 18	Acoustic Assessment Traffic Assessment
02 22 13	Accessibility Assessment
02 24 00	Environmental Assessment
02 24 13	Natural Environment Assessment
02 24 13.13	
02 24 13.43	Water Assessment
02 24 13.73	Land Assessment
02 24 23	Chemical Sampling and Analysis of Soils
02 24 43	Transboundary and Global Environmental Aspects Assessment
02 25 00	Existing Material Assessment
02 25 16 02 25 16.13	Existing Concrete Assessment Concrete Assessment Drilling
02 25 10.13	Existing Masonry Assessment
02 25 19.13	Masonry Assessment Drilling
02 25 23	Existing Metals Assessment
02 25 23.13	Welding Investigations
02 25 26	Existing Wood, Plastics, and Composites Assessment
02 25 29	Existing Thermal and Moisture Protection Assessment
02 25 29.13 02 25 29.23	Waterproofing Investigations Roofing Investigations

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02 26 00	Hazardous Material Assessment
02 26 23	Asbestos Assessment
02 26 26	Lead Assessment
02 26 29	Polychlorinate Biphenyl Assessment
02 26 33	Biological Assessment
02 26 33.13 02 26 36	Mold Assessment Hazardous Waste Drum Assessment
02 30 00	Subsurface Investigation
02 31 00	Geophysical Investigations
02 31 13	Seismic Investigations
02 31 16	Gravity Investigations
02 31 19	Magnetic Investigations
02 31 23	Electromagnetic Investigations
02 31 26	Electrical Resistivity Investigations
02 31 29	Magnetotelluric Investigations
02 32 00	Geotechnical Investigations
02 32 13	Subsurface Drilling and Sampling
02 32 16	Material Testing
02 32 19	Exploratory Excavations
02 32 23	Geotechnical Monitoring Before Construction
02 32 23.13	Groundwater Monitoring Before Construction
02 40 00	Demolition and Structure Moving
02 41 00	Demolition
02 41 13	Selective Site Demolition
02 41 13.13	
02 41 13.23	Utility Line Removal
02 41 13.33	Railtrack Removal
02 41 16	Structure Demolition
02 41 16.13	0
02 41 16.23 02 41 16.33	Tower Demolition Bridge Demolition
02 41 16.43	Dam Demolition
02 41 19	Selective Demolition
02 41 19.13	Selective Building Demolition
02 41 19.16	Selective Interior Demolition
02 41 19.19	Selective Facility Services Demolition
02 41 19.33	Selective Bridge Demolition
02 41 91	Selective Historic Demolition
02 42 00	Removal and Salvage of Construction Materials
02 42 13	Deconstruction of Structures
02 42 13.13 02 42 91	Deconstruction of Buildings Removal and Salvage of Historic Construction Materials
02 43 00	Structure Moving
02 43 13	Structure Relocation
02 43 13.13 02 43 16	Building Relocation Structure Raising
02 43 16.13	Building Raising
02 50 00	Site Remediation

02	51 00	Physical Decontamination
	02 51 13	Coagulation and Flocculation Decontamination
	02 51 16	Reverse-Osmosis Decontamination
	02 51 19	Solidification and Stabilization Decontamination
	02 51 23	Mechanical Filtration Decontamination
	02 51 26	Radioactive Decontamination
	02 51 29 02 51 29.13	Surface Cleaning Decontamination
	02 51 29.15	High-Pressure Water Cleaning Decontamination Vacuum Sweeping Cleaning Decontamination
	02 51 33	Surface Removal Decontamination
	02 51 33.13	
	02 51 33.16	Surface Removal Decontamination by Sand Blasting
~~	02 51 33.19	Surface Removal Decontamination by Ultrasound
02	52 00	Chemical Decontamination
	02 52 13	Chemical Precipitation Decontamination
	02 52 16	Ion Change Decontamination Neutralization Decontamination
ഹ	02 52 19	
UΖ	53 00	Thermal Decontamination
	02 53 13 02 53 13.13	Incineration Decontamination Remediation of Contaminated Soils and Sludges by Incineration
	02 53 15.15	Thermal Desorption Decontamination
	02 53 16.13	Remediation of Contaminated Soils by Thermal Desorption
	02 53 19	Vitrification Decontamination
02	54 00	Biological Decontamination
	02 54 13	Aerobic Processes Decontamination
	02 54 16	Anaerobic Processes Decontamination
	02 54 19	Bioremediation Decontamination
	02 54 19.13 02 54 19.16	Bioremediation Using Landfarming Bioremediation of Soils Using Windrow Composting
	02 54 19.10	Bioremediation Using Bacteria Injection
	02 54 23	Soil Washing through Separation/Solubilization
	02 54 26	Organic Decontamination
02	55 00	Remediation Soil Stabilization
02	56 00	Site Containment
	02 56 13	Waste Containment
	02 56 13.13	Geomembrane Waste Containment
	02 56 19	Gas Containment
റാ	02 56 19.13	Fluid-Applied Gas Barrier
UZ	57 00	Sinkhole Remediation
	02 57 13 02 57 13.13	Sinkhole Remediation by Grouting Sinkhole Remediation by Compaction Grouting
	02 57 13.16	Sinkhole Remediation by Cap Grouting
	02 57 16	Sinkhole Remediation by Backfilling
02	58 00	Snow Control
	02 58 13	Snow Fencing
	02 58 16	Snow Avalanche Control
02	2 60 00	Contaminated Site Material Removal
	61 00	Removal and Disposal of Contaminated Soils
~-	02 61 13	Excavation and Handling of Contaminated Material

02 61 23	Removal and Disposal of Polychlorinate Biphenyl Contaminated Soils
02 61 26	Removal and Disposal of Asbestos Contaminated Soils
02 61 29	Removal and Disposal of Organically Contaminated Soils
02 62 00	Hazardous Waste Recovery Processes
02 62 13	Air and Steam Stripping
02 62 16	Soil Vapor Extraction
02 62 19	Soil Washing and Flushing
02 65 00	Underground Storage Tank Removal
02 66 00	Landfill Construction and Storage
02 70 00	Water Remediation
02 71 00	Groundwater Treatment
02 72 00	Water Decontamination
02 72 13	Chemical Water Decontamination
02 72 16	Biological Water Decontamination
02 72 19	Electrolysis Water Decontamination
02 80 00	Facility Remediation
02 81 00	Transportation and Disposal of Hazardous Materials
02 82 00	Asbestos Remediation
02 82 13	Asbestos Abatement
02 82 13.13	Glovebag Asbestos Abatement
02 82 13.16	Precautions for Asbestos Abatement
02 82 13.19	Asbestos Floor Tile and Mastic Abatement
02 82 16	Engineering Control of Asbestos Containing Materials
02 82 33	Removal and Disposal of Asbestos Containing Materials
02 83 00	Lead Remediation
02 83 13	Lead Hazard Control Activities
02 83 19	Lead-Based Paint Remediation
02 83 19.13 02 83 33	Lead-Based Paint Abatement Removal and Disposal of Material Containing Lead
02 83 33.13	Lead-Based Paint Removal and Disposal
02 84 00	Polychlorinate Biphenyl Remediation
02 84 16	Handling of Lighting Ballasts and Lamps Containing PCBs and Mercury
02 84 33	Removal and Disposal of Polychlorinate Biphenyls
02 85 00	Mold Remediation
02 85 13	Precautions for Mold Remediation
02 85 16	Mold Remediation Preparation and Containment
02 85 19	Mold Remediation Clearance Air Sampling
02 85 33	Removal and Disposal of Materials with Mold
02 86 00	Hazardous Waste Drum Handling

03 00 00 Concrete 03 01 00 Maintenance of Concrete 03 01 10 Maintenance of Concrete Forming and Accessories 03 01 20 Maintenance of Concrete Reinforcing 03 01 23 Maintenance of Stressing Tendons 03 01 30 Maintenance of Cast-in-Place Concrete Cleaning of Cast-in-Place Concrete 03 01 30.51 Resurfacing of Cast-in-Place Concrete 03 01 30.61 03 01 30.71 Rehabilitation of Cast-in-Place Concrete 03 01 30.72 Strengthening of Cast-in-Place Concrete 03 01 40 Maintenance of Precast Concrete **Cleaning of Precast Concrete** 03 01 40.51 03 01 40.61 **Resurfacing of Precast Concrete** Rehabilitation of Precast Concrete 03 01 40.71 Strengthening of Precast Concrete 03 01 40.72 Maintenance of Cast Decks and Underlayment 03 01 50 03 01 50.51 **Cleaning Cast Decks and Underlayment** 03 01 50.61 Resurfacing of Cast Decks and Underlayment 03 01 50.71 Rehabilitation of Cast Decks and Underlayment 03 01 50.72 Strengthening of Cast Decks and Underlayment Maintenance of Grouting 03 01 60

- 03 01 70 Maintenance of Mass Concrete
- 03 01 80 Maintenance of Concrete Cutting and Boring

03 05 00 Common Work Results for Concrete 03 06 00 Schedules for Concrete

- 03 06 10 Schedules for Concrete Forming and Accessories
- 03 06 20 Schedules for Concrete Reinforcing
- 03 06 20.13 Concrete Beam Reinforcing Schedule
- 03 06 20.16 Concrete Slab Reinforcing Schedule
- 03 06 30 Schedules for Cast-in-Place Concrete
- 03 06 30.13 Concrete Footing Schedule
- 03 06 30.16 Concrete Column Schedule
- 03 06 30.19 Concrete Slab Schedule
- 03 06 30.23 Concrete Shaft Schedule
- 03 06 30.26 Concrete Beam Schedule
- 03 06 40 Schedules for Precast Concrete
- 03 06 40.13 Precast Concrete Panel Schedule
- 03 06 50 Schedules for Cast Decks and Underlayment
- 03 06 60 Schedules for Grouting
- 03 06 70 Schedules for Mass Concrete
- 03 06 80 Schedules for Concrete Cutting and Boring

03 08 00 Commissioning of Concrete

03 10 00

03 11 00

Concrete Forming and Accessories Concrete Forming

- 03 11 13 Structural Cast-in-Place Concrete Forming
- 03 11 13.13 Concrete Slip Forming
- 03 11 13.16 Concrete Shoring
- 03 11 13.19 Falsework
- 03 11 16 Architectural Cast-in Place Concrete Forming
- 03 11 16.13 Concrete Form Liners

03 11 19 03 11 23	Insulating Concrete Forming Permanent Stair Forming
03 15 00	Concrete Accessories
03 15 13	Waterstops
03 15 13.13	Non-Expanding Waterstops
03 15 13.16	Expanding Waterstops
03 15 13.19 03 15 13.21	Combination Expanding and Injection Hose Waterstops Injection Hose Waterstops
03 15 16	Concrete Construction Joints
03 15 19	Cast-In Concrete Anchors
03 20 00	Concrete Reinforcing
03 21 00	Reinforcement Bars
03 21 11	Plain Steel Reinforcement Bars
03 21 13	Galvanized Reinforcement Steel Bars
03 21 16	Epoxy-Coated Reinforcement Steel Bars
03 21 19	Stainless Steel Reinforcement Bars
03 21 21	Composite Reinforcement Bars
03 21 21.11 03 21 21.13	Glass Fiber-Reinforced Polymer Reinforcement Bars Organic Fiber-Reinforced Polymer Reinforcement Bars
03 21 21.15	Carbon Fiber-Reinforced Polymer Reinforcement Bars
03 22 00	Fabric and Grid Reinforcing
03 22 13	Galvanized Welded Wire Fabric Reinforcing
03 22 16	Epoxy-Coated Welded Wire Fabric Reinforcing
03 22 19	Composite Grid Reinforcing
03 23 00	Stressed Tendon Reinforcing
03 24 00	
	Fibrous Reinforcing
03 24 00 03 25 00 03 25 13	Fibrous Reinforcing Composite Reinforcing
03 25 00	Fibrous Reinforcing
03 25 00 03 25 13	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 19	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 19 03 31 23	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 23 03 31 24	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 19 03 31 23 03 31 24 03 31 26	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete Self-Compacting Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 19 03 31 23 03 31 24 03 31 26 03 33 00	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete Self-Compacting Concrete Architectural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 19 03 31 23 03 31 24 03 31 26	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete Self-Compacting Concrete
$\begin{array}{c} \textbf{03 25 00} \\ 03 25 13 \\ 03 25 16 \\ 03 25 19 \end{array} \\ \textbf{03 30 53} \\ \textbf{03 30 53} \\ \textbf{03 31 00} \\ 03 31 13 \\ 03 31 16 \\ 03 31 19 \\ 03 31 23 \\ 03 31 23 \\ 03 31 24 \\ 03 31 26 \end{array} \\ \textbf{03 33 00} \\ 03 33 13 \end{array}$	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete Self-Compacting Concrete Heavyweight Architectural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 23 03 31 24 03 31 26 03 33 00 03 33 13 03 33 16	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete Self-Compacting Concrete Heavyweight Architectural Concrete Lightweight Architectural Concrete Lightweight Architectural Concrete
03 25 00 03 25 13 03 25 16 03 25 19 03 30 00 03 30 53 03 31 00 03 31 13 03 31 16 03 31 23 03 31 23 03 31 24 03 31 26 03 33 00 03 33 13 03 33 16 03 34 00	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete Self-Compacting Concrete Heavyweight Architectural Concrete Lightweight Architectural Concrete
$\begin{array}{c} \textbf{03 25 00} \\ 03 25 13 \\ 03 25 16 \\ 03 25 19 \end{array} \\ \textbf{03 30 53} \\ \textbf{03 30 53} \\ \textbf{03 31 00} \\ 03 31 13 \\ 03 31 16 \\ 03 31 19 \\ 03 31 23 \\ 03 31 24 \\ 03 31 26 \end{array} \\ \textbf{03 33 00} \\ 03 33 16 \\ \textbf{03 34 00} \\ \textbf{03 35 00} \end{array}$	Fibrous Reinforcing Composite Reinforcing Glass Fiber-Reinforced Polymer Reinforcing Organic Fiber-Reinforced Polymer Reinforcing Carbon Fiber-Reinforced Polymer Reinforcing Cast-in-Place Concrete Miscellaneous Cast-in-Place Concrete Structural Concrete Heavyweight Structural Concrete Lightweight Structural Concrete Shrinkage-Compensating Structural Concrete High-Performance Structural Concrete Ultra High-Performance Structural Concrete Self-Compacting Concrete Heavyweight Architectural Concrete Lightweight Architectural Concrete Lightweight Architectural Concrete Lightweight Architectural Concrete Lightweight Architectural Concrete Lightweight Architectural Concrete Lightweight Architectural Concrete

03 35 23 Exposed Aggregat	e Concrete Finishing
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- 03 35 26 Grooved Concrete Surface Finishing
- 03 35 29 **Tooled Concrete Finishing**
- 03 35 33 Stamped Concrete Finishing
- Polished Concrete Finishing 03 35 43

03 37 00 **Specialty Placed Concrete**

- Shotcrete 03 37 13
- 03 37 16 Pumped Concrete
- 03 37 19 Pneumatically Placed Concrete
- **Roller-Compacted Concrete** 03 37 23
- 03 37 26 **Underwater Placed Concrete**

03 38 00 Post-Tensioned Concrete

- 03 38 13 Post-Tensioned Concrete Preparation
- 03 38 16 Unbonded Post-Tensioned Concrete
- 03 38 19 Bonded Post-Tensioned Concrete

03 39 00 Concrete Curing

- 03 39 13 Water Concrete Curing
- 03 39 16 Sand Concrete Curing
- 03 39 23 Membrane Concrete Curing
- Chemical Compound Membrane Concrete Curing 03 39 23.13 Sheet Membrane Concrete Curing
- 03 39 23.23

03 40 00

03 41 00

03 47 00

03 48 00

Precast Concrete

Precast Structural Concrete

- 03 41 13 Precast Concrete Hollow Core Planks
- 03 41 16 Precast Concrete Slabs
- 03 41 23 Precast Concrete Stairs
- 03 41 33 Precast Structural Pretensioned Concrete
- 03 41 36 Precast Structural Post-Tensioned Concrete

Precast Architectural Concrete 03 45 00

- Faced Architectural Precast Concrete 03 45 13
- 03 45 33 Precast Architectural Pretensioned Concrete
- Precast Architectural Post-Tensioned Concrete 03 45 36

Site-Cast Concrete

- 03 47 13 Tilt-Up Concrete
- 03 47 16 Lift-Slab Concrete

Precast Concrete Specialties

- 03 48 13 Precast Concrete Bollards
- 03 48 16 Precast Concrete Splash Blocks
- 03 48 19 Precast Concrete Stair Treads
- Precast Pre-Framed Concrete Panels 03 48 33
- Precast Concrete Trim 03 48 43

03 49 00 Glass-Fiber-Reinforced Concrete

- 03 49 13 Glass-Fiber-Reinforced Concrete Column Covers
- 03 49 16 **Glass-Fiber-Reinforced Concrete Spandrels**
- 03 49 43 Glass-Fiber-Reinforced Concrete Trim

03 50 00 Cast Decks and Underlayment 03 51 00 Cast Roof Decks

03 51 13	Cementitious Wood Fiber Decks
03 51 16	Gypsum Concrete Roof Decks
03 52 00	Lightweight Concrete Roof Insulation
03 52 13	Composite Concrete Roof Insulation
03 52 16 03 52 16.13	Lightweight Insulating Concrete Lightweight Cellular Insulating Concrete
03 52 16.15	Lightweight Aggregate Insulating Concrete
03 53 00	Concrete Topping
03 53 13	Emery-Aggregate Concrete Topping
03 53 16	Iron-Aggregate Concrete Topping
03 54 00	Cast Underlayment
03 54 13	Gypsum Cement Underlayment
03 54 16	Hydraulic Cement Underlayment
03 60 00	Grouting
03 61 00	Cementitious Grouting
03 61 13	Dry-Pack Grouting
03 62 00	Non-Shrink Grouting
03 62 13	Non-Metallic Non-Shrink Grouting
03 62 16	Metallic Non-Shrink Grouting
03 63 00	Epoxy Grouting
03 64 00	Injection Grouting
03 64 23	Epoxy Injection Grouting
03 70 00	Mass Concrete
03 71 00	Mass Concrete for Raft Foundations
03 72 00	Mass Concrete for Dams
03 80 00	Concrete Cutting and Boring
03 81 00	Concrete Cutting
03 81 13	Flat Concrete Sawing
03 81 16	Track Mounted Concrete Wall Sawing
03 81 19	Wire Concrete Wall Sawing
03 81 23	Hand Concrete Wall Sawing
03 81 26	Chain Concrete Wall Sawing
03 82 00	Concrete Boring

03 82 13 C

Concrete Core Drilling

04 01 20	Maintenance of Unit Masonry
04 01 20.41	Unit Masonry Stabilization
04 01 20.51	Unit Masonry Maintenance
04 01 20.52	Unit Masonry Cleaning
04 01 20.91	Unit Masonry Restoration
04 01 20.93	Testing and Sampling Brick Units for Restoration
04 01 40	Maintenance of Stone Assemblies
04 01 40.51	Stone Maintenance
04 01 40.52	Stone Cleaning
04 01 40.91	Stone Restoration
04 01 50	Maintenance of Refractory Masonry
04 01 60	Maintenance of Corrosion-Resistant Masonry
04 01 70	Maintenance of Manufactured Masonry
04 05 00	Common Work Results for Masonry
04 05 13	Masonry Mortaring
04 05 13.16	Chemical-Resistant Masonry Mortaring
04 05 13.10	Epoxy Masonry Mortaring
04 05 13.23	Surface Bonding Masonry Mortaring
04 05 13.26	Engineered Masonry Mortaring
04 05 13.29	Refractory Masonry Mortaring
04 05 13.91	Masonry Restoration Mortaring
04 05 16	Masonry Grouting
04 05 16.16	Chemical-Resistant Masonry Grouting
04 05 16.26	Engineered Masonry Grouting
04 05 19	Masonry Anchorage and Reinforcing
04 05 19.13	Continuous Joint Reinforcing
04 05 19.13	Masonry Anchors
04 05 19.10	Masonry Reinforcing Bars
04 05 19.20	Stone Anchors
04 05 21	Masonry Strengthening
04 05 21	
	Masonry Accessories
04 05 23.13 04 05 23.16	Masonry Control and Expansion Joints Masonry Embedded Flashing
04 05 23.10	Masonry Cavity Drainage, Weepholes, and Vents
04 06 00	Schedules for Masonry
04 06 20	Schedules for Unit Masonry
04 06 20.13	Masonry Unit Schedule
04 06 40	Schedules for Stone Assemblies
04 06 50	Schedules for Refractory Masonry
04 06 60	Schedules for Corrosion-Resistant Masonry
04 06 70	Schedules for Manufactured Masonry
04 08 00	Commissioning of Masonry
04 20 00	
	Unit Masonry
04 21 00	Clay Unit Masonry
04 21 13	Brick Masonry
04 21 13.13	Brick Veneer Masonry
04 21 13.23	Surface-Bonded Brick Masonry

04 21 16 Ceramic Glazed Clay Masonry

04 21 19	Clay Tile Masonry
04 21 23	Structural Clay Tile Masonry
04 21 26	Glazed Structural Clay Tile Masonry
04 21 29	Terra Cotta Masonry
04 22 00	Concrete Unit Masonry
04 22 00.13	Concrete Unit Veneer Masonry
04 22 00.16	Surface-Bonded Concrete Unit Masonry
04 22 19	Insulated Concrete Unit Masonry
04 22 23	Architectural Concrete Unit Masonry
04 22 23.13	Exposed Aggregate Concrete Unit Masonry
04 22 23.16	Fluted Concrete Unit Masonry
04 22 23.19	Molded-Face Concrete Unit Masonry
04 22 23.23 04 22 23.26	Prefaced Concrete Unit Masonry Sound-Absorbing Concrete Unit Masonry
04 22 23.20	Split-Face Concrete Unit Masonry
04 22 26	Autoclaved Aerated Concrete Unit Masonry
04 22 33	Interlocking Concrete Unit Masonry
04 23 00	Glass Unit Masonry
04 23 13	Vertical Glass Unit Masonry
04 23 16	Glass Unit Masonry Floors
04 23 19	Glass Unit Masonry Skylights
04 24 00	Adobe Unit Masonry
04 24 13	Site-Cast Adobe Unit Masonry
04 24 16	Manufactured Adobe Unit Masonry
04 25 00	Unit Masonry Panels
04 25 13	Metal-Supported Unit Masonry Panels
04 26 00	Single-Wythe Unit Masonry
04 26 13	Masonry Veneer
04 27 00	Multiple-Wythe Unit Masonry
04 27 13	Composite Unit Masonry
04 27 23	Cavity Wall Unit Masonry
04 28 00	Concrete Form Masonry Units
04 28 13	Dry-Stacked, Concrete-Filled Masonry Units
04 28 23	Mortar-Set, Concrete-Filled Masonry Units
04 29 00	Engineered Unit Masonry
04 40 00	Stone Assemblies
04 41 00	Dry-Placed Stone
04 42 00	Exterior Stone Cladding
04 42 13	Masonry-Supported Stone Cladding
04 42 16	Steel-Stud-Supported Stone Cladding
04 42 19	Strongback-Frame-Supported Stone Cladding
04 42 23	Truss-Supported Stone Cladding
04 42 26	Grid-System-Supported Stone Cladding
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04 42 43	Stone Panels for Curtain Walls
04 42 43 04 43 00	
	Stone Panels for Curtain Walls Stone Masonry Stone Masonry Veneer

04 43 13.16	Adhered Stone Masonry Veneer
04 50 00	Refractory Masonry
04 51 00	Flue Liner Masonry
04 52 00	Combustion Chamber Masonry
04 53 00	Castable Refractory Masonry
04 54 00	Refractory Brick Masonry
04 57 00	Masonry Fireplaces
04 57 33	Modular Masonry Fireplaces
04 60 00	Corrosion-Resistant Masonry
04 61 00	Chemical-Resistant Brick Masonry
04 62 00	Vitrified Clay Liner Plate
04 70 00	Manufactured Masonry
04 71 00	Manufactured Brick Masonry
04 71 13	Calcium Silicate Manufactured Brick Masonry
04 72 00	Cast Stone Masonry
04 73 00	Manufactured Stone Masonry
04 73 13	Calcium Silicate Manufactured Stone Masonry

05 00 00 Metals 05 01 00 Maintenance of Metals 05 01 10 Maintenance of Structural Metal Framing 05 01 20 Maintenance of Metal Joists 05 01 30 Maintenance of Metal Decking Maintenance of Cold-Formed Metal Framing 05 01 40 Maintenance of Metal Fabrications 05 01 50 05 01 70 Maintenance of Decorative Metal Historic Treatment of Decorative Metal 05 01 70.91 05 05 00 Common Work Results for Metals 05 05 13 Shop-Applied Coatings for Metal Post-Installed Concrete Anchors 05 05 19 05 05 23 Metal Fastenings 05 05 53 Security Metal Fastenings 05 06 00 Schedules for Metals 05 06 10 Schedules for Structural Metal Framing Steel Column Schedule 05 06 10.13 05 06 10.16 Steel Beam Schedule 05 06 20 Schedules for Metal Joists 05 06 20.13 Steel Joist Schedule 05 06 30 Schedules for Metal Decking 05 06 40 Schedules for Cold-Formed Metal Framing 05 06 50 Schedules for Metal Fabrications 05 06 70 Schedules for Decorative Metal 05 08 00 **Commissioning of Metals** Structural Metal Framing 05 10 00 05 12 00 Structural Steel Framing 05 12 13 Architecturally-Exposed Structural Steel Framing 05 12 16 Fabricated Fireproofed Steel Columns 05 12 19 **Buckling Restrained Braces** 05 12 23 Structural Steel for Buildings 05 12 33 Structural Steel for Bridges 05 13 00 Structural Stainless-Steel Framing Structural Aluminum Framing 05 14 00 Architecturally-Exposed Structural Aluminum Framing 05 14 13 05 15 00 Wire Rope Assemblies Aluminum Wire Rope Assemblies 05 15 13 05 15 16 Steel Wire Rope Assemblies 05 15 19 Stainless-Steel Wire Rope Assemblies 05 16 00 Structural Cabling Cable Bow Truss Assemblies 05 16 13 05 16 33 Bridge Cabling Structural Rod Assemblies 05 17 00 05 19 00 Tension Rod and Cable Truss Assemblies 05 19 13 FaA§ade Support Truss Assemblies

05 19 19 Canopy Support Truss Assemblies

05 20 00	Metal Joists
05 21 00	Steel Joist Framing
05 21 13	Deep Longspan Steel Joist Framing
05 21 16	Longspan Steel Joist Framing
05 21 19 05 21 23	Open Web Steel Joist Framing
05 25 00	Steel Joist Girder Framing Aluminum Joist Framing
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05 30 00	Metal Decking
05 31 00	Steel Decking
05 31 13	Steel Floor Decking
05 31 23 05 31 33	Steel Roof Decking Steel Form Decking
05 33 00	Aluminum Decking
05 33 13	Aluminum Floor Decking
05 33 23	Aluminum Roof Decking
05 34 00	Acoustical Metal Decking
05 35 00	Raceway Decking Assemblies
05 36 00	Composite Metal Decking
05 36 13	Composite Steel Plate and Elastomer Decking
05 40 00	Cold-Formed Metal Framing
05 41 00	Structural Metal Stud Framing
05 42 00	Cold-Formed Metal Joist Framing
05 42 13	Cold-Formed Metal Floor Joist Framing
05 42 23	Cold-Formed Metal Roof Joist Framing
05 43 00	Slotted Channel Framing
05 44 00	Cold-Formed Metal Trusses
05 44 13	Cold-Formed Metal Roof Trusses
05 45 00	Metal Support Assemblies
05 45 13	Mechanical Metal Supports
05 45 16	Electrical Metal Supports
05 45 19	Communications Metal Supports
05 45 23	Healthcare Metal Supports
05 50 00	Metal Fabrications
05 51 00	Metal Stairs
05 51 13	Metal Pan Stairs
05 51 16 05 51 19	Metal Floor Plate Stairs Metal Grating Stairs
05 51 23	Metal Fire Escapes
05 51 33	Metal Ladders
05 51 33.13	Vertical Metal Ladders
05 51 33.16	Inclined Metal Ladders
05 51 33.23 05 51 36	Alternating Tread Ladders Metal Walkways
05 51 36.13	Metal Catwalks
	Metal Ramps

05 51 36.16 Metal Ramps

Metal Railings
Pipe and Tube Railings
Metal Gratings
Bar Gratings
Plank Gratings
Metal Floor Plates
Metal Stair Treads and Nosings
Metal Stair Treads
Metal Stair Nosings
Metal Castings
Formed Metal Fabrications
Column Covers
Formed Metal Enclosures
Heating/Cooling Unit Covers
Formed Metal Guards
Metal Specialties
Metal Balconies
Detention Enclosures
Decorative Metal
Decorative Metal Stairs
Fabricated Metal Spiral Stairs
Decorative Metal Railings
Glazed Decorative Metal Railings
Wire Rope Decorative Metal Railings
Decorative Metal Castings
Decorative Formed Metal
Decorative Forged Metal

Wood, Plastics, and Composites 06 00 00 Maintenance of Wood, Plastics, and Composites 06 01 00 Maintenance of Rough Carpentry 06 01 10

- 06 01 10.71 Rough Carpentry Rehabilitation 06 01 10.91
- Rough Carpentry Restoration 06 01 10.92 Rough Carpentry Preservation
- 06 01 20 Maintenance of Finish Carpentry
- Finish Carpentry Rehabilitation 06 01 20.71
- Finish Carpentry Restoration 06 01 20.91
- Finish Carpentry Preservation 06 01 20.92
- Maintenance of Architectural Woodwork 06 01 40
- 06 01 40.51 Architectural Woodwork Cleaning
- 06 01 40.61 Architectural Woodwork Refinishing
- Architectural Woodwork Restoration 06 01 40.91
- 06 01 50 Maintenance of Structural Plastics
- Maintenance of Plastic Fabrications 06 01 60
- 06 01 60.51 Plastic Cleaning
- Plastic Rehabilitation 06 01 60.71
- 06 01 60.91 Plastic Restoration
- 06 01 60.92 Plastic Preservation
- 06 01 70 Maintenance of Structural Composites
- 06 01 80 Maintenance of Composite Assemblies
- 06 01 80.51 **Composite Cleaning**
- 06 01 80.71 Composite Rehabilitation
- 06 01 80.91 **Composite Restoration**
- 06 01 80.92 **Composite Preservation**
- 06 05 00

06 06 00

Common Work Results for Wood, Plastics, and Composites

- 06 05 23 Wood, Plastic, and Composite Fastenings
- 06 05 73 Wood Treatment
- Fire-Retardant Wood Treatment 06 05 73.13
- 06 05 73.33 Preservative Wood Treatment
- 06 05 73.91 Long-Term Wood Treatment
- 06 05 73.93 Eradication of Insects in Wood
- 06 05 73.96 Antiseptic Treatment of Wood
- 06 05 83 Shop-Applied Wood Coatings

Schedules for Wood, Plastics, and Composites

- 06 06 10 Schedules for Rough Carpentry
- Nailing Schedule 06 06 10.13
- 06 06 10.16 Wood Beam Schedule
- 06 06 10.19 Plywood Shear Wall Schedule
- 06 06 10.23 Plywood Web Joist Schedule
- 06 06 10.26 Wood Truss Schedule
- 06 06 20 Schedules for Finish Carpentry
- 06 06 40 Schedules for Architectural Woodwork
- 06 06 50 Schedules for Structural Plastics
- 06 06 60 Schedules for Plastic Fabrications
- 06 06 70 Schedules for Structural Composites
- 06 06 80 Schedules for Composite Assemblies

06 08 00 Commissioning of Wood, Plastics, and Composites

06 10 00	Rough Carpentry
06 10 53	Miscellaneous Rough Carpentry
06 10 63	Exterior Rough Carpentry
06 11 00	Wood Framing
06 11 13	Engineered Wood Products
06 11 16	Mechanically Graded Lumber
06 12 00	Structural Panels
06 12 13	Cementitious Reinforced Panels
06 12 16	Stressed Skin Panels
06 13 00	Heavy Timber Construction
06 13 13	Log Construction
06 13 13.91	Period Horizontal Log Work
06 13 16	Pole Construction
06 13 23	Heavy Timber Framing
06 13 26	Heavy Timber Trusses
06 13 33	Heavy Timber Pier Construction
06 14 00	Treated Wood Foundations
06 15 00	Wood Decking
06 15 13	Wood Floor Decking
06 15 13.91	Carvel Planking
06 15 16	Wood Roof Decking
06 15 19	Timber Decking
06 15 23	Laminated Wood Decking
06 15 33	Wood Patio Decking
06 16 00	Sheathing
06 16 13	Insulating Sheathing
06 16 23	Subflooring
06 16 26	Underlayment
06 16 33	Wood Board Sheathing
06 16 36	Wood Panel Product Sheathing
06 16 43	Gypsum Sheathing
06 16 53	Moisture-Resistant Sheathing Board
06 16 63	Cementitious Sheathing
06 17 00	Shop-Fabricated Structural Wood
06 17 13	Laminated Veneer Lumber
06 17 23	Parallel Strand Lumber
06 17 33	Wood I-Joists
06 17 36	Metal-Web Wood Joists
06 17 43	Rim Boards
06 17 53	Shop-Fabricated Wood Trusses
06 18 00	Glued-Laminated Construction
06 18 13	Glued-Laminated Beams
06 18 16	Glued-Laminated Columns
06 20 00	Finish Carpentry
06 20 13	Exterior Finish Carpentry
06 20 23	Interior Finish Carpentry

06 22 00 Millwork

06 22 13	Standard Pattern Wood Trim
06 25 00	Prefinished Paneling
06 25 13	Prefinished Hardboard Paneling
06 25 16	Prefinished Plywood Paneling
06 26 00	Board Paneling
06 26 13	Profile Board Paneling
06 40 00	Architectural Woodwork
06 40 13	
06 40 23	
06 41 00	Architectural Wood Casework
06 41 13	Wood-Veneer-Faced Architectural Cabinets
06 41 16 06 41 93	Plastic-Laminate-Clad Architectural Cabinets Cabinet and Drawer Hardware
06 42 00	Wood Paneling
06 42 13	Wood Board Paneling
06 42 14 06 42 16	Stile and Rail Wood Paneling Flush Wood Paneling
06 42 10	Plastic-Laminate-Faced Wood Paneling
06 43 00	Wood Stairs and Railings
06 43 13	Wood Stairs
06 43 13	Wood Railings
06 44 00	Ornamental Woodwork
06 44 13	Wood Turnings
06 44 13	Wood Pilasters
06 44 19	Wood Grilles
06 44 23	Wood Corbels
06 44 26	Wood Cupolas
06 44 29	Wood Finials
06 44 33	Wood Mantels
06 44 36	Wood Pediment Heads
06 44 39	Wood Posts and Columns
06 46 00	Wood Trim
06 46 13	Wood Door and Window Casings
06 46 16	Wood Aprons
06 46 19	Wood Base and Shoe Moldings
06 46 23	Wood Chair Rails
06 46 26	Wood Cornices
06 46 29 06 46 33	Wood Fasciae and Soffits
06 46 91	Wood Stops, Stools, and Sills Splicing of Wooden Components
06 48 00	Wood Frames
06 48 13	Exterior Wood Door Frames
06 48 16	Interior Wood Door Frames
06 48 19	Ornamental Wood Frames
06 48 23	Stick-Built Wood Windows
06 48 26	Wood-Veneer Frames
06 49 00	Wood Screens and Exterior Wood Shutters
06 49 13	Wood Screens

06 49 16	Exterior Wood Blinds
06 49 19	Exterior Wood Shutters
06 50 00	Structural Plastics
06 51 00	Structural Plastic Shapes and Plates
06 51 13	Plastic Lumber
06 52 00	Plastic Structural Assemblies
06 53 00	Plastic Decking
06 53 13	Solid Plastic Decking
06 60 00	Plastic Fabrications
06 61 00	Simulated Stone Fabrications
06 61 13	Cultured Marble Fabrications
06 61 16	Solid Surfacing Fabrications
06 61 19	Quartz Surfacing Fabrications
06 63 00	Plastic Railings
06 64 00 06 64 13	Plastic Paneling Plastic Lattice Paneling
06 65 00	Plastic Simulated Wood Trim
06 66 00	Custom Ornamental Simulated Woodwork
06 70 00	Structural Composites
06 71 00	Structural Composite Shapes and Plates
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06 71 13	Composite Lumber
06 71 13 06 72 00	Composite Lumber Composite Structural Assemblies
06 71 13 06 72 00 06 72 13	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies
06 71 13 06 72 00 06 72 13 06 73 00	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking
06 71 13 06 72 00 06 72 13 06 73 00 06 73 13	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking
06 71 13 06 72 00 06 72 13 06 73 00	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings
06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings
06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Fiberglass Reinforced Gratings Composite Fabrications
06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13 06 80 00	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings
06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13 06 80 00 06 81 00	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings Composite Fabrications Composite Railings
06 71 13 06 72 00 06 72 13 06 73 00 06 73 13 06 74 00 06 74 13 06 80 00 06 81 00 06 81 13	Composite Lumber Composite Structural Assemblies Composite Joist Assemblies Composite Decking Composite Structural Decking Composite Gratings Fiberglass Reinforced Gratings Composite Fabrications Composite Railings Glass-Fiber-Reinforced Plastic Railings

07 00 00Thermal and Moisture Protection07 01 00Operation and Maintenance of Thermal and Moisture
Protection

- 07 01 10 Maintenance of Dampproofing and Waterproofing
- 07 01 10.81 Waterproofing Replacement
- 07 01 20 Maintenance of Thermal Protection
- 07 01 30 Maintenance of Steep Slope Roofing
- 07 01 40 Maintenance of Roofing and Siding Panels
- 07 01 50 Maintenance of Membrane Roofing
- 07 01 50.13 Roof Moisture Survey
- 07 01 50.16 Roof Maintenance Program
- 07 01 50.19 Preparation for Re-Roofing
- 07 01 50.23 Roof Removal
- 07 01 50.61 Roof Re-Coating
- 07 01 50.81 Roof Replacement
- 07 01 50.91 Roofing Restoration
- 07 01 60 Maintenance of Flashing and Sheet Metal
- 07 01 60.71 Flashing and Sheet Metal Rehabilitation
- 07 01 60.91 Flashing and Sheet Metal Restoration
- 07 01 60.92 Flashing and Sheet Metal Preservation
- 07 01 70 Operation and Maintenance of Roof Specialties and Accessories
- 07 01 80 Maintenance of Fire and Smoke Protection
- 07 01 90 Maintenance of Joint Protection
- 07 01 90.71 Joint Sealant Rehabilitation
- 07 01 90.81 Joint Sealant Replacement

07 05 00 Common Work Results for Thermal and Moisture Protection

07 05 53

3 Fire and Smoke Assembly Identification

07 06 00 Schedules for Thermal and Moisture Protection

- 07 06 10 Schedules for Dampproofing and Waterproofing
- 07 06 20 Schedules for Thermal Protection
- 07 06 30 Schedules for Steep Slope Roofing
- 07 06 40 Schedules for Roofing and Siding Panels
- 07 06 50 Schedules for Membrane Roofing
- 07 06 60 Schedules for Flashing and Sheet Metal
- 07 06 70 Schedules for Roof Specialties and Accessories
- 07 06 80 Schedules for Fire and Smoke Protection
- 07 06 80.13 Fireproofing Schedule
- 07 06 80.16 Firestopping Schedule
- 07 06 90 Schedules for Joint Protection
- 07 06 90.13 Joint Sealant Schedule
- 07 08 00 Commissioning of Thermal and Moisture Protection

07 10 00 Dar

07 10 00

Dampproofing and Waterproofing Dampproofing

- 07 11 13 Bituminous Dampproofing
- 07 11 16 Cementitious Dampproofing
- 07 11 19 Sheet Dampproofing

07 12 00 Built-Up Bituminous Waterproofing

07 12 13 Built-Up Asphalt Waterproofing

07 13 00Sheet Waterproofing07 13 13Bituminous Sheet Waterproofing07 13 26Self-Adhering Sheet Waterproofing07 13 52Modified Bituminous Sheet Waterproofing07 13 53Elastomeric Sheet Waterproofing07 13 54Thermoplastic Sheet Waterproofing07 14 00Fluid-Applied Waterproofing07 14 13Hot Fluid-Applied Rubberized Asphalt Waterproofing07 14 14Cold Fluid-Applied Polyurea Waterproofing07 15 00Sheet Metal Waterproofing07 16 10Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 13Ory 16 1007 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing07 17 13Bentonite Panel Waterproofing
07 13 13Bituminous Sheet Waterproofing07 13 26Self-Adhering Sheet Waterproofing07 13 52Modified Bituminous Sheet Waterproofing07 13 53Elastomeric Sheet Waterproofing07 13 54Thermoplastic Sheet Waterproofing07 14 00Fluid-Applied Waterproofing07 14 13Hot Fluid-Applied Rubberized Asphalt Waterproofing07 14 14Hot Fluid-Applied Polyurea Waterproofing07 15 00Sheet Metal Waterproofing07 15 13Sheet Metal Waterproofing07 16 00Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 14Oxide Waterproofing07 16 15Bentonite Waterproofing
07 13 52Modified Bituminous Sheet Waterproofing07 13 53Elastomeric Sheet Waterproofing07 13 54Thermoplastic Sheet Waterproofing07 14 00Fluid-Applied Waterproofing07 14 13Hot Fluid-Applied Rubberized Asphalt Waterproofing07 14 14Hot Fluid-Applied Polyurea Waterproofing07 14 16Cold Fluid-Applied Waterproofing07 15 00Sheet Metal Waterproofing07 15 13Sheet Lead Waterproofing07 16 10Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 16Crystalline Waterproofing07 17 00Bentonite Waterproofing
07 13 53Elastomeric Sheet Waterproofing07 13 54Thermoplastic Sheet Waterproofing07 14 00Fluid-Applied Waterproofing07 14 13Hot Fluid-Applied Rubberized Asphalt Waterproofing07 14 14Hot Fluid-Applied Polyurea Waterproofing07 14 16Cold Fluid-Applied Waterproofing07 15 00Sheet Metal Waterproofing07 15 13Sheet Lead Waterproofing07 16 10Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 13Metal Oxide Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 13 54Thermoplastic Sheet Waterproofing07 14 00Fluid-Applied Waterproofing07 14 13Hot Fluid-Applied Rubberized Asphalt Waterproofing07 14 14Hot Fluid-Applied Polyurea Waterproofing07 14 16Cold Fluid-Applied Waterproofing07 15 00Sheet Metal Waterproofing07 15 13Sheet Lead Waterproofing07 16 00Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 13Crystalline Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 14 00Fluid-Applied Waterproofing07 14 13Hot Fluid-Applied Rubberized Asphalt Waterproofing07 14 14Hot Fluid-Applied Polyurea Waterproofing07 14 16Cold Fluid-Applied Waterproofing07 15 00Sheet Metal Waterproofing07 15 13Sheet Lead Waterproofing07 16 00Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 13Crystalline Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 14 13 07 14 14 07 14 14Hot Fluid-Applied Rubberized Asphalt Waterproofing Hot Fluid-Applied Polyurea Waterproofing Cold Fluid-Applied Waterproofing07 15 00 07 15 13Sheet Metal Waterproofing Sheet Lead Waterproofing07 16 00 07 16 13 07 16 16 07 16 19Cementitious and Reactive Waterproofing Polymer Modified Cement Waterproofing Or 16 1907 17 00Bentonite Waterproofing
07 14 14 07 14 16Hot Fluid-Applied Polyurea Waterproofing Cold Fluid-Applied Waterproofing07 15 00 07 15 13Sheet Metal Waterproofing Sheet Lead Waterproofing07 16 00 07 16 13 07 16 16 07 16 19Cementitious and Reactive Waterproofing Polymer Modified Cement Waterproofing Crystalline Waterproofing07 17 00Bentonite Waterproofing
07 14 16Cold Fluid-Applied Waterproofing07 15 00Sheet Metal Waterproofing07 15 13Sheet Lead Waterproofing07 16 00Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 16Crystalline Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 15 00 07 15 13Sheet Metal Waterproofing Sheet Lead Waterproofing07 16 00 07 16 13 07 16 16 07 16 16 07 16 19Cementitious and Reactive Waterproofing Crystalline Waterproofing Metal Oxide Waterproofing07 17 00Bentonite Waterproofing Materproofing
07 15 13Sheet Lead Waterproofing07 16 00Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 16Crystalline Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 16 00Cementitious and Reactive Waterproofing07 16 13Polymer Modified Cement Waterproofing07 16 16Crystalline Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 16 13Polymer Modified Cement Waterproofing07 16 16Crystalline Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 16 13Polymer Modified Cement Waterproofing07 16 16Crystalline Waterproofing07 16 19Metal Oxide Waterproofing07 17 00Bentonite Waterproofing
07 16 19 Metal Oxide Waterproofing 07 17 00 Bentonite Waterproofing
07 17 00 Bentonite Waterproofing
07 17 13 Bentonite Panel Waterproofing
07 17 16 Bentonite Composite Sheet Waterproofing
07 18 00 Traffic Coatings
07 18 13 Pedestrian Traffic Coatings
07 18 16 Vehicular Traffic Coatings
07 19 00 Water Repellents
07 19 13 Acrylic Water Repellents
07 19 16 Silane Water Repellents
07 19 19 Silicone Water Repellents
07 19 23 Siloxane Water Repellents
07 19 26 Stearate Water Repellents
07 20 00 Thermal Protection
07 21 00 Thermal Insulation
07 21 13 Board Insulation
07 21 13.13 Foam Board Insulation
07 21 13.16 Fibrous Board Insulation
07 21 13.19 Mineral Board Insulation
07 21 16 Blanket Insulation
07 21 19 Foamed-In-Place Insulation 07 21 23 Loose-Fill Insulation
07 21 26 Blown Insulation
07 21 29 Sprayed Insulation
07 21 53 Reflective Insulation
07 22 00 Roof and Deck Insulation
07 22 13 Asphaltic Perlite Concrete Deck
07 22 16 Roof Board Insulation
07 24 00 Exterior Insulation and Finish Systems
07 24 13 Polymer-Based Exterior Insulation and Finish System
07 24 16 Polymer-Modified Exterior Insulation and Finish System
07 24 19 Water-Drainage Exterior Insulation and Finish System

07 24 23	Direct-Applied Finish Systems
07 25 00	Weather Barriers
07 26 00	Vapor Retarders
07 26 13	Above-Grade Vapor Retarders
07 26 16	Below-Grade Vapor Retarders
07 26 23	Below-Grade Gas Retarders
07 27 00	Air Barriers
07 27 13	Modified Bituminous Sheet Air Barriers
07 27 13	Sheet Metal Membrane Air Barriers
07 27 10	Plastic Sheet Air Barriers
07 27 23	Board Product Air Barriers
07 27 25	Fluid-Applied Membrane Air Barriers
07 27 20	Sprayed Foam Air Barrier
07 30 00	Steep Slope Roofing
07 30 91	Canvas Roofing
07 31 00	Shingles and Shakes
07 31 13	Asphalt Shingles
07 31 13.13	Fiberglass-Reinforced Asphalt Shingles
07 31 16	Metal Shingles
07 31 19	Mineral-Fiber Cement Shingles
07 31 23	Porcelain Enamel Shingles
07 31 26	Slate Shingles
07 31 29	Wood Shingles and Shakes
07 31 29.13	Wood Shingles
07 31 29.16	Wood Shakes
07 31 33	Composite Rubber Shingles
07 31 53	Plastic Shakes
07 32 00	Roof Tiles
07 32 13	Clay Roof Tiles
07 32 14	Ceramic and Porcelain Roof Tiles
07 32 16	Concrete Roof Tiles
07 32 19	Metal Roof Tiles
07 32 23	Mineral-Fiber Cement Roof Tiles
07 32 26	Plastic Roof Tiles
07 32 29	Rubber Tiles/Panels
07 33 00	Natural Roof Coverings
07 33 13	Sod Roofing
07 33 16	Thatched Roofing
07 33 63	Vegetated Roofing
07 40 00	Roofing and Siding Panels
07 41 00	Roof Panels
07 41 13	Metal Roof Panels
07 41 23	Wood Roof Panels
07 41 33	Plastic Roof Panels
07 41 43	Composite Roof Panels
07 41 63	Fabricated Roof Panel Assemblies
07 42 00	Wall Panels

07 42 00 Wall Panels

07 42 13	Metal Wall Panels
07 42 13.13	Formed Metal Wall Panels
07 42 13.16	Metal Plate Wall Panels
07 42 13.19	Insulated Metal Wall Panels
07 42 13.23	Metal Composite Material Wall Panels
07 42 23	Wood Wall Panels
07 42 29	Terracotta Wall Panels
07 42 33	Plastic Wall Panels
07 42 43	Composite Wall Panels
07 42 63	Fabricated Wall Panel Assemblies
07 42 93	Soffit Panels
07 44 00	Faced Panels
07 44 13	Aggregate Coated Panels
07 44 16	Porcelain Enameled Faced Panels
07 44 19	Tile-Faced Panels
07 44 23	Ceramic-Tile-Faced Panels
07 44 33	Metal Faced Panels
07 44 53	Glass-Fiber-Reinforced Cementitious Panels
07 44 56	Mineral-Fiber-Reinforced Cementitious Panels
07 44 63	Fabricated Faced Panel Assemblies
07 46 00	Siding
07 46 16	Aluminum Siding
07 46 19	Steel Siding
07 46 23	Wood Siding
07 46 26	Hardboard Siding
07 46 29	Plywood Siding
07 46 33	Plastic Siding
07 46 43	Composition Siding
07 46 46	Fiber-Cement Siding
07 46 63	Fabricated Panel Assemblies with Siding
07 50 00	Membrane Roofing
07 51 00	Built-Up Bituminous Roofing
07 51 13	Built-Up Asphalt Roofing
07 51 13.13	Cold-Applied Built-Up Asphalt Roofing
07 51 16	Built-Up Coal Tar Roofing
07 51 23	Glass-Fiber-Reinforced Asphalt Emulsion Roofing
07 52 00	Modified Bituminous Membrane Roofing
07 52 13	Atactic-Polypropylene-Modified Bituminous Membrane Roofing
07 52 13.11	Cold Adhesive Applied Atactic-Polypropylene-Modified Bituminous Membrane Roofing
07 52 13.13	Torch-Applied Atactic-Polypropylene-Modified Bituminous Membrane Roofing
07 52 13.14	Mechanically Fastened Atactic-Polypropylene-Modified Bituminous Membrane Roofing
07 52 16	Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
07 52 16.11	Cold Adhesive Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
07 52 16.12	Hot-Mopped Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
07 52 16.13	Torch-Applied Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing
07 52 16.14	Mechanically Fastened Styrene-Butadiene-Styrene Modified Bituminous Membrane Roofing

07 53 00 Elastomeric Membrane Roofing

	07 53 13	Chlorinated-Polyethylene Roofing
	07 53 16	Chlorosulfonate-Polyethylene Roofing
	07 53 23	Ethylene-Propylene-Diene-Monomer Roofing
	07 53 29	Polyisobutylene Roofing
07	54 00	Thermoplastic Membrane Roofing
	07 54 13	Copolymer-Alloy Roofing
	07 54 16	Ethylene-Interpolymer Roofing
	07 54 19	Polyvinyl-Chloride Roofing
	07 54 23	Thermoplastic-Polyolefin Roofing
	07 54 26	Nitrile-Butadiene-Polymer Roofing
07	55 00	Protected Membrane Roofing
• -	07 55 51	Built-Up Bituminous Protected Membrane Roofing
	07 55 52	Modified Bituminous Protected Membrane Roofing
	07 55 53	Elastomeric Protected Membrane Roofing
	07 55 54	Thermoplastic Protected Membrane Roofing
	07 55 56	Fluid-Applied Protected Membrane Roofing
	07 55 56.13	Hot-Applied Rubberized Asphalt Protected Membrane Roofing
	07 55 63	Vegetated Protected Membrane Roofing
07	56 00	Fluid-Applied Roofing
07	57 00	Coated Foamed Roofing
•	07 57 13	Sprayed Polyurethane Foam Roofing
07	58 00	
		Roll Roofing
07	′ 60 00	Flashing and Sheet Metal
07	61 00	Sheet Metal Roofing
	07 61 13	Standing Seam Sheet Metal Roofing
	07 61 16	Batten Seam Sheet Metal Roofing
	07 61 19	Flat Seam Sheet Metal Roofing
07	62 00	Sheet Metal Flashing and Trim
	63 00	Sheet Metal Roofing Specialties
07	64 00	Sheet Metal Wall Cladding
	07 64 13	Standing Seam Sheet Metal Wall Cladding
	07 64 16	Batten Seam Sheet Metal Wall Cladding
07	07 64 19	Flat Seam Sheet Metal Wall Cladding
07	65 00	Flexible Flashing
	07 65 13	Laminated Sheet Flashing
	07 65 16	Modified Bituminous Sheet Flashing
	07 65 19	Plastic Sheet Flashing
	07 65 23 07 65 26	Rubber Sheet Flashing
~-		Self-Adhering Sheet Flashing
0/	70 00	Roof and Wall Specialties and Accessories
07	71 00	Roof Specialties
	07 71 13	Manufactured Copings
	07 71 16	Manufactured Counterflashing Systems
	07 71 19	Manufactured Gravel Stops and Fasciae
	07 71 23	Manufactured Gutters and Downspouts
	07 71 23.13	Gutter Debris Guards
	07 71 26	Reglets

07 71 29	Manufactured Roof Expansion Joints
07 71 33	Manufactured Scuppers
07 72 00	Roof Accessories
07 72 13	Manufactured Curbs
07 72 23	Relief Vents
07 72 26	Ridge Vents
07 72 33	Roof Hatches
07 72 36	Smoke Vents
07 72 43	Roof Walk Boards
07 72 46 07 72 53	Roof Walkways Snow Guards
07 72 63	Waste Containment Assemblies
07 76 00	Roof Pavers
07 76 13	Roof Ballast Pavers
07 76 16	Roof Decking Pavers
07 77 00	Wall Specialties
	·
07 80 00	Fire and Smoke Protection
07 81 00	Applied Fireproofing
07 81 13	Cement Aggregate Fireproofing
07 81 16	Cementitious Fireproofing
07 81 19	Foamed Magnesium-Oxychloride Fireproofing
07 81 23	Intumescent Fireproofing
07 81 26	Magnesium Cement Fireproofing
07 81 29	Mineral-Fiber Cementitious Fireproofing
07 81 33	Mineral-Fiber Fireproofing
07 82 00	Board Fireproofing
07 82 13	Calcium-Silicate Board Fireproofing
07 82 16	Slag-Fiber Board Fireproofing
07 84 00	Firestopping
07 84 13	Penetration Firestopping
07 84 13.13 07 84 13.16	Penetration Firestopping Mortars Penetration Firestopping Devices
07 84 43	Joint Firestopping
07 84 53	Building Perimeter Firestopping
07 86 00	Smoke Seals
07 87 00	Smoke Containment Barriers
07 90 00	Joint Protection
07 91 00	Preformed Joint Seals
07 91 13	Compression Seals
07 91 16	Joint Gaskets
07 91 23 07 91 26	Backer Rods Joint Fillers
07 92 00	Joint Sealants
07 92 13 07 92 16	Elastomeric Joint Sealants
07 92 18	Rigid Joint Sealants Acoustical Joint Sealants
07 95 00	
07 35 00	Expansion Control

- 07 95 13
- 07 95 53
- Expansion Joint Cover Assemblies Joint Slide Bearings Bridge Expansion Joint Cover Assemblies 07 95 63

Openings 08 00 00 **Operation and Maintenance of Openings** 08 01 00 Operation and Maintenance of Doors and Frames 08 01 10 08 01 11 Operation and Maintenance of Metal Doors and Frames 08 01 14 Operation and Maintenance of Wood Doors Operation and Maintenance of Plastic Doors 08 01 15 08 01 16 Operation and Maintenance of Composite Doors 08 01 17 Operation and Maintenance of Integrated Door Opening Assemblies 08 01 30 Operation and Maintenance of Specialty Doors and Frames Operation and Maintenance of Sliding Glass Doors 08 01 32 Operation and Maintenance of Coiling Doors and Grilles 08 01 33 Operation and Maintenance of Special Function Doors 08 01 34 08 01 35 Operation and Maintenance of Folding Doors and Grilles **Operation and Maintenance of Panel Doors** 08 01 36 08 01 39 **Operation and Maintenance of Traffic Doors** Operation and Maintenance of Entrances, Storefronts, and Curtain Walls 08 01 40 08 01 41 Operation and Maintenance of Entrances 08 01 42 **Operation and Maintenance of Storefronts** 08 01 44 Operation and Maintenance of Curtain Walls **Operation and Maintenance of Windows** 08 01 50 08 01 51 Operation and Maintenance of Metal Windows Operation and Maintenance of Wood Windows 08 01 52 Wood Window Repairs 08 01 52.61 08 01 52.71 Wood Window Rehabilitation 08 01 52.81 Wood Window Replacement 08 01 52.91 Wood Window Restoration 08 01 52.93 Historic Treatment of Wood Windows 08 01 53 Operation and Maintenance of Plastic Windows Operation and Maintenance of Composite Windows 08 01 54 08 01 56 Operation and Maintenance of Special Function Windows Operation and Maintenance of Skylights and Roof Windows 08 01 60 08 01 61 Operation and Maintenance of Roof Windows 08 01 62 Operation and Maintenance of Unit Skylights Operation and Maintenance of Metal-Framed Skylights 08 01 63 Operation and Maintenance of Plastic-Framed Skylights 08 01 64 08 01 70 Operation and Maintenance of Hardware 08 01 71 Operation and Maintenance of Door Hardware 08 01 74 Operation and Maintenance of Access Control Hardware 08 01 75 Operation and Maintenance of Window Hardware 08 01 80 Maintenance of Glazing 08 01 81 Maintenance of Glass Glazing 08 01 84 Maintenance of Plastic Glazing 08 01 88 Maintenance of Special Function Glazing 08 01 90 Operation and Maintenance of Louvers and Vents 08 01 91 **Operation and Maintenance of Louvers** Operation and Maintenance of Louvered Equipment Enclosures 08 01 92 Operation and Maintenance of Vents 08 01 95 08 05 00 **Common Work Results for Openings Schedules for Openings** 08 06 00

08 06 10 Door Schedule

08 06 10.13	Door Type Schedule
08 06 10.16	Frame Type Schedule
08 06 40	Schedules for Entrances, Storefronts, and Curtain Walls
08 06 41	Entrance Schedule
08 06 42	Storefront Schedule
08 06 50	Window Schedule
08 06 60	Skylight Schedule
08 06 70	Hardware Schedule
08 06 71 08 06 80	Door Hardware Schedule
	Glazing Schedule Louver and Vent Schedule
08 06 90 08 08 00	Commissioning of Openings
08 10 00	Doors and Frames
08 11 00	Metal Doors and Frames
08 11 13	Hollow Metal Doors and Frames
08 11 13.13	Standard Hollow Metal Doors and Frames
08 11 13.16	Custom Hollow Metal Doors and Frames
08 11 16	Aluminum Doors and Frames
08 11 19	Stainless-Steel Doors and Frames
08 11 23	Bronze Doors and Frames
08 11 63	Metal Screen and Storm Doors and Frames
08 11 63.13	Steel Screen and Storm Doors and Frames
08 11 63.23	Aluminum Screen and Storm Doors and Frames
08 11 66	Metal Screen Doors and Frames
08 11 66.13	Steel Screen Doors and Frames
08 11 66.23	Aluminum Screen Doors and Frames
08 11 69 08 11 69.13	Metal Storm Doors and Frames Steel Storm Doors and Frames
08 11 69.13	Aluminum Storm Doors and Frames
08 11 73	Sliding Metal Fire Doors
08 11 74	Sliding Metal Grilles
08 12 00	Metal Frames
08 12 13 08 12 13.13	Hollow Metal Frames Standard Hollow Metal Frames
08 12 13.13	Custom Hollow Metal Frames
08 12 15:55	Aluminum Frames
08 12 19	Stainless-Steel Frames
08 12 23	Bronze Frames
08 13 00	Metal Doors
08 13 13	Hollow Metal Doors
08 13 13.13	Standard Hollow Metal Doors
08 13 13.53	Custom Hollow Metal Doors
08 13 16	Aluminum Doors
08 13 19	Stainless-Steel Doors
08 13 23	Bronze Doors
08 13 73	Sliding Metal Doors
08 13 76	Bifolding Metal Doors
08 14 00	Wood Doors
08 14 13	Carved Wood Doors
08 14 16	Flush Wood Doors

	08 14 23	Clad Wood Doors
	08 14 23.13 08 14 23.16	Metal-Faced Wood Doors Plastic-Laminate-Faced Wood Doors
	08 14 23.10	Molded-Hardboard-Faced Wood Doors
	08 14 29	Prefinished Wood Doors
	08 14 33	Stile and Rail Wood Doors
	08 14 66	Wood Screen Doors
	08 14 69	Wood Storm Doors
	08 14 73	Sliding Wood Doors
	08 14 76	Bifolding Wood Doors
08	15 00	Plastic Doors
•••	08 15 13	Laminated Plastic Doors
	08 15 16	Solid Plastic Doors
	08 15 66	Plastic Screen Doors
	08 15 69	Plastic Storm Doors
	08 15 73	Sliding Plastic Doors
	08 15 76	Bifolding Plastic Doors
08	16 00	Composite Doors
	08 16 13	Fiberglass Doors
	08 16 73	Sliding Composite Doors
	08 16 76	Bifolding Composite Doors
08	17 00	Integrated Door Opening Assemblies
	08 17 13	Integrated Metal Door Opening Assemblies
	08 17 23	Integrated Wood Door Opening Assemblies
	08 17 33	Integrated Plastic Door Opening Assemblies
	08 17 43	Integrated Composite Door Opening Assemblies
80	30 00	Specialty Doors and Frames
	30 00 31 00	Specialty Doors and Frames Access Doors and Panels
		• •
	31 00	Access Doors and Panels
	31 00 08 31 13	Access Doors and Panels Access Doors and Frames
80	31 00 08 31 13 08 31 13.53	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames
80	31 00 08 31 13 08 31 13.53 08 31 16	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors
80	31 00 08 31 13 08 31 13.53 08 31 16 32 00	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames
80	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 16 08 33 23 08 33 23.13	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Rapid Coiling Doors
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 16 08 33 23 08 33 23.13 08 33 26	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Rapid Coiling Doors Overhead Coiling Grilles
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 13 08 33 23 08 33 23.13 08 33 26 08 33 33	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Doors
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 13 08 33 23 08 33 23.13 08 33 26 08 33 33 08 33 36	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Doors Side Coiling Grilles
08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 16 08 33 23 08 33 23.13 08 33 26 08 33 36 08 33 43	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Grilles Side Coiling Grilles Overhead Coiling Smoke Curtains
08 08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 16 08 33 23 08 33 23.13 08 33 26 08 33 33 08 33 36 08 33 43 08 33 44	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Doors Side Coiling Grilles Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains
08 08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 13 08 33 23 08 33 23.13 08 33 23 08 33 23 08 33 23 08 33 33 08 33 36 08 33 43 08 33 44 34 00	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Grilles Side Coiling Grilles Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains Special Function Doors
08 08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 13 08 33 13 08 33 23 08 33 23.13 08 33 23 08 33 23 08 33 23 08 33 43 08 33 44 34 00 08 34 13	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Grilles Side Coiling Grilles Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains Overhead Coiling Fire Curtains Corehead Coiling Fire Curtains Cold Storage Doors
08 08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 16 08 33 23 08 33 23 08 33 23.13 08 33 26 08 33 33 08 33 36 08 33 43 08 33 44 34 00 08 34 13 08 34 16	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Doors Side Coiling Grilles Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains Overhead Coiling Fire Curtains Cold Storage Doors Hangar Doors
08 08 08	31 00 08 31 13 08 31 13.53 08 31 16 32 00 08 32 13 08 32 16 08 32 19 33 00 08 33 13 08 33 13 08 33 13 08 33 23 08 33 23.13 08 33 23 08 33 23 08 33 23 08 33 43 08 33 44 34 00 08 34 13	Access Doors and Panels Access Doors and Frames Security Access Doors and Frames Access Panels and Frames Sliding Glass Doors Sliding Aluminum-Framed Glass Doors Sliding Plastic-Framed Glass Doors Sliding Wood-Framed Glass Doors Sliding Wood-Framed Glass Doors Coiling Doors and Grilles Coiling Counter Doors Coiling Counter Grilles Overhead Coiling Doors Overhead Coiling Doors Overhead Coiling Grilles Side Coiling Grilles Side Coiling Grilles Overhead Coiling Smoke Curtains Overhead Coiling Fire Curtains Overhead Coiling Fire Curtains Corehead Coiling Fire Curtains Cold Storage Doors

	08 34 33	Lightproof Doors
		5 1
	08 34 36	Darkroom Doors
	08 34 46	Radio-Frequency-Interference Shielding Doors
	08 34 49	Radiation Shielding Doors and Frames
	08 34 49.13	Neutron Shielding Doors and Frames
	08 34 53	Security Doors and Frames
	08 34 56	Security Gates
	08 34 58	File Room Doors and Frames
	08 34 59	Vault Doors and Day Gates
	08 34 63	Detention Doors and Frames
	08 34 63.13	
	08 34 63.16	
	08 34 63.33	
	08 34 73	Sound Control Door Assemblies
08 (35 00	Folding Doors and Grilles
	08 35 13	Folding Doors
	08 35 13.13	Accordion Folding Doors
	08 35 13.23	Accordion Folding Fire Doors
	08 35 13.33	Panel Folding Doors
	08 35 16	Folding Grilles
	08 35 16.13	Accordion Folding Grilles
08	36 00	Panel Doors
	08 36 13	Sectional Doors
	08 36 16	Single-Panel Doors
	08 36 19	Multi-Leaf Vertical Lift Doors
	08 36 23	Telescoping Vertical Lift Doors
08	38 00	Traffic Doors
00		
	08 38 13	Flexible Strip Doors
	08 38 16	Flexible Traffic Doors
00	08 38 19	Rigid Traffic Doors
08	39 00	Pressure-Resistant Doors
	08 39 13	Airtight Doors
	08 39 19	Watertight Doors
	08 39 53	Blast-Resistant Doors
08	40 00	Entrances, Storefronts, and Curtain Walls
08	41 00	Entrances and Storefronts
•••	08 41 13	Aluminum-Framed Entrances and Storefronts
	08 41 13.13	Fire-Rated Aluminum-Framed Entrances and Storefronts
	08 41 16	Bronze-Framed Entrances and Storefronts
	08 41 19	Stainless-Steel-Framed Entrances and Storefronts
	08 41 23	Steel-Framed Entrances and Storefronts
	08 41 26	All-Glass Entrances and Storefronts
00	42 00	Entrances
00		
	08 42 26	All-Glass Entrances
	08 42 29	Automatic Entrances
	08 42 29.13	Folding Automatic Entrances
	08 42 29.23	Sliding Automatic Entrances
	08 42 29.33	Swinging Automatic Entrances
	08 42 33 08 42 33.13	Revolving Door Entrances
	00 42 33.13	Security Revolving Door Entrances

08 42 36	Balanced Door Entrances
08 42 39	Pressure-Resistant Entrances
08 42 43	Intensive Care Unit/Critical Care Unit Entrances
08 43 00	Storefronts
08 43 11	Timber-Framed Storefronts
08 43 13	Aluminum-Framed Storefronts
08 43 13.13	Fire-Rated Aluminum Storefronts
08 43 16	Bronze-Framed Storefronts
08 43 19	Stainless-Steel-Framed Storefronts
08 43 23	Steel-Framed Storefronts
08 43 26	All-Glass Storefronts
08 43 27	Channel Glass Storefronts
08 43 29	Sliding Storefronts
08 44 00	Curtain Wall and Glazed Assemblies
08 44 11	Glazed Timber Curtain Walls
08 44 12	Glazed Composite Curtain Wall
08 44 12.13	Glazed Fiberglass Curtain Wall
08 44 13	Glazed Aluminum Curtain Walls
08 44 16	Glazed Bronze Curtain Walls
08 44 18	Glazed Steel Curtain Walls
08 44 19	Glazed Stainless-Steel Curtain Walls
08 44 23	Structural Sealant Glazed Curtain Walls
08 44 26	Structural Glass Curtain Walls
08 44 26.19	Point Supported Structural Glass
08 44 33	Sloped Glazing Assemblies
08 45 00	Translucent Wall and Roof Assemblies
08 45 13	Translucent Wall and Roof Assemblies Structured-Polycarbonate-Panel Assemblies
08 45 13 08 45 23	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies
08 45 13 08 45 23 08 50 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows
08 45 13 08 45 23 08 50 00 08 51 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19 08 51 23	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 08 52 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 08 52 00 08 52 13	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 08 52 00 08 52 13 08 52 16	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Metal-Clad Wood Windows Plastic-Clad Wood Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 13 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 08 52 00 08 52 13 08 52 16 08 52 66	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Window Screens Metal Window Screens Metal Storm Windows Wood Windows Plastic-Clad Wood Windows Wood Window Screens
$\begin{array}{c} 08 \ 45 \ 13 \\ 08 \ 45 \ 23 \end{array} \\ \begin{array}{c} \textbf{08 \ 50 \ 00} \\ \textbf{08 \ 51 \ 00} \\ 08 \ 51 \ 00 \\ 08 \ 51 \ 13 \\ 08 \ 51 \ 13 \\ 08 \ 51 \ 19 \\ 08 \ 51 \ 23 \\ 08 \ 51 \ 23 \\ 08 \ 51 \ 66 \\ 08 \ 51 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 52 \ 00} \\ \textbf{08 \ 52 \ 13} \\ 08 \ 52 \ 16 \\ 08 \ 52 \ 66 \\ 08 \ 52 \ 69 \end{array} \end{array}$	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Window Screens Metal Window Screens Metal Storm Windows Wood Windows Plastic-Clad Wood Windows Wood Window Screens Wood Storm Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 10 08 51 16 08 51 19 08 51 23 08 51 66 08 51 69 08 52 00 08 52 13 08 52 16 08 52 66 08 52 69 08 53 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Plastic Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 10 08 51 13 08 51 16 08 51 19 08 51 23 08 51 23 08 51 66 08 51 69 08 52 10 08 52 13 08 52 16 08 52 66 08 52 69 08 53 00 08 53 13	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Steel Window Screens Metal Storm Windows Wood Windows Plastic-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Plastic Windows Plastic Windows Vinyl Windows
$\begin{array}{c} 08 \ 45 \ 13 \\ 08 \ 45 \ 23 \end{array} \\ \begin{array}{c} \textbf{08 \ 50 \ 00} \\ \textbf{08 \ 51 \ 00} \\ \textbf{08 \ 51 \ 00} \\ 08 \ 51 \ 13 \\ 08 \ 51 \ 16 \\ 08 \ 51 \ 19 \\ 08 \ 51 \ 23 \\ 08 \ 51 \ 66 \\ 08 \ 51 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 52 \ 00} \\ 08 \ 52 \ 13 \\ 08 \ 52 \ 16 \\ 08 \ 52 \ 66 \\ 08 \ 52 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 52 \ 66} \\ 08 \ 52 \ 69 \\ \textbf{08 \ 53 \ 00} \\ 08 \ 53 \ 13 \\ 08 \ 53 \ 66 \end{array} \end{array}$	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Window Screens Metal Vindow Screens Metal Storm Windows Plastic-Clad Wood Windows Plastic-Clad Wood Windows Wood Window Screens Wood Storm Windows Plastic Windows Vinyl Windows Vinyl Windows
$\begin{array}{c} 08 \ 45 \ 13 \\ 08 \ 45 \ 23 \end{array} \\ \begin{array}{c} \textbf{08 \ 50 \ 00} \\ \textbf{08 \ 51 \ 00} \\ \textbf{08 \ 51 \ 00} \\ 08 \ 51 \ 13 \\ 08 \ 51 \ 10 \\ 08 \ 51 \ 19 \\ 08 \ 51 \ 23 \\ 08 \ 51 \ 23 \\ 08 \ 51 \ 66 \\ 08 \ 51 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 52 \ 00} \\ \textbf{08 \ 52 \ 13} \\ 08 \ 52 \ 16 \\ 08 \ 52 \ 66 \\ 08 \ 52 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 52 \ 00} \\ \textbf{08 \ 52 \ 66 \\ 08 \ 52 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 53 \ 00} \\ 08 \ 53 \ 13 \\ 08 \ 53 \ 66 \\ 08 \ 53 \ 69 \end{array} \end{array}$	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Plastic-Clad Wood Windows Wood Window Screens Wood Storm Windows Plastic Windows Vinyl Windows Vinyl Windows Vinyl Windows
08 45 13 08 45 23 08 50 00 08 51 00 08 51 10 08 51 13 08 51 16 08 51 19 08 51 23 08 51 23 08 51 66 08 51 69 08 52 00 08 52 13 08 52 16 08 52 66 08 52 69 08 53 00 08 53 13 08 53 66 08 53 69 08 54 00	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Window Screens Metal Vindow Screens Metal Storm Windows Plastic-Clad Wood Windows Plastic-Clad Wood Windows Plastic-Clad Wood Windows Wood Storm Windows Wood Storm Windows Plastic Windows Vinyl Window Screens Vinyl Window Screens Vinyl Windows Vinyl Windows
$\begin{array}{c} 08 \ 45 \ 13 \\ 08 \ 45 \ 23 \end{array} \\ \begin{array}{c} \textbf{08 \ 50 \ 00} \\ \textbf{08 \ 51 \ 00} \\ \textbf{08 \ 51 \ 00} \\ 08 \ 51 \ 13 \\ 08 \ 51 \ 16 \\ 08 \ 51 \ 19 \\ 08 \ 51 \ 23 \\ 08 \ 51 \ 23 \\ 08 \ 51 \ 66 \\ 08 \ 51 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 52 \ 00} \\ \textbf{08 \ 52 \ 13} \\ 08 \ 52 \ 16 \\ 08 \ 52 \ 66 \\ 08 \ 52 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 52 \ 00} \\ \textbf{08 \ 52 \ 66 \\ 08 \ 52 \ 69 \end{array} \\ \begin{array}{c} \textbf{08 \ 53 \ 00} \\ 08 \ 53 \ 13 \\ 08 \ 53 \ 66 \\ 08 \ 53 \ 69 \end{array} \end{array}$	Structured-Polycarbonate-Panel Assemblies Fiberglass-Sandwich-Panel Assemblies Windows Metal Windows Aluminum Windows Bronze Windows Stainless-Steel Windows Steel Windows Metal Window Screens Metal Storm Windows Wood Windows Plastic-Clad Wood Windows Wood Window Screens Wood Storm Windows Plastic Windows Vinyl Windows Vinyl Windows Vinyl Windows

08 54 69 08 55 00	Fiberglass Storm Windows Pressure-Resistant Windows
08 56 00	Special Function Windows
08 56 19	Pass Windows
08 56 46 08 56 49	Radio-Frequency-Interference Shielding Windows Radiation Shielding Windows
08 56 53	Security Windows
08 56 56	Security Window Screens
08 56 59	Service and Teller Window Units
08 56 63	Detention Windows
08 56 66	Detention Window Screens
08 56 73	Sound Control Windows
08 56 88	Interior Insulating Windows
08 60 00	Roof Windows and Skylights
08 61 00	Roof Windows
08 61 13	Metal Roof Windows
08 61 16	Wood Roof Windows
08 62 00	Unit Skylights
08 62 13	Domed Unit Skylights
08 62 16	Pyramidal Unit Skylights
08 62 19 08 62 23	Vaulted Unit Skylights Tubular Skylights
08 63 00	Metal-Framed Skylights
08 63 13	Domed Metal-Framed Skylights
08 63 16	Pyramidal Metal-Framed Skylights
08 63 19	Vaulted Metal-Framed Skylights
08 63 23	Ridge Metal-Framed Skylights
08 63 53	Motorized Metal-Framed Skylights
08 64 00	Plastic-Framed Skylights
08 67 00	Skylight Protection and Screens
08 70 00	Hardware
08 71 00	Door Hardware
08 71 13	Automatic Door Operators
08 71 53	Security Door Hardware
08 71 63	Detention Door Hardware
08 74 00	Access Control Hardware
08 74 13	Card Key Access Control Hardware
08 74 16	Keypad Access Control Hardware
08 74 19 08 75 00	Biometric Identity Access Control Hardware Window Hardware
08 75 13	Automatic Window Equipment
08 75 16	Window Operators
08 78 00	Special Function Hardware
08 79 00	Hardware Accessories
08 79 13	Key Storage Equipment
08 80 00	Glazing

08 81 00	Glass Glazing
08 81 13	Decorative Glass Glazing
08 83 00	Mirrors
08 83 13	Mirrored Glass Glazing
08 83 16	Mirrored Plastic Glazing
08 84 00	Plastic Glazing
08 84 13	Decorative Plastic Glazing
08 85 00	Glazing Accessories
08 87 00	Glazing Surface Films
08 87 13	Solar Control Films
08 87 23	Safety and Security Films
08 87 23.13	
08 87 23.16	, , , , , , , , , , , , , , , , , , ,
08 87 33	Decorative Films
08 88 00	Special Function Glazing
08 88 13	Fire-Resistant Glazing
08 88 19	Hurricane-Resistant Glazing
08 88 23	Cable Suspended Glazing
08 88 33	Transparent Mirrored Glazing
08 88 36	Switchable Glass
08 88 36.16	Electronically Controlled Switchable Glass
08 88 39	Pressure-Resistant Glazing
08 88 49	Radiation-Resistant Glazing
08 88 53	Security Glazing
08 88 56	Ballistics-Resistant Glazing
08 90 00	Louvers and Vents
08 91 00	Louvers
08 91 13	Motorized Wall Louvers
08 91 16	Operable Wall Louvers
08 91 19	Fixed Louvers
08 91 26	Door Louvers
08 92 00	Louvered Equipment Enclosures
08 95 00	Vents
08 95 13	Soffit Vents

- Wall Vents 08 95 16
- 08 95 33 **Explosion Vents**
- Flood Vents 08 95 43

Finishes 09 00 00 09 01 00 Maintenance of Finishes 09 01 20 Maintenance of Plaster and Gypsum Board 09 01 20.91 Plaster Restoration 09 01 30 Maintenance of Tiling 09 01 30.91 **Tile Restoration** 09 01 50 Maintenance of Ceilings 09 01 50.91 **Ceiling Restoration** Maintenance of Flooring 09 01 60 09 01 60.91 Flooring Restoration 09 01 70 Maintenance of Wall Finishes Wall Finish Restoration 09 01 70.91 Maintenance of Acoustic Treatment 09 01 80 09 01 90 Maintenance of Painting and Coating 09 01 90.51 Paint Cleaning 09 01 90.52 Maintenance Repainting **Maintenance Coatings** 09 01 90.53 09 01 90.61 Repainting 09 01 90.91 Paint Restoration **Coating Restoration** 09 01 90.92 09 01 90.93 Paint Preservation 09 05 00 Common Work Results for Finishes 09 05 13 Common Finishes Common Work Results for Flooring Preparation 09 05 61 09 06 00 Schedules for Finishes 09 06 00.13 Room Finish Schedule 09 06 20 Schedules for Plaster and Gypsum Board 09 06 30 Schedules for Tiling 09 06 50 Schedules for Ceilings 09 06 60 Schedules for Flooring Schedules for Wall Finishes 09 06 70 09 06 80 Schedules for Acoustical Treatment 09 06 90 Schedules for Painting and Coating 09 06 90.13 Paint Schedule 09 08 00 **Commissioning of Finishes** 09 20 00 Plaster and Gypsum Board 09 21 00 Plaster and Gypsum Board Assemblies Plaster Assemblies 09 21 13 09 21 16 Gypsum Board Assemblies Gypsum Board Shaft Wall Assemblies 09 21 16.23 09 21 16.33 Gypsum Board Area Separation Wall Assemblies Supports for Plaster and Gypsum Board 09 22 00 Metal Furring 09 22 13 Metal Channel Furring 09 22 13.13 09 22 13.23 **Resilient Channel Furring** Non-Structural Metal Framing 09 22 16 09 22 16.13 Non-Structural Metal Stud Framing 09 22 26 Suspension Systems

09 22 26.23 Metal Suspension Systems

	09 22 26.33 09 22 36	Plastic Suspension Systems Lath
	09 22 36.13	Gypsum Lath
	09 22 36.23	Metal Lath
00	09 22 39	Veneer Plaster Base
09	23 00	Gypsum Plastering
	09 23 13 09 23 82	Acoustical Gypsum Plastering
00	24 00	Fireproof Gypsum Plastering
09		Cement Plastering
	09 24 13 09 24 23	Adobe Finish Cement Stucco
	09 24 23	Cement Parging
09	25 00	Other Plastering
00	09 25 13	Acrylic Plastering
	09 25 13.13	Acrylic Plaster Finish
	09 25 23	Lime Based Plastering
	09 25 26	Natural Clay Plastering
09	26 00	Veneer Plastering
	09 26 13	Gypsum Veneer Plastering
09	27 00	Plaster Fabrications
	09 27 13	Glass-Fiber-Reinforced Plaster Fabrications
	09 27 23	Simulated Plaster Fabrications
09	28 00	Backing Boards and Underlayments
	09 28 13	Cementitious Backing Boards
	09 28 16	Glass-Mat Faced Gypsum Backing Boards
00	09 28 19	Fibered Gypsum Backing Boards
09	09 28 19 29 00	Fibered Gypsum Backing Boards Gypsum Board
	09 28 19 29 00 09 29 82	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing
	09 28 19 29 00	Fibered Gypsum Backing Boards Gypsum Board
	09 28 19 29 00 09 29 82 30 00 09 30 13	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling
	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling
	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling
	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling
	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling
	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26 09 30 29	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling
	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 26	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling
	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 29 09 30 33	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Ceramic Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13 09 31 16	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13 09 31 16 09 31 19	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13 09 31 16 09 31 19 09 31 23	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Glass Mosaic Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13 09 31 16 09 31 19 09 31 23 09 31 26	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Plastic Tiling Thin-Set Plastic Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13 09 31 16 09 31 19 09 31 23 09 31 29	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Quarry Tiling Thin-Set Glass Mosaic Tiling Thin-Set Plastic Tiling Thin-Set Plastic Tiling Thin-Set Metal Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13 09 31 16 09 31 19 09 31 23 09 31 26	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Ceramic Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Paver Tiling Thin-Set Glass Mosaic Tiling Thin-Set Plastic Tiling Thin-Set Plastic Tiling Thin-Set Metal Tiling Thin-Set Metal Tiling Thin-Set Stone Tiling
09	09 28 19 29 00 09 29 82 30 00 09 30 13 09 30 16 09 30 19 09 30 23 09 30 23 09 30 26 09 30 29 09 30 33 09 30 36 09 30 39 31 00 09 31 13 09 31 16 09 31 19 09 31 23 09 31 26 09 31 29 09 31 33	Fibered Gypsum Backing Boards Gypsum Board Gypsum Board Fireproofing Tiling Ceramic Tiling Quarry Tiling Paver Tiling Glass Mosaic Tiling Plastic Tiling Metal Tiling Stone Tiling Concrete Tiling Brick Tiling Thin-Set Ceramic Tiling Thin-Set Quarry Tiling Thin-Set Quarry Tiling Thin-Set Glass Mosaic Tiling Thin-Set Plastic Tiling Thin-Set Plastic Tiling Thin-Set Metal Tiling

09 32 13	Mortar-Bed Ceramic Tiling
09 32 16	Mortar-Bed Quarry Tiling
09 32 19	Mortar-Bed Paver Tiling
09 32 23	Mortar-Bed Glass Mosaic Tiling
09 32 26	Mortar-Bed Plastic Tiling
09 32 29	Mortar-Bed Metal Tiling
09 32 33	Mortar-Bed Stone Tiling
09 32 36	Mortar-Bed Concrete Tiling
09 33 00	Conductive Tiling
09 33 13	Conductive Ceramic Tiling
09 33 16	Conductive Quarry Tiling
09 33 19	Conductive Paver Tiling
09 33 23	Conductive Glass Mosaic Tiling
09 33 26	Conductive Plastic Tiling
09 33 29	Conductive Metal Tiling
09 33 33	Conductive Stone Tiling
09 33 36	Conductive Concrete Tiling
09 34 00	Waterproofing-Membrane Tiling
09 34 13	Waterproofing-Membrane Ceramic Tiling
09 34 16	Waterproofing-Membrane Quarry Tiling
09 34 19	Waterproofing-Membrane Paver Tiling
09 34 23	Waterproofing-Membrane Glass Mosaic Tiling
09 34 26	Waterproofing-Membrane Plastic Tiling
09 34 29	Waterproofing-Membrane Metal Tiling
09 34 33	Waterproofing-Membrane Stone Tiling
09 34 36	Waterproofing-Membrane Concrete Tiling
09 35 00	Chemical-Resistant Tiling
09 35 13	Chemical-Resistant Ceramic Tiling
09 35 16	Chemical-Resistant Quarry Tiling
09 35 19	Chemical-Resistant Paver Tiling
09 35 23	Chemical-Resistant Glass Mosaic Tiling
09 35 26	Chemical-Resistant Plastic Tiling
09 35 29	Chemical-Resistant Metal Tiling
09 35 33	Chemical-Resistant Stone Tiling
09 35 36	Chemical-Resistant Concrete Tiling
09 50 00	Ceilings
09 51 00	Acoustical Ceilings
09 51 13	Acoustical Panel Ceilings
09 51 14	Acoustical Fabric-Faced Panel Ceilings
09 51 23	Acoustical Tile Ceilings
09 51 26	Acoustical Wood Ceilings
09 51 33	Acoustical Metal Pan Ceilings
09 51 33.13	Acoustical Snap-in Metal Pan Ceilings
09 51 53	Direct-Applied Acoustical Ceilings
09 53 00	Acoustical Ceiling Suspension Assemblies
09 53 13	Curved Profile Ceiling Suspension Assemblies
09 53 23	Metal Acoustical Ceiling Suspension Assemblies
09 53 33	Plastic Acoustical Ceiling Suspension Assemblies
09 54 00	Specialty Ceilings

09 54 13	Open Metal Mesh Ceilings
09 54 16	Luminous Ceilings
09 54 19	Mirror Panel Ceilings
09 54 23	Linear Metal Ceilings
09 54 26	Suspended Wood Ceilings
09 54 33	Decorative Panel Ceilings
09 54 36	Suspended Decorative Grids
09 54 43	Stretched-Fabric Ceiling Systems
09 54 46	Fabric-Wrapped Ceiling Panels
09 54 53	Fiberglass Reinforced Panel Ceilings
09 56 00	Textured Ceilings
09 56 13	Gypsum-Panel Textured Ceilings
09 56 16	Metal-Panel Textured Ceilings
09 57 00	Special Function Ceilings
09 57 53	Security Ceiling Assemblies
09 58 00	Integrated Ceiling Assemblies
09 60 00	Flooring
09 60 13	Acoustic Underlayment
09 61 00	Flooring Treatment
09 61 13	Slip-Resistant Flooring Treatment
09 61 19	Concrete Staining
09 61 36	Static-Resistant Flooring Treatment
09 62 00	Specialty Flooring
09 62 13	Asphaltic Plank Flooring
09 62 19	Laminate Flooring
09 62 23	Bamboo Flooring
09 62 26	Leather Flooring
09 62 29	Cork Flooring
09 62 35	Acid-Resistant Flooring
09 62 48	Acoustic Flooring
09 62 53	Synthetic Turf Flooring
09 62 63	Metal Flooring
09 62 63.13	Aluminum Flooring
09 62 63.16	Stainless Steel Flooring
09 62 83	Structural Glass Flooring
09 63 00	Masonry Flooring
09 63 13	Brick Flooring
09 63 13.35	Chemical-Resistant Brick Flooring
09 63 40	Stone Flooring
09 63 43	Composition Stone Flooring
09 64 00	Wood Flooring
09 64 16	Wood Block Flooring
09 64 19	Wood Composition Flooring
09 64 23	Wood Parquet Flooring
09 64 23.13	Acrylic-Impregnated Wood Parquet Flooring
09 64 29	Wood Strip and Plank Flooring
09 64 33	Laminated Wood Flooring
09 64 53	Resilient Wood Flooring Assemblies
09 64 66	Wood Athletic Flooring

09 65 00	Resilient Flooring
09 65 13	Resilient Base and Accessories
09 65 13.13	Resilient Base
09 65 13.23	Resilient Stair Treads and Risers
09 65 13.26	Resilient Stair Nosings
09 65 13.33	Resilient Accessories
09 65 13.36 09 65 16	Resilient Carpet Transitions Resilient Sheet Flooring
09 65 16.23	Vinyl Sheet Flooring
09 65 16.33	Rubber Sheet Flooring
09 65 16.43	PVC-Free Sheet Flooring
09 65 19	Resilient Tile Flooring
09 65 33	Conductive Resilient Flooring
09 65 36	Static-Control Resilient Flooring
09 65 36.13	Static-Dissipative Resilient Flooring
09 65 36.16	Static-Resistant Resilient Flooring
09 65 43	Linoleum Flooring
09 65 66	Resilient Athletic Flooring
09 66 00	Terrazzo Flooring
09 66 13	Portland Cement Terrazzo Flooring
09 66 13.13	Sand Cushion Terrazzo Flooring
09 66 13.16	Monolithic Terrazzo Flooring
09 66 13.19	Bonded Terrazzo Flooring
09 66 13.23	Palladina Terrazzo Flooring
09 66 13.26	Rustic Terrazzo Flooring
09 66 13.33	Structural Terrazzo Flooring
09 66 16 09 66 16.13	Terrazzo Floor Tile Portland Cement Terrazzo Floor Tile
09 66 16.16	Plastic-Matrix Terrazzo Floor Tile
09 66 23	Resinous Matrix Terrazzo Flooring
09 66 23.13	Polyacrylate Modified Cementitious Terrazzo Flooring
09 66 23.16	Epoxy-Resin Terrazzo Flooring
09 66 23.19	Polyester-Resin Terrazzo Flooring
09 66 33	Conductive Terrazzo Flooring
09 66 33.13	Conductive Epoxy-Resin Terrazzo
09 66 33.16	Conductive Polyester-Resin Terrazzo Flooring
09 66 33.19	Conductive Plastic-Matrix Terrazzo Flooring
09 67 00	Fluid-Applied Flooring
09 67 13	Elastomeric Liquid Flooring
09 67 13.33	Conductive Elastomeric Liquid Flooring
09 67 16	Epoxy-Marble Chip Flooring
09 67 19	Magnesium-Oxychloride Flooring
09 67 23	Resinous Flooring
09 67 26	Quartz Flooring
09 67 66	Fluid-Applied Athletic Flooring
09 68 00	Carpeting
09 68 13	Tile Carpeting
09 68 16	Sheet Carpeting
09 69 00	Access Flooring
09 69 13	Rigid-Grid Access Flooring
09 69 16	Snap-on Stringer Access Flooring
09 69 19	Stringerless Access Flooring

09 69 33	Low-Profile Fixed Height Access Flooring
09 69 53 09 69 56	Access Flooring Accessories Access Flooring Stairs and Stringers
09 70 00	Wall Finishes
09 72 00	Wall Coverings
09 72 13 09 72 16	Cork Wall Coverings
09 72 16	Vinyl-Coated Fabric Wall Coverings Flexible Vinyl Wall Coverings
09 72 16.16	Rigid-Sheet Vinyl Wall Coverings
09 72 19	Textile Wall Coverings
09 72 23	Wallpapering
09 73 00	Wall Carpeting
09 74 00	Flexible Wood Sheets
09 74 13	Wood Wall Coverings
09 74 16	Flexible Wood Veneers
09 75 00	Stone Facing
09 75 13	Stone Wall Facing
09 75 19	Stone Trim
09 76 00	Plastic Blocks
09 77 00	Special Wall Surfacing
09 77 13 09 77 23	Stretched-Fabric Wall Systems Fabric-Wrapped Panels
09 77 53	Vegetated Wall Systems
09 78 00	Interior Wall Paneling
09 78 13	Metal Interior Wall Paneling
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09 78 13	Metal Interior Wall Paneling
09 78 13 09 80 00 09 81 00 09 81 13	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components
09 78 13 09 80 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Wall Coating Acoustic Ceiling Coating Acoustic Drapery
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 29 09 83 00 09 83 13 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 16	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Drapery Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 29 09 83 00 09 83 13 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 16 09 84 23	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 26	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Drapery Acoustic Stretched-Fabric Wall Systems Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Reflective Panels
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 23 09 84 33	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Reflective Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 29 09 83 00 09 83 13 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 23 09 84 33 09 84 36	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Drapery Acoustic Stretched-Fabric Wall Systems Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Reflective Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 23 09 84 33 09 84 36 09 90 00	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units Acousting Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Fixed Sound-Reflective Panels Moveable Sound-Reflective Panels Acoustic Absorbing Units Acoustic Absorbing Ceiling Cei
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 16 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 23 09 84 33 09 84 36 09 90 00 09 91 00	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Drapery Acoustic Stretched-Fabric Wall Systems Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units Painting and Coating Painting
09 78 13 09 80 00 09 81 00 09 81 00 09 81 13 09 81 29 09 83 00 09 83 13 09 83 16 09 83 22 09 84 00 09 84 13 09 84 14 09 84 16 09 84 23 09 84 23 09 84 33 09 84 36 09 90 00	Metal Interior Wall Paneling Acoustic Treatment Acoustic Insulation Acoustic Board Insulation Acoustic Blanket Insulation Sprayed Acoustic Insulation Acoustic Finishes Acoustic Vall Coating Acoustic Ceiling Coating Acoustic Drapery Acoustic Room Components Fixed Sound-Absorptive Panels Acoustic Stretched-Fabric Wall Systems Fixed Sound-Reflective Panels Moveable Sound-Absorptive Panels Moveable Sound-Reflective Panels Sound-Absorbing Wall Units Sound-Absorbing Ceiling Units Acousting Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Acoustic Stretched-Fabric Vall Systems Fixed Sound-Reflective Panels Moveable Sound-Reflective Panels Acoustic Absorbing Units Acoustic Absorbing Ceiling Cei

09 93 00	Staining and Transparent Finishing
09 93 13	Exterior Staining and Finishing
09 93 13.13	5
09 93 13.53	0
09 93 23	Interior Staining and Finishing
09 93 23.13	5
09 93 23.53	Interior Finishing
09 94 00	Decorative Finishing
09 94 13	Textured Finishing
09 94 16	Faux Finishing
09 94 19	Multicolor Interior Finishing
09 96 00	High-Performance Coatings
09 96 13	Abrasion-Resistant Coatings
09 96 23	Graffiti-Resistant Coatings
09 96 26	Marine Coatings
09 96 33	High-Temperature-Resistant Coatings
09 96 35	Chemical-Resistant Coatings
09 96 43	Fire-Retardant Coatings
09 96 46	Intumescent Painting
09 96 53	Elastomeric Coatings
09 96 56	Epoxy Coatings
09 96 59	High-Build Glazed Coatings
09 96 63	Textured Plastic Coatings
09 96 66	Aggregate Wall Coatings
09 97 00	Special Coatings
09 97 13	Steel Coatings
09 97 13.13	Interior Steel Coatings
09 97 13.23	Exterior Steel Coatings
09 97 23	Concrete and Masonry Coatings

- 09 97 26
- 09 97 26.13
- Cementitious Coatings Interior Cementitious Coatings Exterior Cementitious Coatings 09 97 26.23

Specialties 10 00 00 **Operation and Maintenance of Specialties** 10 01 00 10 01 10 Operation and Maintenance of Information Specialties 10 01 20 Operation and Maintenance of Interior Specialties 10 01 30 Operation and Maintenance of Fireplaces and Stoves Operation and Maintenance of Safety Specialties 10 01 40 Operation and Maintenance of Storage Specialties 10 01 50 10 01 70 Operation and Maintenance of Exterior Specialties 10 01 80 Operation and Maintenance of Other Specialties 10 05 00 Common Work Results for Specialties 10 06 00 Schedules for Specialties 10 06 10 Schedules for Information Specialties 10 06 10.13 **Exterior Signage Schedule** 10 06 10.16 Interior Signage Schedule 10 06 20 Schedules for Interior Specialties Toilet, Bath, and Laundry Accessory Schedule 10 06 20.13 Schedules for Fireplaces and Stoves 10 06 30 10 06 40 Schedules for Safety Specialties Schedules for Storage Specialties 10 06 50 10 06 70 Schedules for Exterior Specialties 10 06 80 Schedules for Other Specialties 10 08 00 **Commissioning of Specialties Information Specialties** 10 10 00 10 11 00 Visual Display Units Chalkboards 10 11 13 10 11 13.13 **Fixed Chalkboards** Modular-Support-Mounted Chalkboards 10 11 13.23 10 11 13.33 Rail-Mounted Chalkboards 10 11 13.43 Portable Chalkboards 10 11 16 Markerboards 10 11 16.13 **Fixed Markerboards** Modular-Support-Mounted Markerboards 10 11 16.23 10 11 16.33 Rail-Mounted Markerboards Portable Markerboards 10 11 16.43 10 11 16.53 Electronic Markerboards 10 11 23 Tackboards 10 11 23.13 **Fixed Tackboards** 10 11 23.23 Modular-Support-Mounted Tackboards **Rail-Mounted Tackboards** 10 11 23.33 10 11 23.43 Portable Tackboards Sliding Visual Display Units 10 11 33 Horizontal-Sliding Visual Display Units 10 11 33.13 10 11 33.23 Vertical-Sliding Visual Display Units 10 11 36 Visual Display Conference Units 10 11 39 Visual Display Rails 10 11 43 Visual Display Wall Panels 10 11 46 Visual Display Fabrics 10 12 00 **Display Cases**

10 13 00 Directories

10 10 10	
10 13 13 10 13 23	Electronic Directories Illuminated Directories
10 13 23	
10 14 00	Signage
10 14 19	Plaques Dimensional Letter Signage
10 14 23	Panel Signage
10 14 23.13	Engraved Panel Signage
10 14 26	Post and Panel/Pylon Signage
10 14 33	Illuminated Panel Signage
10 14 43	Photoluminescent Signage
10 14 53	Traffic Signage
10 14 53.13 10 14 63	Transportation Reference Markers Electronic Message Signage
10 14 64	Audible Signage
10 14 66	Floating Signage
10 14 67	Tactile Signage
10 17 00	Telephone Specialties
10 17 13	Telephone Directory Units
10 17 16	Telephone Enclosures
10 17 16.13	Telephone Stalls
10 17 16.16 10 17 19	Telephone Alcoves
10 18 00	Telephone Shelving Informational Kiosks
10 20 00	Interior Specialties
40 04 00	
10 21 00	Compartments and Cubicles
10 21 13	Toilet Compartments
10 21 13 10 21 13.13	Toilet Compartments Metal Toilet Compartments
10 21 13 10 21 13.13 10 21 13.16	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments
10 21 13 10 21 13.13	Toilet Compartments Metal Toilet Compartments
10 21 13 10 21 13.13 10 21 13.16 10 21 13.19 10 21 13.23 10 21 13.40	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments
10 21 13 10 21 13.13 10 21 13.16 10 21 13.19 10 21 13.23 10 21 13.40 10 21 16	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments
10 21 13 10 21 13.13 10 21 13.16 10 21 13.19 10 21 13.23 10 21 13.40 10 21 16 10 21 16.13	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments
$\begin{array}{c} 10 \ 21 \ 13 \\ 10 \ 21 \ 13.13 \\ 10 \ 21 \ 13.16 \\ 10 \ 21 \ 13.19 \\ 10 \ 21 \ 13.23 \\ 10 \ 21 \ 13.40 \\ 10 \ 21 \ 16 \\ 10 \ 21 \ 16.13 \\ 10 \ 21 \ 16.16 \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Particleboard Shower and Dressing Compartments
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Particleboard Shower and Dressing Compartments Stone Shower and Dressing Compartments
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.16\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ 10\ 21\ 23\end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Particleboard Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.16\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ 10\ 21\ 23\\ 10\ 21\ 23.13\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Particleboard Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ 10\ 21\ 23\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware
10 21 13 10 21 13.13 10 21 13.13 10 21 13.16 10 21 13.23 10 21 13.23 10 21 13.40 10 21 16.13 10 21 16.13 10 21 16.16 10 21 16.19 10 21 16.23 10 21 16.40 10 21 23 10 21 23.13 10 21 23.16 10 22 00	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ 10\ 21\ 23\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.16\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\\ \textbf{10\ 22\ 00}\\ 10\ 22\ 13\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Particleboard Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions Wire Mesh Partitions
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 23.13\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\\ \textbf{10\ 22\ 13}\\ 10\ 22\ 14\\ 10\ 22\ 16\\ 10\ 22\ 19\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions Wire Mesh Partitions Expanded Metal Partitions Folding Gates Demountable Partitions
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\\ \textbf{10\ 21\ 23.16}\\ \textbf{10\ 22\ 13}\\ 10\ 22\ 13\\ 10\ 22\ 14\\ 10\ 22\ 16\\ 10\ 22\ 19\\ 10\ 22\ 19.13\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions Wire Mesh Partitions Expanded Metal Partitions Folding Gates Demountable Partitions Demountable Metal Partitions
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\\ \textbf{10\ 22\ 13}\\ 10\ 22\ 13\\ 10\ 22\ 14\\ 10\ 22\ 19\\ 10\ 22\ 19.13\\ 10\ 22\ 19.23\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions Wire Mesh Partitions Expanded Metal Partitions Folding Gates Demountable Partitions Demountable Metal Partitions Demountable Metal Partitions
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\\ \textbf{10\ 21\ 23.16}\\ \textbf{10\ 22\ 13}\\ 10\ 22\ 13\\ 10\ 22\ 14\\ 10\ 22\ 16\\ 10\ 22\ 19\\ 10\ 22\ 19.13\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions Wire Mesh Partitions Expanded Metal Partitions Folding Gates Demountable Partitions Demountable Metal Partitions
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.40\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\\ \textbf{10\ 22\ 13}\\ 10\ 22\ 13.13\\ 10\ 22\ 13\\ 10\ 22\ 14\\ 10\ 22\ 16\\ 10\ 22\ 19\\ 10\ 22\ 19.13\\ 10\ 22\ 19.23\\ 10\ 22\ 19.23\\ 10\ 22\ 19.43\\ 10\ 22\ 19.43\\ 10\ 22\ 19.53\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Metal Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains and Track Cubicle Curtains Cubicle Track and Hardware Partitions Wire Mesh Partitions Expanded Metal Partitions Folding Gates Demountable Partitions Demountable Metal Partitions Demountable Metal Partitions Demountable Plastic Partitions Demountable Plastic Partitions Demountable Plastic Partitions Demountable Composite Partitions Demountable Gypsum Partitions
$\begin{array}{c} 10\ 21\ 13\\ 10\ 21\ 13.13\\ 10\ 21\ 13.16\\ 10\ 21\ 13.16\\ 10\ 21\ 13.19\\ 10\ 21\ 13.23\\ 10\ 21\ 13.23\\ 10\ 21\ 13.40\\ 10\ 21\ 16.13\\ 10\ 21\ 16.16\\ 10\ 21\ 16.19\\ 10\ 21\ 16.23\\ 10\ 21\ 16.23\\ 10\ 21\ 23.13\\ 10\ 21\ 23.16\\ \textbf{10\ 21\ 23.16}\\ \textbf{10\ 22\ 13}\\ 10\ 22\ 13\\ 10\ 22\ 14\\ 10\ 22\ 14\\ 10\ 22\ 19\\ 10\ 22\ 19.13\\ 10\ 22\ 19.23\\ 10\ 22\ 19.33\\ 10\ 22\ 19.43\\ \end{array}$	Toilet Compartments Metal Toilet Compartments Plastic-Laminate-Clad Toilet Compartments Plastic Toilet Compartments Particleboard Toilet Compartments Stone Toilet Compartments Stone Toilet Compartments Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic-Laminate-Clad Shower and Dressing Compartments Plastic Shower and Dressing Compartments Plastic Shower and Dressing Compartments Stone Shower and Dressing Compartments Stone Shower and Dressing Compartments Cubicle Curtains and Track Cubicle Curtains and Track Cubicle Track and Hardware Partitions Wire Mesh Partitions Expanded Metal Partitions Folding Gates Demountable Partitions Demountable Partitions Demountable Plastic Partitions Demountable Plastic Partitions Demountable Plastic Partitions Demountable Plastic Partitions

10 22 23.13 10 22 23.23 10 22 33 10 22 36 10 22 39 10 22 43 10 25 00	Wall Screens Movable Panel Systems Accordion Folding Partitions Coiling Partitions Folding Panel Partitions Sliding Partitions Service Walls
10 25 13 10 25 16	Patient Bed Service Walls Modular Service Walls
10 26 00	Wall and Door Protection
$\begin{array}{c} 10 \ 26 \ 13 \\ 10 \ 26 \ 16 \\ 10 \ 26 \ 16.13 \\ 10 \ 26 \ 16.16 \\ 10 \ 26 \ 23 \\ 10 \ 26 \ 23.13 \\ 10 \ 26 \ 23.16 \\ 10 \ 26 \ 33 \\ 10 \ 26 \ 41 \end{array}$	Corner Guards Bumper Guards Bumper Rails Protective Corridor Handrails Protective Wall Covering Impact Resistant Wall Protection Fiberglass Reinforced Protective Wall Covering Door and Frame Protection Bullet Resistant Panels
10 28 00	Toilet, Bath, and Laundry Accessories
$\begin{array}{c} 10 \ 28 \ 13 \\ 10 \ 28 \ 13.13 \\ 10 \ 28 \ 13.13 \\ 10 \ 28 \ 13.53 \\ 10 \ 28 \ 13.63 \\ 10 \ 28 \ 13.63 \\ 10 \ 28 \ 16 \\ 10 \ 28 \ 16.13 \\ 10 \ 28 \ 19 \\ 10 \ 28 \ 19.16 \\ 10 \ 28 \ 19.19 \\ 10 \ 28 \ 23 \\ 10 \ 28 \ 23.13 \\ 10 \ 28 \ 23.16 \end{array}$	Toilet Accessories Commercial Toilet Accessories Healthcare Toilet Accessories Security Toilet Accessories Detention Toilet Accessories Bath Accessories Residential Bath Accessories Tub and Shower Doors Shower Doors Tub Doors Laundry Accessories Built-In Ironing Boards Clothes Drying Racks
10 30 00	Fireplaces and Stoves
10 31 00	Manufactured Fireplaces
10 31 13	Manufactured Fireplace Chimneys
10 31 16 10 32 00	Manufactured Fireplace Forms
10 32 00 10 32 13 10 32 16 10 32 19 10 32 23 10 32 26	Fireplace Specialties Fireplace Dampers Fireplace Inserts Fireplace Screens Fireplace Doors Fireplace Water Heaters
10 35 00	Stoves
10 35 13	Heating Stoves
10 35 23	
10 40 00	Safety Specialties
10 41 00 10 41 13	Emergency Access and Information Cabinets Fire Department Plan Cabinets

	10 41 16	Emergency Key Cabinets
10	43 00	Emergency Aid Specialties
	10 43 13	Defibrillator Cabinets
	10 43 16	First Aid Cabinets
	10 43 21	Accessibility Evacuation Chairs
	10 43 31	Respiration Equipment
	10 43 33	Breathing Air Replenishment Systems
10	44 00	Fire Protection Specialties
	10 44 13	Fire Protection Cabinets
	10 44 13.53	Security Fire Extinguisher Cabinets
	10 44 16	Fire Extinguishers
	10 44 16.13	Portable Fire Extinguishers
	10 44 16.16	Wheeled Fire Extinguisher Units
	10 44 19 10 44 43	Fire Blankets
40		Fire Extinguisher Accessories
10	50 00	Storage Specialties
10	51 00	Lockers
	10 51 13	Metal Lockers
	10 51 16	Wood Lockers
	10 51 23	Plastic-Laminate-Clad Lockers
	10 51 26	Plastic Lockers
	10 51 26.13	Recycled Plastic Lockers
	10 51 29	Phenolic Lockers
	10 51 33	Glass Lockers
	10 51 43	Wire Mesh Storage Lockers
	10 51 52	Locker Doom Bonches
10	10 51 53	Locker Room Benches
10	55 00	Postal Specialties
10	55 00 10 55 13	Postal Specialties Central Mail Delivery Boxes
10	55 00 10 55 13 10 55 13.13	Postal Specialties Central Mail Delivery Boxes Cluster Box Units
10	55 00 10 55 13 10 55 13.13 10 55 16	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes
10	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes
10	55 00 10 55 13 10 55 13.13 10 55 16	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes
10	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes
10	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers
10	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers
10	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes
10	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.19 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13 10 56 13.13	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving End-Panel-Support Metal Storage Shelving
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13 10 56 13.13 10 56 13.13 10 56 13.16	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving End-Panel-Support Metal Storage Shelving Post-and-Shelf Metal Storage Shelving
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13 10 56 13.13 10 56 13.16 10 56 13.19	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving End-Panel-Support Metal Storage Shelving Post-and-Beam Metal Storage Shelving
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.16 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13 10 56 13.13 10 56 13.13 10 56 13.16	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving End-Panel-Support Metal Storage Shelving Post-and-Beam Metal Storage Shelving Cantilever Metal Storage Shelving
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13.13 10 56 13.16 10 56 13.19 10 56 13.23	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving End-Panel-Support Metal Storage Shelving Post-and-Beam Metal Storage Shelving
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13.13 10 56 13.19 10 56 13.23 10 56 16	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving End-Panel-Support Metal Storage Shelving Post-and-Shelf Metal Storage Shelving Post-and-Beam Metal Storage Shelving Cantilever Metal Storage Shelving Fabricated Wood Storage Shelving
	55 00 10 55 13 10 55 13.13 10 55 16 10 55 19 10 55 23 10 55 23.13 10 55 23.13 10 55 23.16 10 55 23.19 10 55 26 10 55 33 10 55 36 10 55 91 56 00 10 56 13.13 10 56 13.13 10 56 13.19 10 56 13.23 10 56 16 10 56 17	Postal Specialties Central Mail Delivery Boxes Cluster Box Units Mail Collection Boxes Receiving Boxes Mail Boxes Apartment Mail Boxes Mail Box Directories Mail Box Key Keepers Parcel Lockers Data Distribution Boxes Package Depositories Mail Chutes Storage Assemblies Metal Storage Shelving End-Panel-Support Metal Storage Shelving Post-and-Beam Metal Storage Shelving Post-and-Beam Metal Storage Shelving Cantilever Metal Storage Shelving Fabricated Wood Storage Shelving Wall-Mounted Standards and Shelving

10 56 23 Wire Storage Shelving

10 56 26	Mobile Storage Shelving
10 56 26.13	Manual Mobile Storage Shelving
10 56 26.23	Motorized Mobile Storage Shelving
10 56 29	Storage Racks
10 56 29.13	Flow Storage Racks
10 56 29.16	Pallet Storage Racks
10 56 29.19	Movable-Shelf Storage Racks
10 56 29.23	Stacker Storage Racks
10 56 29.26	Cantilever Storage Racks
10 56 29.29	Drive-In Storage Racks
10 56 29.33	Drive-Through Storage Racks
10 56 29.43	Wine Storage Racks
10 56 33	Mercantile Storage Assemblies
10 57 00	Wardrobe and Closet Specialties
10 57 13	Hat and Coat Racks
10 57 16	Boot Racks
10 57 23	Closet and Utility Shelving
10 57 23.13	Wire Closet and Utility Shelving
10 57 23.16	Plastic-Laminate-Clad Closet and Utility Shelving
10 57 23.19	Wood Closet and Utility Shelving
10 57 33	Closet and Utility Shelving Hardware
10 70 00	Exterior Specialties
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10 71 00	Exterior Protection
10 71 13	Exterior Sun Control Devices
10 71 13.13	Exterior Shutters
10 71 13.19	Rolling Exterior Shutters
10 71 13.23	Coiling Exterior Shutters
10 71 13.26	Decorative Exterior Shutters
10 71 13.29	Side-Hinged Exterior Shutters
10 71 13.43	Fixed Sun Screens
10 71 13.53	Exterior Daylighting Devices
10 71 16	Storm Panels Demountable Storm Panels
10 71 16.13 10 71 16.16	Movable Storm Panels
10 71 19	Flood Barriers
10 71 19.16	Removable Flood Barriers
10 73 00	Protective Covers
10 73 13	Awnings
10 73 16	Canopies Car Shelters
10 73 23	
10 73 26	Walkway Coverings
10 73 33	Marquees
10 73 43	Transportation Stop Shelters
10 74 00	Manufactured Exterior Specialties
10 74 13	Exterior Clocks
10 74 23	Cupolas
10 74 26	Spires

- Weathervanes 10 74 33
- Below-Grade Egress Assemblies Window Wells
- 10 74 43 10 74 46

10 75 00 10 75 13 10 75 16 10 75 19 10 75 23	Flagpoles Automatic Flagpoles Ground-Set Flagpoles Nautical Flagpoles Wall-Mounted Flagpoles
10 80 00	Other Specialties
10 81 00	Pest Control Devices
10 81 13	Bird Control Devices
10 81 16	Insect Control Devices
10 81 19	Rodent Control Devices
10 82 00	Grilles and Screens
10 82 13	Exterior Grilles and Screens
10 82 19	Exterior Sound Screens
10 82 23	Interior Grilles and Screens
10 83 00	Flags and Banners
10 83 13	Flags
10 83 16	Banners
10 84 00	Gas Lighting
10 84 13	Exterior Gas Lighting
10 84 16	Interior Gas Lighting
10 86 00	Security Mirrors and Domes
10 88 00	Scales

Equipment 11 00 00 **Operation and Maintenance of Equipment** 11 01 00 Operation and Maintenance of Vehicle and Pedestrian Equipment 11 01 10 Operation and Maintenance of Security, Bank, and Detention Equipment 11 01 15 11 01 20 **Operation and Maintenance of Commercial Equipment** Operation and Maintenance of Residential Equipment 11 01 30 11 01 40 Operation and Maintenance of Foodservice Equipment 11 01 50 Operation and Maintenance of Educational and Scientific Equipment 11 01 56 Operation and Maintenance of Observatory Equipment 11 01 60 Operation and Maintenance of Entertainment Equipment Operation and Maintenance of Athletic and Recreational Equipment 11 01 65 11 01 70 Operation and Maintenance of Healthcare Equipment 11 01 80 Operation and Maintenance of Collection and Disposal Equipment Operation and Maintenance of Other Equipment 11 01 90 11 05 00 **Common Work Results for Equipment** 11 05 13 Common Motor Requirements for Equipment 11 06 00 Schedules for Equipment Schedules for Vehicle and Pedestrian Equipment 11 06 10 Schedules for Security, Bank, and Detention Equipment 11 06 15 **Teller and Service Equipment Schedule** 11 06 15.13 Schedules for Commercial Equipment 11 06 20 11 06 30 Schedules for Residential Equipment Schedules for Foodservice Equipment 11 06 40 Foodservice Equipment Schedule 11 06 40.13 11 06 50 Schedules for Educational and Scientific Equipment 11 06 60 Schedules for Entertainment Equipment 11 06 65 Schedules for Athletic and Recreational Equipment 11 06 70 Schedules for Healthcare Equipment 11 06 70.13 Healthcare Equipment Schedule Schedules for Collection and Disposal Equipment 11 06 80 11 06 90 Schedules for Other Equipment 11 08 00 **Commissioning of Equipment** Vehicle and Pedestrian Equipment 11 10 00 11 11 00 Vehicle Service Equipment Compressed-Air Vehicle Service Equipment 11 11 13 11 11 19 Vehicle Lubrication Equipment 11 11 23 **Tire-Changing Equipment** 11 11 26 Vehicle-Washing Equipment 11 12 00 Parking Control Equipment Parking Key and Card Control Units 11 12 13 Parking Ticket Dispensers 11 12 16 11 12 23 Parking Meters 11 12 26 Parking Fee Collection Equipment 11 12 26.13 Parking Fee Coin Collection Equipment 11 12 33 Parking Gates 11 12 33.13 Lift Arm Parking Gates 11 12 33.16 Sliding Parking Gates

11 12 33.19 Swinging Parking Gates

11 13 00	Loading Dock Equipment
11 13 13	Loading Dock Bumpers
11 13 16	Loading Dock Seals and Shelters
11 13 16.13	Loading Dock Seals
11 13 16.23	Loading Dock Shelters
11 13 16.33	Loading Dock Rail Shelters
11 13 19	Stationary Loading Dock Equipment
11 13 19.13	Loading Dock Levelers
11 13 19.23	Stationary Loading Dock Lifts
11 13 19.26 11 13 19.33	Loading Dock Truck Lifts
11 13 19.33	Loading Dock Truck Restraints Portable Dock Equipment
11 13 23.13	Portable Dock Lifts
11 13 23.16	Portable Dock Ramps
11 13 23.19	Portable Dock Bridges
11 13 23.23	Portable Dock Platforms
11 13 26	Loading Dock Lights
11 14 00	Pedestrian Control Equipment
11 14 13	Pedestrian Gates
11 14 13.13	
11 14 13.16	Rotary Gates
11 14 13.19	Turnstiles
11 14 16	Money-Changing Equipment
11 14 16.19	Money-Changing Machines
11 14 26	Pedestrian Fare Collection Equipment
11 14 26.13	Pedestrian Coin Fare Collection Equipment
11 14 43	Pedestrian Detection Equipment
11 14 43.13	Electronic Detection and Counting Systems
11 14 53	Electronic Detection and Counting Systems Pedestrian Security Equipment
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11 14 53	Pedestrian Security Equipment Security, Detention, and Banking
11 14 53 11 15 00	Pedestrian Security Equipment Security, Detention, and Banking Equipment
11 14 53 11 15 00 11 16 00	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment
11 14 53 11 15 00 11 16 00 11 16 13	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems
11 14 53 11 15 00 11 16 00 11 16 13 11 16 13 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26 11 17 33 11 17 36	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26 11 17 33 11 17 36 11 18 00	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units Security Equipment
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 26 11 17 33 11 17 36 11 18 00 11 18 13	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units Security Equipment Deal Drawers
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26 11 17 33 11 17 36 11 18 00 11 18 13 11 18 16	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units Security Equipment Deal Drawers Gun Ports
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26 11 17 33 11 17 36 11 18 00 11 18 13 11 18 16 11 18 23	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units Security Equipment Deal Drawers Gun Ports Valuable Material Storage
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26 11 17 33 11 17 36 11 18 00 11 18 13 11 18 13 11 18 10 11 18 23 11 19 00	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units Security Equipment Deal Drawers Gun Ports Valuable Material Storage Detention Equipment
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26 11 17 33 11 17 36 11 18 00 11 18 13 11 18 16 11 18 23	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units Security Equipment Deal Drawers Gun Ports Valuable Material Storage
11 14 53 11 15 00 11 16 00 11 16 13 11 16 16 11 16 23 11 16 33 11 17 00 11 17 13 11 17 16 11 17 23 11 17 26 11 17 33 11 17 36 11 18 00 11 18 13 11 18 13 11 18 10 11 18 23 11 19 00	Pedestrian Security Equipment Security, Detention, and Banking Equipment Vault Equipment Safe Deposit Boxes Safes Vault Ventilators Time Capsules Teller and Service Equipment Teller Equipment Systems Automatic Banking Systems Money Handling Equipment Money Depositories Money Cart Pass-Through Package Transfer Units Security Equipment Deal Drawers Gun Ports Valuable Material Storage Detention Equipment

11 19 16	Detention Gun Lockers
11 20 00	Commercial Equipment
11 21 00	Mercantile and Service Equipment
11 21 13	Cash Registers and Checking Equipment
11 21 23	Vending Equipment
11 21 23.13	Vending Machines
11 21 33	Checkroom Equipment
11 21 43	Weighing and Wrapping Equipment
11 21 53	Barber and Beauty Shop Equipment
11 22 00	Refrigerated Display Equipment
11 23 00	Commercial Laundry and Dry Cleaning Equipment
11 23 13	Dry Cleaning Equipment
11 23 16	Drying and Conditioning Equipment
11 23 19	Finishing Equipment
11 23 23	Commercial Ironing Equipment
11 23 26	Commercial Washers and Extractors
11 23 33	Coin-Operated Laundry Equipment
11 23 43	Hanging Garment Conveyors
11 24 00	Maintenance Equipment
11 24 13	Floor and Wall Cleaning Equipment
11 24 16	Housekeeping Carts
11 24 19	Vacuum Cleaning Systems
11 24 23	Façade Access Equipment
11 24 23.13	Window Washing Systems
11 24 29	Facility Fall Protection
11 25 00	Hospitality Equipment
11 25 13	Registration Equipment
11 26 00	Unit Kitchens
11 26 13	Metal Unit Kitchens
11 26 16	Wood Unit Kitchens
11 26 19	Plastic-Laminate-Clad Unit Kitchens
11 27 00	Photographic Processing Equipment
11 27 13	Darkroom Processing Equipment
11 27 16	Film Transfer Cabinets
11 28 00	Office Equipment
11 28 13	Computers
11 28 16	Printers
11 28 19	Self-Contained Facsimile Machines
11 28 23	Copiers
11 29 00	Postal, Packaging, and Shipping Equipment
11 29 23	Packaging Equipment
11 29 33	Shipping Equipment
11 29 55	Postal Equipment
11 30 00	Residential Equipment
11 31 00	Residential Appliances
11 31 13	Residential Kitchen Appliances
11 31 23	Residential Laundry Appliances

11 33	00	Retractable Stairs
11 34	00	Residential Ceiling Fans
11 4	0 00	Foodservice Equipment
11 41	00	Foodservice Storage Equipment
1	1 41 13	Refrigerated Food Storage Cases
1	1 41 23	Walk-In Coolers
	1 41 26	Walk-In Freezers
	1 41 33	Foodservice Shelving
11 42		Food Preparation Equipment
	1 42 13	Food Preparation Appliances
	1 42 16	Food Preparation Surfaces
11 43		Food Delivery Carts and Conveyors
	1 43 13	Food Delivery Carts
	1 43 16	Food Delivery Conveyors
11 44		Food Cooking Equipment
	1 44 13 1 44 16	Commercial Ranges Commercial Ovens
11 46	-	Food Dispensing Equipment
	1 46 13	Bar Equipment
	1 46 16	Service Line Equipment
	1 46 19	Soda Fountain Equipment
1	1 46 23	Coffee and Espresso Equipment
11 47	00	Ice Machines
11 48	00	Cleaning and Disposal Equipment
		Commercial Dishwashers
1	1 48 13	Commercial Distiwashers
	1 48 13 0 00	Educational and Scientific Equipment
	0 00	
11 5 11 51	0 00	Educational and Scientific Equipment
11 5 11 51	0 00 00 1 51 13 1 51 16	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories
11 5 11 51 1 1	0 00 00 1 51 13 1 51 16 1 51 19	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment
11 5 11 51 1 1 1	0 00 00 1 51 13 1 51 16 1 51 19 1 51 23	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems
11 5 11 51 1 1 1	0 00 00 1 51 13 1 51 16 1 51 16 1 51 23 1 51 23.13	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving
11 5 11 51 1 1 1 1 1 1 1 1 1 1 1 1	0 00 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment
11 5 11 51 1 1 1 1 1 1 11 52 1	0 00 00 1 51 13 1 51 16 1 51 16 1 51 23 1 51 23.13	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens
11 5 11 51 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13 1 52 13.13 1 52 13.13 1 52 13.13	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens
11 5 11 51 1 1 1 1 1 11 52 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens
11 5 11 51 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13 1 52 13.13 1 52 13.16 1 52 13.19 1 52 16	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens Projectors
11 5 11 51 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13 1 52 13.13 1 52 13.16 1 52 13.19 1 52 16 1 52 16.13	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens Projectors Movie Projectors
11 5 11 51 1 1 1 1 1 1 1 1 1 	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13.13 1 52 13.16 1 52 13.16 1 52 13.19 1 52 16.13 1 52 16.13 1 52 16.19	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens Projectors
11 5 11 51 1 1 1 1 1 11 52 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13.13 1 52 13.16 1 52 13.19 1 52 16.13 1 52 16.13 1 52 16.13 1 52 16.19 1 52 16.23	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens Projectors Movie Projectors Slide Projectors Overhead Projectors Opaque Projectors
11 5 11 51 1 1 1 1 1 11 52 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13 1 52 13.13 1 52 13.16 1 52 13.19 1 52 16.13 1 52 16.13 1 52 16.13 1 52 16.23 1 52 16.23 1 52 16.23	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projectors Screens Projectors Movie Projectors Slide Projectors Overhead Projectors Opaque Projectors Video Projectors
11 5 11 51 1 1 1 1 1 11 52 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13 1 52 13.13 1 52 13.13 1 52 13.16 1 52 13.19 1 52 16.13 1 52 16.13 1 52 16.19 1 52 16.23 1 52 16.23 1 52 16.23 1 52 19	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens Projectors Movie Projectors Slide Projectors Overhead Projectors Opaque Projectors Video Projectors Players and Recorders
11 5 11 51 1 1 1 1 1 11 52 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 16.13 1 52 16.13 1 52 16.23 1 52 16.23 1 52 16.26 1 52 19 1 52 23	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens Projectors Movie Projectors Slide Projectors Slide Projectors Overhead Projectors Overhead Projectors Players and Recorders Audio-Visual Equipment Supports
11 5 11 51 1 1 1 1 1 11 52 1 1 1 1 1 1 1 1 1 11 53	0 00 1 51 13 1 51 16 1 51 19 1 51 23 1 51 23.13 00 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 13.13 1 52 16.13 1 52 16.13 1 52 16.23 1 52 16.23 1 52 16.26 1 52 19 1 52 23	Educational and Scientific Equipment Library Equipment Automated Book Storage and Retrieval Systems Book Depositories Book Theft Protection Equipment Library Stack Systems Metal Library Shelving Audio-Visual Equipment Projection Screens Fixed Projection Screens Portable Projection Screens Rear Projection Screens Projectors Movie Projectors Slide Projectors Overhead Projectors Opaque Projectors Video Projectors Players and Recorders

	11 53 13.13	Recirculating Laboratory Fume Hoods
	11 53 16 11 53 17	Laboratory Incubators Laboratory Equipment Washers
	11 53 19	Laboratory Sterilizers
	11 53 23	Laboratory Refrigerators
	11 53 26	Laboratory Freezers
	11 53 29	Laboratory Controlled-Environment Cabinets
	11 53 33	Emergency Safety Appliances
	11 53 43	Service Fittings and Accessories
	11 53 53	Biological Safety Cabinets
11	55 00	Planetarium Equipment
	11 55 13	Planetarium Projectors
	11 55 16	Planetarium Pendulums
11	56 00	Observatory Equipment
	11 56 13	Telescopes
	11 56 16	Telescope Mounts
	11 56 19	Telescope Drive Mechanisms
	11 56 23	Telescope Domes
11	57 00	Vocational Shop Equipment
11	59 00	Exhibit Equipment
11	60 00	Entertainment Equipment
11	61 00	Broadcast, Theater, and Stage Equipment
	11 61 13	Acoustical Shells
	11 61 23	Folding and Portable Stages
	11 61 33	Rigging Systems and Controls
	11 61 33.11	Lighting Rigging Systems
	11 61 33.16	Scenery Rigging Systems
	11 61 33.19	Curtain Systems
	11 61 43	Stage Curtains
11	62 00	Musical Equipment
	11 62 13	Bells
	11 62 16 11 62 19	Carillons
		Organs
11	65 00	Athletic and Recreational Equipment
11	66 00	Athletic Equipment
	11 66 13	Exercise Equipment
	11 66 23	Gymnasium Equipment
	11 66 23.13	Basketball Equipment
	11 66 23.23	Volleyball Equipment
	11 66 23.33 11 66 23.43	Interior Tennis Equipment Interior Track and Field Equipment
	11 66 23.53	Wall Padding
	11 66 23.56	Mat Storage
	11 66 43	Interior Scoreboards
	11 66 53	Gymnasium Dividers
	11 66 53.13	Batting/Golf Cages
11	67 00	Recreational Equipment
	11 67 13	Bowling Alley Equipment

11	91 00	Religious Equipment
	90 00	Other Equipment
	11 82 36	Facility Waste Balers
	11 82 33	Facility Waste Shredders
	11 82 29	Composting Equipment
	11 82 26	Facility Waste Compactors
	11 82 23	Recycling Equipment
	11 82 19	Packaged Incinerators
11	62 00 11 82 13	Solid Waste Handling Equipment Solid Waste Bins
	82 00	• • •
	80 00	Collection and Disposal Equipment
11	79 00	Therapy Equipment
	11 78 19	Mortuary Lifts
	11 78 13 11 78 16	Mortuary Refrigerators Crematorium Equipment
11	78 00	Mortuary Equipment
	77 00	Radiology Equipment
	76 00	Operating Room Equipment
	75 00	Optical Equipment
	74 00	Dental Equipment
		Patient Care Equipment
11	73 00	Treatment Equipment
	11 72 13 11 72 53	Examination Equipment
11	72 00	Examination and Treatment Equipment
	71 00	Medical Sterilizing Equipment
	70 00	Healthcare Equipment
11		
	11 68 33.43 11 68 43	Track and Field Equipment Exterior Scoreboards
	11 68 33.33	Baseball Field Equipment
	11 68 33.23	
	11 68 33 11 68 33.13	Athletic Field Equipment Football Field Equipment
	11 68 23.33	Tennis Equipment
	11 68 23.23	Exterior Volleyball Equipment
	11 68 23.13	Exterior Basketball Equipment
	11 68 16 11 68 23	Play Structures Exterior Court Athletic Equipment
	11 68 13	Playground Equipment
11	68 00	Play Field Equipment and Structures
	11 67 53.23	Pinball Machines
	11 67 53.13	Video Games
	11 67 53	Game Room Equipment
	11 67 43.13 11 67 43.23	Pool Tables Ping-Pong Tables
	11 67 43	Table Games Equipment
	11 67 33	Climbing Walls
	11 67 23	Shooting Range Equipment

	11 91 13	Baptisteries
11	92 00	Agricultural Equipment
	11 92 13	Milkers
	11 92 16	Stock Feeders
	11 92 19	Stock Waterers
	11 92 23	Agricultural Waste Clean-Up Equipment
11	93 00	Horticultural Equipment
	11 93 13	Hydroponic Growing Systems
	11 93 16	Seeders
	11 93 19	Transplanters
	11 93 23	Potting Machines
	11 93 26	Flat Fillers
	11 93 29	Baggers
	11 93 33	Soil Mixers
11	95 00	Arts and Crafts Equipment

Arts and Crafts Equipment Kilns

11 95 13

12 00 00	Furnishings
12 01 00	Operation and Maintenance of Furnishings
12 01 10	Operation and Maintenance of Art
12 01 20	Operation and Maintenance of Window Treatments
12 01 30	Operation and Maintenance of Casework
12 01 40	Operation and Maintenance of Furnishings and Accessories
12 01 50	Operation and Maintenance of Furniture
12 01 60 12 01 90	Operation and Maintenance of Multiple Seating Operation and Maintenance of Other Furnishings
12 05 00	Common Work Results for Furnishings
12 05 00	Fabrics
12 06 00	Schedules for Furnishings
12 06 10	Schedules for Art
12 06 10	Schedules for Window Treatments
12 06 20.13	Window Treatment Schedule
12 06 30	Schedules for Casework
12 06 30.13	Manufactured Casework Schedule
12 06 40	Schedules for Furnishings and Accessories
12 06 40.13 12 06 50	Furnishings Schedule Schedules for Furniture
12 00 50	Schedules for Multiple Seating
12 06 90	Schedules for Other Furnishings
12 08 00	Commissioning of Furnishings
12 10 00	AIL
12 10 00	Art Murals
12 11 00	Murals
12 11 00 12 11 13	Murals
12 11 00	Murals
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26	Murals Photo Murals Sculptured Brick Panels
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 19	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 19 12 12 23	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 23 12 12 26	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 19 12 12 23 12 12 26 12 14 00	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Sculptures
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 23 12 12 26 12 14 00 12 14 13	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Carved Sculpture
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 19 12 12 23 12 12 26 12 14 00	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Sculptures Carved Sculpture Cast Sculpture
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 23 12 12 26 12 14 00 12 14 13 12 14 16	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Carved Sculpture
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 23 12 12 26 12 14 00 12 14 13 12 14 16 12 14 19	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Carved Sculpture Cast Sculpture Constructed Sculpture
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 23 12 12 26 12 14 00 12 14 13 12 14 16 12 14 23	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Carved Sculpture Cast Sculpture Constructed Sculpture Relief Art
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 19 12 12 23 12 12 26 12 14 00 12 14 13 12 14 16 12 14 19 12 14 23 12 17 00 12 17 13 12 17 16	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Sculptures Carved Sculpture Cast Sculpture Constructed Sculpture Relief Art Art Glass
12 11 00 12 11 13 12 11 16 12 11 23 12 11 26 12 11 33 12 12 00 12 12 13 12 12 16 12 12 23 12 12 26 12 14 00 12 14 13 12 14 16 12 14 19 12 14 23 12 17 00 12 17 13	Murals Photo Murals Sculptured Brick Panels Brick Murals Ceramic Tile Murals Trompe l'oeil Wall Decorations Commissioned Paintings Framed Paintings Framed Prints Tapestries Wall Hangings Sculptures Carved Sculpture Cast Sculpture Constructed Sculpture Relief Art Art Glass Etched Glass

67

12 21 00	Window Blinds
12 21 13	Horizontal Louver Blinds
12 21 13.13	Metal Horizontal Louver Blinds
12 21 13.23	Wood Horizontal Louver Blinds
12 21 13.33 12 21 16	Plastic Horizontal Louver Blinds Vertical Louver Blinds
12 21 16.13	Metal Vertical Louver Blinds
12 21 16.13	Wood Vertical Louver Blinds
12 21 16.33	Plastic Vertical Louver Blinds
12 21 23	Roll-Down Blinds
12 21 26	Black-Out Blinds
12 22 00	Curtains and Drapes
12 22 13	Draperies
12 22 16	Drapery Track and Accessories
12 23 00	Interior Shutters
12 23 13	Wood Interior Shutters
12 24 00	Window Shades
12 24 13	Roller Window Shades
12 24 16	Pleated Window Shades
12 24 16.13	Z-Pleated Window Shades
12 24 16.16	Cellular Shades
12 24 16.19	Roman Shades
12 25 00	Window Treatment Operating Hardware
12 25 09	Window Treatment Control System
12 25 13	Motorized Drapery Rods
12 26 00	Interior Daylighting Devices
12 26 00 12 30 00	Casework
12 30 00	Casework
12 30 00 12 31 00	Casework Manufactured Metal Casework
12 30 00 12 31 00 12 31 16	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework
12 30 00 12 31 00 12 31 16 12 32 00	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17 12 35 25	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework
12 30 00 12 31 00 12 31 16 12 32 00 12 32 13 12 32 16 12 34 00 12 34 16 12 35 00 12 35 17	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ 12 31 16 \\ \textbf{12 32 00} \\ 12 32 13 \\ 12 32 16 \\ \textbf{12 34 00} \\ 12 34 16 \\ \textbf{12 35 00} \\ 12 35 17 \\ 12 35 25 \\ 12 35 30 \\ 12 35 30 \\ 12 35 30.13 \\ 12 35 30.23 \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ \textbf{12 31 16} \\ \textbf{12 32 00} \\ \textbf{12 32 13} \\ \textbf{12 32 16} \\ \textbf{12 32 16} \\ \textbf{12 34 00} \\ \textbf{12 34 16} \\ \textbf{12 35 00} \\ \textbf{12 35 17} \\ \textbf{12 35 25} \\ \textbf{12 35 30} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.23} \\ \textbf{12 35 30.43} \\ \textbf{12 35 30.43} \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework Dormitory Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ \textbf{12 31 16} \\ \textbf{12 32 00} \\ \textbf{12 32 13} \\ \textbf{12 32 16} \\ \textbf{12 32 16} \\ \textbf{12 34 00} \\ \textbf{12 34 16} \\ \textbf{12 35 00} \\ \textbf{12 35 17} \\ \textbf{12 35 5} \\ \textbf{12 35 30} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.23} \\ \textbf{12 35 30.43} \\ \textbf{12 35 33} \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Kitchen Casework Kitchen Casework Dormitory Casework Utility Room Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ \textbf{12 31 16} \\ \textbf{12 32 00} \\ \textbf{12 32 13} \\ \textbf{12 32 16} \\ \textbf{12 32 16} \\ \textbf{12 34 00} \\ \textbf{12 34 16} \\ \textbf{12 35 00} \\ \textbf{12 35 17} \\ \textbf{12 35 25} \\ \textbf{12 35 30} \\ \textbf{12 35 30} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.43} \\ \textbf{12 35 33} \\ \textbf{12 35 33} \\ \textbf{12 35 33} \\ \textbf{12 35 36} \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Dormitory Casework Utility Room Casework Mailroom Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ \textbf{12 31 16} \\ \textbf{12 32 00} \\ \textbf{12 32 13} \\ \textbf{12 32 16} \\ \textbf{12 32 16} \\ \textbf{12 34 00} \\ \textbf{12 34 16} \\ \textbf{12 35 00} \\ \textbf{12 35 17} \\ \textbf{12 35 25} \\ \textbf{12 35 25} \\ \textbf{12 35 30} \\ \textbf{12 35 30} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.43} \\ \textbf{12 35 33} \\ \textbf{12 35 36} \\ \textbf{12 35 36} \\ \textbf{12 35 39} \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Dormitory Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ \textbf{12 31 16} \\ \textbf{12 32 00} \\ \textbf{12 32 13} \\ \textbf{12 32 16} \\ \textbf{12 32 16} \\ \textbf{12 34 00} \\ \textbf{12 34 16} \\ \textbf{12 35 00} \\ \textbf{12 35 17} \\ \textbf{12 35 25} \\ \textbf{12 35 25} \\ \textbf{12 35 30} \\ \textbf{12 35 30} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.23} \\ \textbf{12 35 30.43} \\ \textbf{12 35 36} \\ \textbf{12 35 39} \\ \textbf{12 35 50} \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework Educational/Library Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ \textbf{12 31 16} \\ \textbf{12 32 00} \\ \textbf{12 32 13} \\ \textbf{12 32 16} \\ \textbf{12 32 16} \\ \textbf{12 34 00} \\ \textbf{12 34 16} \\ \textbf{12 35 00} \\ \textbf{12 35 17} \\ \textbf{12 35 25} \\ \textbf{12 35 30} \\ \textbf{12 35 30} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.43} \\ \textbf{12 35 33} \\ \textbf{12 35 33} \\ \textbf{12 35 36} \\ \textbf{12 35 39} \\ \textbf{12 35 50} \\ \textbf{12 35 50} \\ \textbf{12 35 50} \\ \textbf{12 35 50.13} \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework Dormitory Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework Educational/Library Casework Educational Casework
$\begin{array}{c} \textbf{12 30 00} \\ \textbf{12 31 00} \\ \textbf{12 31 16} \\ \textbf{12 32 00} \\ \textbf{12 32 13} \\ \textbf{12 32 16} \\ \textbf{12 32 16} \\ \textbf{12 34 00} \\ \textbf{12 34 16} \\ \textbf{12 35 00} \\ \textbf{12 35 17} \\ \textbf{12 35 25} \\ \textbf{12 35 25} \\ \textbf{12 35 30} \\ \textbf{12 35 30} \\ \textbf{12 35 30.13} \\ \textbf{12 35 30.23} \\ \textbf{12 35 30.43} \\ \textbf{12 35 36} \\ \textbf{12 35 39} \\ \textbf{12 35 50} \end{array}$	Casework Manufactured Metal Casework Manufactured Metal Sandwich Panel Casework Manufactured Wood-Veneer-Faced Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Plastic-Laminate-Clad Casework Manufactured Solid-Plastic Casework Manufactured Solid-Plastic Casework Specialty Casework Bank Casework Hospitality Casework Residential Casework Kitchen Casework Bathroom Casework Utility Room Casework Mailroom Casework Commercial Kitchen Casework Educational/Library Casework

	12 35 53.13	Metal Laboratory Casework
	12 35 53.16	Plastic-Laminate-Clad Laboratory Casework
	12 35 53.19	Wood Laboratory Casework
	12 35 53.23	Solid-Plastic Laboratory Casework
	12 35 59	Display Casework
	12 35 70	Healthcare Casework
	12 35 70.13	Hospital Casework
	12 35 70.16 12 35 70.19	Nurse Station Casework Exam Room Casework
	12 35 70.19	Dental Casework
	12 35 83	Performing Arts Casework
	12 35 91	Religious Casework
12 ⁴	36 00	Countertops
12	12 36 13	Concrete Countertops
	12 36 16	Metal Countertops
	12 36 19	Wood Countertops
	12 36 23	Plastic Countertops
	12 36 23.13	Plastic-Laminate-Clad Countertops
	12 36 40	Stone Countertops
	12 36 53	Laboratory Countertops
	12 36 61	Simulated Stone Countertops
	12 36 61.13	Cultured Marble Countertops
	12 36 61.16	Solid Surfacing Countertops
	12 36 61.19	Quartz Agglomerate Countertops
12	40 00	Furnishings and Accessories
12	41 00	
12	41 00 12 41 13	Office Accessories
	12 41 13	Office Accessories Desk Accessories
	12 41 13 42 00	Office Accessories Desk Accessories Table Accessories
	12 41 13 42 00 12 42 13	Office Accessories Desk Accessories Table Accessories Ceramics
	12 41 13 42 00 12 42 13 12 42 16	Office Accessories Desk Accessories Table Accessories Ceramics Flatware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware
	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13 43 00	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16.13 12 42 19 12 42 23 12 42 26 12 42 26.13	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 23 12 42 26 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.13	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps
12	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 23 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps
12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 23 12 42 26 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.13	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps
12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 26 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.16 12 43 13.19	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Desk Lamps Table Lamps Floor Lamps
12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 23 12 42 26 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.13 12 43 13.19 44 00 12 44 13 12 44 13 12 44 13.13	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens Bath Mats
12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 26 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13 13 12 44 13 13 13 14 14 13 14 1	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens Bath Mats Bath Towels
12 · 12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 26 12 42 26 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13.16 12 44 16	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens Bath Mats Bath Towels Shower Curtains
12 · 12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 16 12 42 19 12 42 23 12 42 26 12 42 26 12 42 26 12 43 13 12 43 13 12 43 13.13 12 43 13.13 12 43 13.13 12 44 13.13 12 44 13 12 44 16 45 00	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens Bath Mats Bath Towels Shower Curtains
12 · 12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 26 12 42 26 12 42 26 12 43 13 12 43 13 12 43 13.13 12 43 13.13 12 43 13.13 12 44 13.13 12 44 13 12 44 13 13 14 14 16 14 15 14 15 15 15 1	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens Bath Mats Bath Towels Shower Curtains Bedroom Furnishings Bed Linens
12 · 12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 26 12 42 26 12 42 26.13 43 00 12 43 13 12 43 13.13 12 43 13.16 12 43 13.19 44 00 12 44 13 12 44 13.13 12 44 13 13 12 45 13 12 45 13 12 45 13 12 45 13 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens Bath Mats Bath Towels Shower Curtains Bed Linens Bed Linens Blankets
12 · 12 ·	12 41 13 42 00 12 42 13 12 42 16 12 42 16 12 42 19 12 42 23 12 42 26 12 42 26 12 42 26 12 43 13 12 43 13 12 43 13.13 12 43 13.13 12 43 13.13 12 44 13.13 12 44 13 12 44 13 13 14 14 16 14 15 14 15 15 15 1	Office Accessories Desk Accessories Table Accessories Ceramics Flatware Silverware Hollowware Glassware Table Linens Napery Portable Lamps Lamps Desk Lamps Table Lamps Floor Lamps Floor Lamps Bath Furnishings Bath Linens Bath Mats Bath Towels Shower Curtains Bedroom Furnishings Bed Linens

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12 46 00	Furnishing Accessories
12 46 13	Ash Receptacles
12 46 16	Bowls
12 46 19	Clocks
12 46 23	Decorative Crafts
12 46 26	Decorative Screens
12 46 29	Vases
12 46 33	Waste Receptacles
12 48 00	Rugs and Mats
12 48 13	Entrance Floor Mats and Frames
12 48 13.13	
12 48 13.16	Entrance Floor Mat Frames
12 48 16	Entrance Floor Grilles
12 48 19	Entrance Floor Gratings
12 48 23	Entrance Floor Grids
12 48 26	Entrance Tile
12 48 43	Floor Mats
12 48 43.13	Chair Mats
12 48 43.23	Anti-Fatigue Floor Mats
12 48 43.26 12 48 53	Fall-Cushioning Floor Mats Rugs
12 48 53.13	Runners
12 48 53.16	Oriental Rugs
12 50 00	Furniture
40 54 00	
12 51 00	Office Furniture
12 51 16	Case Goods
12 51 16 12 51 16.13	Case Goods Metal Case Goods
12 51 16 12 51 16.13 12 51 16.16	Case Goods Metal Case Goods Wood Case Goods
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19 12 51 19	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19 12 51 19 12 51 19 12 51 19.13	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19 12 51 19	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19 12 51 19 12 51 19.13 12 51 19.13	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19 12 51 19 12 51 19 12 51 19.13 12 51 19.16 12 51 23 12 51 83	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19 12 51 19 12 51 19.13 12 51 19.13 12 51 23 12 51 23 12 51 83 12 52 00	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \begin{array}{c} 12\ 51\ 83\\ 12\ 52\ 10\\ 12\ 52\ 13\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs
12 51 16 12 51 16.13 12 51 16.16 12 51 16.19 12 51 19 12 51 19.13 12 51 19.13 12 51 23 12 51 23 12 51 83 12 52 00	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \begin{array}{c} 12\ 51\ 83\\ 12\ 52\ 13\\ 12\ 52\ 13\\ 12\ 52\ 19\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19\\ 12\ 51\ 19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \color{red}{\textbf{12}}\ 51\ 83\\ \textbf{12\ 52\ 13}\\ 12\ 52\ 13\\ 12\ 52\ 19\\ 12\ 52\ 23\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \begin{array}{c} 12\ 51\ 83\\ 12\ 52\ 13\\ 12\ 52\ 13\\ 12\ 52\ 13\\ 12\ 52\ 23\\ 12\ 52\ 70\\ 12\ 52\ 83\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19\\ 12\ 51\ 19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \color{red}{\textbf{12}}\ 51\ 83\\ \textbf{12\ 52\ 13}\\ 12\ 52\ 13\\ 12\ 52\ 19\\ 12\ 52\ 23\\ 12\ 52\ 70\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \begin{array}{c} 12\ 52\ 13\\ 12\ 52\ 13\\ 12\ 52\ 19\\ 12\ 52\ 23\\ 12\ 52\ 70\\ 12\ 52\ 83\\ \begin{array}{c} 12\ 52\ 83\\ 12\ 53\ 83\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19\\ 12\ 51\ 19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \textbf{12\ 51\ 83}\\ \textbf{12\ 52\ 13}\\ 12\ 52\ 13\\ 12\ 52\ 13\\ 12\ 52\ 23\\ 12\ 52\ 23\\ 12\ 52\ 70\\ 12\ 52\ 83\\ \textbf{12\ 53\ 00}\\ 12\ 53\ 83\\ \textbf{12\ 54\ 00}\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture Hospitality Furniture
$\begin{array}{c} 12\ 51\ 16\\ 12\ 51\ 16.13\\ 12\ 51\ 16.16\\ 12\ 51\ 16.19\\ 12\ 51\ 19\\ 12\ 51\ 19\\ 12\ 51\ 19.13\\ 12\ 51\ 19.16\\ 12\ 51\ 23\\ 12\ 51\ 23\\ 12\ 51\ 83\\ \begin{array}{c} 12\ 52\ 13\\ 12\ 52\ 19\\ 12\ 52\ 23\\ 12\ 52\ 23\\ 12\ 52\ 70\\ 12\ 52\ 83\\ \begin{array}{c} 12\ 52\ 83\\ 12\ 53\ 83\\ \begin{array}{c} 12\ 53\ 83\\ 12\ 54\ 00\\ 12\ 54\ 13\\ \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture Hospitality Furniture Hotel and Motel Furniture
$\begin{array}{c} 12 \ 51 \ 16 \\ 12 \ 51 \ 16.13 \\ 12 \ 51 \ 16.16 \\ 12 \ 51 \ 16.19 \\ 12 \ 51 \ 19 \\ 12 \ 51 \ 19 \\ 12 \ 51 \ 19.13 \\ 12 \ 51 \ 19.16 \\ 12 \ 51 \ 23 \\ 12 \ 51 \ 23 \\ 12 \ 51 \ 83 \end{array}$	Case Goods Metal Case Goods Wood Case Goods Plastic-Laminate-Clad Case Goods Filing Cabinets Lateral Filing Cabinets Vertical Filing Cabinets Office Tables Custom Office Furniture Seating Chairs Upholstered Seating Office Seating Healthcare Seating Custom Seating Retail Furniture Custom Retail Furniture Hotel and Motel Furniture Restaurant Furniture
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12 55 23Detention Tables12 55 26Detention Safety Clothes Hooks12 55 83Custom Detention Furniture12 55 86Detention Control Room Furniture 12 56 00 Institutional Furniture12 56 23Religious Furniture12 56 33Classroom Furniture	
12 55 83Custom Detention Furniture12 55 86Detention Control Room Furniture12 56 00Institutional Furniture12 56 23Religious Furniture12 56 33Classroom Furniture	
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12 56 23Religious Furniture12 56 33Classroom Furniture	
12 56 23Religious Furniture12 56 33Classroom Furniture	
12 56 33 Classroom Furniture	
12 56 33.13 Fixed Classroom Tables	
12 56 33.23 Classroom Computer Furniture	
12 56 39 Lecterns	
12 56 43 Dormitory Furniture	
12 56 51 Library Furniture	
12 56 51.13 Book Shelves	
12 56 51.16 Study Carrels	
12 56 51.19 Index Card File Cabinets	
12 56 52 Audio-Visual Furniture	
12 56 53 Laboratory Furniture	
12 56 70 Healthcare Furniture	
12 56 83 Custom Institutional Furniture	
12 56 86 Institutional Control Room Furniture	
12 57 00 Industrial Furniture	
12 57 13 Welding Benches	
12 57 16 Welding Screens	
12 57 19 Laser Containment Screens	
12 57 83 Custom Industrial Furniture	
12 57 86 Industrial Control Room Furniture	
12 57 86 Industrial Control Room Furniture 12 58 00 Residential Furniture	
12 58 00 Residential Furniture	
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12 58 00Residential Furniture12 58 13Couches and Loveseats12 58 13.13Futons12 58 16Residential Chairs12 58 16.13Reclining Chairs12 58 19Dining Tables and Chairs12 58 23Coffee Tables12 58 26Entertainment Centers12 58 29Beds	
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12 61 16	Molded-Plastic Audience Seating
12 62 00	Portable Audience Seating
12 62 13	Folding Chairs
12 62 16	Interlocking Chairs
12 62 19	Stacking Chairs
12 63 00	Stadium and Arena Seating
12 63 13	Stadium and Arena Bench Seating
12 63 23	Stadium and Arena Seats
12 64 00	Booths and Tables
12 65 00	Multiple-Use Fixed Seating
12 66 00	Telescoping Stands
12 66 13	Telescoping Bleachers
12 66 23	Telescoping Chair Platforms
12 67 00	Pews and Benches
12 67 13	Pews
12 67 23	Benches
12 68 00	Seat and Table Assemblies
12 68 13	Pedestal Tablet Arm Chairs
12 90 00	Other Furnishings
12 92 00	Interior Planters and Artificial Plants
12 92 13	Interior Artificial Plants
12 92 33	Interior Planters
12 92 43	Interior Landscaping Accessories
12 93 00	Site Furnishings
12 93 13	Bicycle Racks
12 93 14	Bicycle Lockers
12 93 23	Trash and Litter Receptacles
12 93 33	Manufactured Planters
12 93 43	Site Seating and Tables
12 93 43.13	Site Seating

12 93 43.53 Site Tables

13 00 00	Special Construction
13 01 00	Operation and Maintenance of Special Construction
13 01 10	Operation and Maintenance of Special Facility Components
13 01 11	Operation and Maintenance of Swimming Pools
13 01 12	Operation and Maintenance of Fountains
13 01 13	Operation and Maintenance of Aquariums
13 01 14	Operation and Maintenance of Amusement Park Structures and Equipment
13 01 18	Operation and Maintenance of Ice Rinks
13 01 20 13 01 21	Operation and Maintenance of Special Purpose Rooms Operation and Maintenance of Controlled Environment Rooms
13 01 23	Operation and Maintenance of Planetariums
13 01 30	Operation and Maintenance of Special Structures
13 01 40	Operation and Maintenance of Integrated Construction
13 01 49	Operation and Maintenance of Radiation Protection
13 01 50	Operation and Maintenance of Special Instrumentation
13 01 51	Operation and Maintenance of Stress Instrumentation
13 01 52	Operation and Maintenance of Seismic Instrumentation
13 01 53	Operation and Maintenance of Meteorological Instrumentation
13 05 00	Common Work Results for Special Construction
13 06 00	Schedules for Special Construction
13 06 10	Schedules for Special Facility Components
13 06 20	Schedules for Special Purpose Rooms
13 06 30	Schedules for Special Structures
13 06 40	Schedules for Integrated Construction
13 06 50	Schedules for Special Instrumentation
13 08 00	Commissioning of Special Construction
13 08 10 13 08 11	Commissioning of Special Facility Components Commissioning of Swimming Pools
13 08 12	Commissioning of Fountains
13 08 12	Commissioning of Aquariums
13 08 14	Commissioning of Amusement Park Structures and Equipment
13 08 18	Commissioning of Ice Rinks
13 08 20	Commissioning of Special Purpose Rooms
13 08 21	Commissioning of Controlled Environment Rooms
13 08 23	Commissioning of Planetariums
13 08 30	Commissioning of Special Structures
13 08 40 13 08 50	Commissioning of Integrated Construction
	Commissioning of Special Instrumentation
13 10 00	Special Facility Components
13 11 00	Swimming Pools
13 11 13	Below-Grade Swimming Pools
13 11 23	On-Grade Swimming Pools
13 11 33	Elevated Swimming Pools
13 11 43	Recirculating Gutter Systems
13 11 46 13 11 49	Swimming Pool Accessories Swimming Pool Cleaning Equipment
13 11 49	Movable Pool Bulkheads

13 11 56 Movable Pool Floors

13 12 00	Fountains
13 12 13	Exterior Fountains
13 12 23	Interior Fountains
13 13 00	Aquariums
13 14 00	Amusement Park Structures and Equipment
13 14 13	Water Slides
13 14 16 13 14 23	Wave Generating Equipment Amusement Park Rides
13 17 00	Tubs and Pools
13 17 13 13 17 23	Hot Tubs Therapeutic Pools
13 17 23	Whirlpool Tubs
13 18 00	Ice Rinks
13 18 13	Ice Rink Floor Systems
13 18 16	Ice Rink Dasher Boards
13 19 00	Kennels and Animal Shelters
13 19 13	Kennel Enclosures and Gates
13 19 16	Kennel Feeding Devices
13 20 00	Special Purpose Rooms
13 21 00	Controlled Environment Rooms
13 21 13	Clean Rooms
13 21 16	Hyperbaric Rooms
13 21 23	Insulated Rooms
13 21 26 13 21 26.13	Cold Storage Rooms Walk-in Coolers
13 21 26.16	Walk-in Freezers
13 21 29	Constant Temperature Rooms
13 21 48	Sound-Conditioned Rooms
13 22 00	Office Shelters and Booths
13 23 00	Planetariums
13 24 0 0	Special Activity Rooms
13 24 16	Saunas
13 24 26	Steam Baths
13 24 66	
13 26 00	Fabricated Rooms
13 26 13 13 27 00	Storm Shelter Rooms Vaults
13 27 00	Modular Fire Vaults
13 27 10	Security Vaults
13 27 53.13	Modular Concrete Security Vaults
13 27 53.16	Modular Metal-Clad Laminated Security Vaults
13 28 00	Athletic and Recreational Special Construction
13 28 13	Indoor Soccer Boards
13 28 16	Safety Netting
13 28 19 13 28 26	Arena Football Boards Floor Sockets
13 28 33	Athletic and Recreational Court Walls

13 28 66	Demountable Athletic Surfaces
13 30 00	Special Structures
13 31 00	Fabric Structures
13 31 13 13 31 13.13	Air-Supported Fabric Structures Single-Walled Air-Supported Structures
13 31 13.16	Multiple-Walled Air-Supported Structures
13 31 23	Tensioned Fabric Structures
13 31 33	Framed Fabric Structures
13 32 00	Space Frames
13 32 13	Metal Space Frames
13 32 23	Wood Space Frames
13 33 00	Geodesic Structures
13 33 13	Geodesic Domes
13 34 00	Fabricated Engineered Structures
13 34 13	Glazed Structures
13 34 13.13	Greenhouses
13 34 13.16	Solariums
13 34 13.19 13 34 13.23	Swimming Pool Enclosures Sunrooms
13 34 13.25	Conservatories
13 34 16	Grandstands and Bleachers
13 34 16.13	Grandstands
13 34 16.53	Bleachers
13 34 18	Post Frame Building Systems
13 34 19	Metal Building Systems
13 34 23 13 34 23.13	Fabricated Structures
13 34 23.13	Portable and Mobile Buildings Fabricated Classroom Buildings
13 34 23.16	Fabricated Control Booths
13 34 23.19	Fabricated Dome Structures
13 34 23.23	Fabricated Substation Control Rooms
13 34 56	Observatories
13 35 00	Rammed Earth Construction
13 35 13	Rammed Earth Walls
13 35 13.13 13 35 13.23	Traditional Rammed Earth Walls Stabilized Insulated Rammed Earth Walls
13 36 00	Towers
13 36 13	Metal Towers
13 36 13.13	Steel Towers
13 36 23	Wood Towers
13 40 00	Integrated Construction
13 42 00	Building Modules
13 42 13	Bathroom Unit Modules
13 42 25 13 42 33	Hospitality Unit Modules Apartment Unit Modules
13 42 33	Dormitory Unit Modules
13 42 46	Education Unit Modules
13 42 63	Detention Cell Modules
	Descart Oscarts Detection Call Madult

13 42 63.13 Precast-Concrete Detention Cell Modules

13 42 63.16	Steel Detention Cell Modules
13 44 00	Modular Mezzanines
13 48 00	Sound, Vibration, and Seismic Control
13 48 13	Manufactured Sound and Vibration Control Components
13 48 23	Fabricated Sound and Vibration Control Assemblies
13 48 53	Manufactured Seismic Control Components
13 48 63	Fabricated Seismic Control Assemblies
13 49 00	Radiation Protection
13 49 13	Integrated X-Ray Shielding Assemblies
13 49 16	Modular X-Ray Shielding Rooms
13 49 23	Integrated RFI/EMI Shielding Assemblies
13 49 26	Modular RFI/EMI Shielding Rooms
13 50 00	Special Instrumentation
13 51 00	Stress Instrumentation
13 52 00	Seismic Instrumentation
13 53 00	Meteorological Instrumentation
13 53 13	Solar Instrumentation
13 53 23	Wind Instrumentation

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14 00 00	Conveying Equipment
14 01 00	Operation and Maintenance of Conveying Equipment
14 01 10	Operation and Maintenance of Dumbwaiters
14 01 10.71	Dumbwaiter Rehabilitation
14 01 20	Operation and Maintenance of Elevators
14 01 20.71	Elevator Rehabilitation
14 01 30 14 01 30.71	Operation and Maintenance of Escalators and Moving Walks Escalators and Moving Walks Rehabilitation
14 01 40	Operation and Maintenance of Lifts
14 01 40.71	Lift Rehabilitation
14 01 70	Operation and Maintenance of Turntables
14 01 80	Operation and Maintenance of Scaffolding
14 01 90	Operation and Maintenance of Other Conveying Equipment
14 05 00	Common Work Results for Conveying Equipment
14 06 00	Schedules for Conveying Equipment
14 06 10	
14 06 20	
14 06 20.13 14 06 30	Elevator Equipment Schedule Schedules for Escalators and Moving Walks
14 06 30	Schedules for Lifts
14 06 40.13	
14 06 70	Schedules for Turntables
14 06 80	Schedules for Scaffolding
14 06 90	Schedules for Other Conveying Equipment
14 08 00	Commissioning of Conveying Equipment
14 08 10	Commissioning of Dumbwaiters
14 08 20	Commissioning of Elevators
14 08 30	Commissioning of Escalators and Moving Walks
14 08 40 14 08 70	Commissioning of Lifts Commissioning of Turntables
14 08 80	Commissioning of Scaffolding
14 10 00	Dumbwaiters
14 11 00	Manual Dumbwaiters
14 12 00	Electric Dumbwaiters
14 14 00	Hydraulic Dumbwaiters
14 20 00	Elevators
14 21 00	Electric Traction Elevators
14 21 13	Electric Traction Freight Elevators
14 21 23	Electric Traction Passenger Elevators
14 21 23.13	Machine Room Electric Traction Passenger Elevators
14 21 23.16 14 21 33	Machine Room-Less Electric Traction Passenger Elevators Electric Traction Residential Elevators
14 21 33	Electric Traction Service Elevators
14 24 00	Hydraulic Elevators
14 24 13	Hydraulic Freight Elevators
14 24 23	Hydraulic Passenger Elevators
14 24 33	Hydraulic Residential Elevators

14 24 43	Hydraulic Service Elevators
14 26 00	Limited-Use/Limited-Application Elevators
14 27 00	Custom Elevator Cabs and Doors
14 27 13	Custom Elevator Cab Finishes
14 27 16	Custom Elevator Doors
14 28 00	Elevator Equipment and Controls
14 28 16	Elevator Controls
14 28 19	Elevator Equipment
14 28 19.13 14 28 19.16	Elevator Safety Equipment Elevator Hoistway Equipment
14 30 00	
	Escalators and Moving Walks
14 31 00	Escalators
14 32 00	Moving Walks
14 33 00	Moving Ramps
14 33 13	Motorized Ramps
14 33 16	Powered Ramps
14 40 00	Lifts
14 41 00	People Lifts
14 41 13	Counterbalanced People Lifts
14 41 16	Endless-Belt People Lifts
14 42 00	Wheelchair Lifts
14 42 13	Inclined Wheelchair Lifts
14 42 16	Vertical Wheelchair Lifts
14 43 00	Platform Lifts
14 43 13 14 43 16	Orchestra Lifts
14 44 00	Stage Lifts Sidewalk Lifts
14 45 00	Vehicle Lifts
14 70 00	Turntables
14 71 00	Industrial Turntables
14 71 11	Vehicle Turntables
14 72 00	Hospitality Turntables
14 72 25	Restaurant Turntables
14 73 00	Exhibit Turntables
14 73 59	Display Turntables
14 74 00	Entertainment Turntables
14 74 61	Stage Turntables
14 80 00	Scaffolding
14 81 00	Suspended Scaffolding
14 81 13	Beam Scaffolding
14 81 16	Carriage Scaffolding
14 81 19	Hook Scaffolding
14 82 00	Rope Climbers
14 82 13	Manual Rope Climbers

14 82 16	Powered Rope Climbers
14 83 00	Elevating Platforms
14 83 13	Telescoping Platform Lifts
14 83 13.13	Electric and Battery Telescoping Platform Lifts
14 83 13.16	Pneumatic Telescoping Platform Lifts
14 83 16	Scissor Lift Platforms
14 83 19	Multi-Axis Platform Lifts
14 84 00	Powered Scaffolding
14 84 13	Window Washing Scaffolding
14 84 23	Window Washing Hoists
14 90 00	Other Conveying Equipment
14 90 00 14 91 00	
	Other Conveying Equipment Facility Chutes Coal Chutes
14 91 00	Facility Chutes
14 91 00 14 91 13	Facility Chutes Coal Chutes
14 91 00 14 91 13 14 91 23	Facility Chutes Coal Chutes Escape Chutes
14 91 00 14 91 13 14 91 23 14 91 33	Facility Chutes Coal Chutes Escape Chutes Laundry and Linen Chutes
14 91 00 14 91 13 14 91 23 14 91 33 14 91 82	Facility Chutes Coal Chutes Escape Chutes Laundry and Linen Chutes Trash Chutes

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21 00 00	Fire Suppression
21 01 00	Operation and Maintenance of Fire Suppression
21 01 10	Operation and Maintenance of Water-Based Fire-Suppression Systems
21 01 20	Operation and Maintenance of Fire-Extinguishing Systems
21 01 30	Operation and Maintenance of Fire-Suppression Equipment
21 05 00	Common Work Results for Fire Suppression
21 05 13	Common Motor Requirements for Fire-Suppression Equipment
21 05 16	Expansion Fittings and Loops for Fire-Suppression Piping
21 05 19	Meters and Gages for Fire-Suppression Systems
21 05 23	General-Duty Valves for Water-Based Fire-Suppression Piping
21 05 29 21 05 33	Hangers and Supports for Fire-Suppression Piping and Equipment Heat Tracing for Fire-Suppression Piping
21 05 33	Vibration and Seismic Controls for Fire-Suppression Piping and Equipment
21 05 53	Identification for Fire-Suppression Piping and Equipment
21 06 00	Schedules for Fire Suppression
21 06 10	Schedules for Water-Based Fire-Suppression Systems
21 06 20	Schedules for Fire-Extinguishing Systems
21 06 30	Schedules for Fire-Suppression Equipment
21 07 00	Fire Suppression Systems Insulation
21 07 16	Fire-Suppression Equipment Insulation
21 07 19	Fire-Suppression Piping Insulation
21 08 00	Commissioning of Fire Suppression
21 09 00	Instrumentation and Control for Fire-Suppression
	Systems
	Systems
21 10 00	Water-Based Fire-Suppression Systems
21 10 00 21 11 00	Water-Based Fire-Suppression Systems
21 11 00	Water-Based Fire-Suppression Systems Facility Fire-Suppression Water-Service Piping
21 11 00 21 11 16	Water-Based Fire-Suppression Systems Facility Fire-Suppression Water-Service Piping Facility Fire Hydrants
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and Nozzles
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose Reels
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose Racks
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose Valves
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Sprinkler Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Sprinkler SystemsWet-Pipe Sprinkler Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Sprinkler SystemsWet-Pipe Sprinkler SystemsDry-Pipe Sprinkler Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16 21 13 19	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Sprinkler SystemsDry-Pipe Sprinkler SystemsPreaction Sprinkler SystemsPreaction Sprinkler Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Sprinkler SystemsWet-Pipe Sprinkler SystemsDry-Pipe Sprinkler Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16 21 13 19 21 13 23	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Hose SystemsPry-Pipe Sprinkler SystemsDry-Pipe Sprinkler SystemsCombined Dry-Pipe and Preaction Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsWater Spray Fixed Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16 21 13 23 21 13 26 21 13 29 21 13 36	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Hose ValvesPre-Suppression Hose ValvesPre-Suppression Sprinkler SystemsDry-Pipe Sprinkler SystemsPreaction Sprinkler SystemsCombined Dry-Pipe and Preaction Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsWater Spray Fixed SystemsMater Spray Fixed SystemsAntifreeze Sprinkler Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16 21 13 23 21 13 26 21 13 29 21 13 39	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Hose ValvesPreaction Sprinkler SystemsDry-Pipe Sprinkler SystemsPreaction Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsMater Spray Fixed SystemsAntifreeze Sprinkler SystemsFoam-Water Systems
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16 21 13 23 21 13 26 21 13 29 21 13 36 21 13 39 21 16 00	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Hose ValvesPreaction Sprinkler SystemsDry-Pipe Sprinkler SystemsDry-Pipe Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsMater Spray Fixed SystemsAntifreeze Sprinkler SystemsFoam-Water SystemsFire-Suppression Pressure Maintenance Pumps
21 11 00 21 11 16 21 11 19 21 12 00 21 12 13 21 12 16 21 12 19 21 12 23 21 13 00 21 13 13 21 13 16 21 13 23 21 13 26 21 13 29 21 13 39	Water-Based Fire-Suppression SystemsFacility Fire-Suppression Water-Service PipingFacility Fire HydrantsFire-Department ConnectionsFire-Suppression StandpipesFire-Suppression Hoses and NozzlesFire-Suppression Hose ReelsFire-Suppression Hose RacksFire-Suppression Hose ValvesFire-Suppression Hose ValvesFire-Suppression Hose ValvesPreaction Sprinkler SystemsDry-Pipe Sprinkler SystemsPreaction Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsDeluge Fire-Suppression Sprinkler SystemsMater Spray Fixed SystemsAntifreeze Sprinkler SystemsFoam-Water Systems

21 21 13	Carbon-Dioxide Fire-Extinguishing Piping
21 21 16	Carbon-Dioxide Fire-Extinguishing Equipment
21 22 00	Clean-Agent Fire-Extinguishing Systems
21 22 13	Clean-Agent Fire-Extinguishing Piping
21 22 16	Clean-Agent Fire-Extinguishing Equipment
21 23 00	Wet-Chemical Fire-Extinguishing Systems
21 23 13	Wet-Chemical Fire-Extinguishing Piping
21 23 16	Wet-Chemical Fire-Extinguishing Equipment
21 24 00	Dry-Chemical Fire-Extinguishing Systems
21 24 13	Dry-Chemical Fire-Extinguishing Piping
21 24 16	Dry-Chemical Fire-Extinguishing Equipment
21 30 00	Fire Pumps
21 31 00	Centrifugal Fire Pumps
21 31 13	Electric-Drive, Centrifugal Fire Pumps
21 31 16	Diesel-Drive, Centrifugal Fire Pumps
21 32 00	Vertical-Turbine Fire Pumps
21 32 13	Electric-Drive, Vertical-Turbine Fire Pumps
21 32 16	Diesel-Drive, Vertical-Turbine Fire Pumps
21 33 00	Positive-Displacement Fire Pumps
21 33 13	Electric-Drive, Positive-Displacement Fire Pumps
21 33 16	Diesel-Drive, Positive-Displacement Fire Pumps
21 40 00	Fire-Suppression Water Storage
21 41 00	Storage Tanks for Fire-Suppression Water
21 41 13	Pressurized Storage Tanks for Fire-Suppression Water
21 41 16	Elevated Storage Tanks for Fire-Suppression Water
21 41 19	Roof-Mounted Storage Tanks for Fire-Suppression Water
21 41 23	Ground Suction Storage Tanks for Fire-Suppression Water
21 41 26	Underground Storage Tanks for Fire-Suppression Water
21 41 29	Storage Tanks for Fire-Suppression Water Additives

22 00 00	Plumbing
22 01 00	Operation and Maintenance of Plumbing
22 01 10	Operation and Maintenance of Plumbing Piping and Pumps
22 01 10.16	Video Piping Inspections
22 01 10.51	Plumbing Piping Cleaning
22 01 10.61	Plumbing Piping Repairs
22 01 10.62	Plumbing Piping Relining
22 01 30 22 01 40	Operation and Maintenance of Plumbing Equipment Operation and Maintenance of Plumbing Fixtures
22 01 40	Operation and Maintenance of Pool and Fountain Plumbing Systems
22 01 50	Operation and Maintenance of Laboratory and Healthcare Systems
22 05 00	Common Work Results for Plumbing
22 05 00	Common Motor Requirements for Plumbing Equipment
22 05 15	Expansion Fittings and Loops for Plumbing Piping
22 05 10	Meters and Gages for Plumbing Piping
22 05 23	General-Duty Valves for Plumbing Piping
22 05 29	Hangers and Supports for Plumbing Piping and Equipment
22 05 33	Heat Tracing for Plumbing Piping
22 05 48	Vibration and Seismic Controls for Plumbing Piping and Equipment
22 05 53	Identification for Plumbing Piping and Equipment
22 05 73	Facility Drainage Manholes
22 05 76	Facility Drainage Piping Cleanouts
22 06 00	Schedules for Plumbing
22 06 10	Schedules for Plumbing Piping and Pumps
22 06 10.13	Plumbing Pump Schedule
22 06 12	Schedules for Facility Potable Water Storage
22 06 15	Schedules for General Service Compressed-Air Equipment
22 06 30	Schedules for Plumbing Equipment
22 06 30.13 22 06 40	Domestic Water Heater Schedule Schedules for Plumbing Fixtures
22 06 40.13	Plumbing Fixture Schedule
22 06 50	Schedules for Pool and Fountain Plumbing Systems
22 06 60	Schedules for Laboratory and Healthcare Systems
22 07 00	Plumbing Insulation
22 07 16	Plumbing Equipment Insulation
22 07 19	Plumbing Piping Insulation
22 08 00	Commissioning of Plumbing
22 09 00	Instrumentation and Control for Plumbing
22 10 00	Plumbing Piping
22 11 00	Facility Water Distribution
22 11 13	Facility Water Distribution Piping
22 11 16	Domestic Water Piping
22 11 19	Domestic Water Piping Specialties
22 11 23	Domestic Water Pumps
22 11 23.13	Domestic-Water Packaged Booster Pumps
22 11 23.23	Close-Coupled, In-Line, Sealless Centrifugal Domestic-Water Pumps
22 11 23.26	Close-Coupled, Horizontally Mounted, In-Line Centrifugal Domestic-Water Pumps
22 11 23.29	Close-Coupled, Vertically Mounted, In-Line Centrifugal Domestic-Water Pumps

	22 11 23.33 22 11 23.36	Separately Coupled, In-Line Centrifugal Domestic-Water Pumps Separately Coupled, Horizontally Mounted, In-Line Centrifugal Domestic-Water Pumps
22 ·	12 00	Facility Potable-Water Storage Tanks
	22 12 13	Facility Roof-Mounted, Potable-Water Storage Tanks
	22 12 13	
		Facility Elevated, Potable-Water Storage Tanks
	22 12 19	Facility Ground-Mounted, Potable-Water Storage Tanks
	22 12 21	Facility Underground Potable-Water Storage Tanks
	22 12 23	Facility Indoor Potable-Water Storage Tanks
	22 12 23.13	Facility Steel, Indoor Potable-Water Storage Pressure Tanks
	22 12 23.16 22 12 23.23	Facility Steel, Indoor Potable-Water Storage Non-Pressure Tanks Facility Plastic, Indoor Potable-Water Storage Pressure Tanks
	22 12 23.25	Facility Plastic, Indoor Potable-Water Storage Non-Pressure Tanks
22 ·	13 00	Facility Sanitary Sewerage
	22 13 13	Facility Sanitary Sewers
	22 13 16	Sanitary Waste and Vent Piping
	22 13 19	Sanitary Waste Piping Specialties
	22 13 19.13	Sanitary Drains
	22 13 19.23	Fats, Oils, and Grease Disposal Systems
	22 13 19.26	Grease Removal Devices
	22 13 19.33	Backwater Valves
	22 13 19.36	Air-Admittance Valves
	22 13 23	Sanitary Waste Interceptors
	22 13 26	Sanitary Waste Separators
	22 13 29	Sanitary Sewerage Pumps
	22 13 29.13	Wet-Pit-Mounted, Vertical Sewerage Pumps
	22 13 29.16	Submersible Sewerage Pumps
	22 13 29.23 22 13 29.33	Sewerage Pump Reverse-Flow Assemblies Sewerage Pump Basins and Pits
	22 13 33	Packaged, Submersible Sewerage Pump Units
	22 13 36	Packaged, Wastewater Pump Units
	22 13 43	Facility Packaged Sewage Pumping Stations
	22 13 43.13	Facility Dry-Well Packaged Sewage Pumping Stations
	22 13 43.16	Facility Wet-Well Packaged Sewage Pumping Stations
	22 13 53	Facility Septic Tanks
	22 13 63	Facility Gray Water Tanks
22 ⁻	14 00	Facility Storm Drainage
	22 14 13	Facility Storm Drainage Piping
	22 14 16	Rainwater Leaders
	22 14 19	Sump Pump Discharge Piping
	22 14 23	Storm Drainage Piping Specialties
	22 14 26	Facility Storm Drains
	22 14 26.13	Roof Drains
	22 14 26.16	Facility Area Drains
	22 14 26.19	Facility Trench Drains
	22 14 29	Sump Pumps Wet-Pit-Mounted, Vertical Sump Pumps
	22 14 29.13 22 14 29.16	Submersible Sump Pumps
	22 14 29.10	Sump-Pump Basins and Pits
	22 14 23:13	Packaged, Pedestal Drainage Pump Units
	22 14 36	Packaged, Submersible, Drainage Pump Units
	22 14 53	Rainwater Storage Tanks

22 1	5 00	General Service Compressed-Air Systems
	22 15 13	General Service Compressed-Air Piping
	22 15 16	General Service Compressed-Air Valves
	22 15 19	General Service Packaged Air Compressors and Receivers
	22 15 19.13	General Service Packaged Reciprocating Air Compressors
	22 15 19.16	General Service Packaged Liquid-Ring Air Compressors
	22 15 19.19	General Service Packaged Rotary-Screw Air Compressors
	22 15 19.23	General Service Packaged Sliding-Vane Air Compressors
22	30 00	Plumbing Equipment
	s1 00	Domestic Water Softeners
	22 31 13	Residential Domestic Water Softeners
	22 31 16	Commercial Domestic Water Softeners
วว ว	32 00	
		Domestic Water Filtration Equipment
	22 32 13	Domestic-Water Bag-Type Filters
	22 32 16	Domestic-Water Freestanding Cartridge Filters
	22 32 19	Domestic-Water Off-Floor Cartridge Filters
	22 32 23	Domestic-Water Carbon Filters
	22 32 26	Domestic-Water Sand Filters
	22 32 26.13	Domestic-Water Circulating Sand Filters
	22 32 26.16	Domestic-Water Multimedia Sand Filters
~~ ~	22 32 26.19	Domestic-Water Greensand Filters
22 3	3 00	Electric Domestic Water Heaters
	22 33 13	Instantaneous Electric Domestic Water Heaters
	22 33 13.13	Flow-Control, Instantaneous Electric Domestic Water Heaters
	22 33 13.16	Thermostat-Control, Instantaneous Electric Domestic Water Heaters
	22 33 30	Residential, Electric Domestic Water Heaters
	22 33 30.13	Residential, Small-Capacity Electric Domestic Water Heaters
	22 33 30.16	Residential, Storage Electric Domestic Water Heaters
	22 33 30.23	Residential, Collector-to-Tank, Solar-Electric Domestic Water Heaters
	22 33 30.26	Residential, Collector-to-Tank, Heat-Exchanger-Coil, Solar-Electric Domestic Water Heaters
	22 33 33	Light-Commercial Electric Domestic Water Heaters
	22 33 36	Commercial Domestic Water Electric Booster Heaters
	22 33 36.13	Commercial Domestic Water Electric Booster Heaters
	22 33 36.16	Commercial Storage Electric Domestic Water Heaters
22 3	4 00	Fuel-Fired Domestic Water Heaters
	22 34 13	Instantaneous, Tankless, Gas Domestic Water Heaters
	22 34 30	Residential Gas Domestic Water Heaters
	22 34 30.13	Residential, Atmospheric, Gas Domestic Water Heaters
	22 34 30.16	Residential, Direct-Vent, Gas Domestic Water Heaters
	22 34 30.19	Residential, Power-Vent, Gas Domestic Water Heaters
	22 34 36	Commercial Gas Domestic Water Heaters
	22 34 36.13	Commercial, Atmospheric, Gas Domestic Water Heaters
	22 34 36.16	Commercial, Power-Burner, Gas Domestic Water Heaters
	22 34 36.19	Commercial, Power-Vent, Gas Domestic Water Heaters
	22 34 36.23	Commercial, High-Efficiency, Gas Domestic Water Heaters
	22 34 36.26	Commercial, Coil-Type, Finned-Tube, Gas Domestic Water Heaters
	22 34 36.29	Commercial, Grid-Type, Finned-Tube, Gas Domestic Water Heaters
	22 34 46	Oil-Fired Domestic Water Heaters
	22 34 46.13	Large-Capacity, Oil-Fired Domestic Water Heaters
	22 34 56	Dual-Fuel-Fired Domestic Water Heaters

22 3	35 00	Domestic Water Heat Exchangers
	22 35 13	Instantaneous Domestic Water Heat Exchangers
	22 35 13.13	Heating-Fluid-in-Coil, Instantaneous Domestic Water Heat Exchangers
	22 35 13.16 22 35 13.19	Domestic-Water-in-Coil, Instantaneous Domestic Water Heat Exchangers Heating-Fluid-in-U-Tube-Coil, Instantaneous Domestic Water Heat Exchangers
	22 35 13.13	Circulating, Domestic Water Heat Exchangers
	22 35 23.13	Circulating, Compact Domestic Water Heat Exchangers
	22 35 23.16	Circulating, Storage Domestic Water Heat Exchangers
	22 35 29	Noncirculating, Domestic Water Heat Exchangers
	22 35 29.13	Noncirculating, Compact Domestic Water Heat Exchangers
	22 35 29.16	Noncirculating, Storage Domestic Water Heat Exchangers
	22 35 36	Domestic Water Brazed-Plate Heat Exchangers
	22 35 39	Domestic Water Frame-and-Plate Heat Exchangers
22	22 35 43 40 00	Domestic Water Heat Reclaimers Plumbing Fixtures
	41 00	Residential Plumbing Fixtures
	22 41 13	Residential Water Closets, Urinals, and Bidets
	22 41 13.13	Residential Water Closets
	22 41 13.16	Residential Urinals
	22 41 13.19	Residential Bidets
	22 41 16	Residential Lavatories and Sinks
	22 41 16.13	Residential Lavatories
	22 41 16.16	Residential Sinks
	22 41 19	Residential Bathtubs
	22 41 23 22 41 26	Residential Showers
	22 41 26	Residential Disposers Residential Laundry Trays
	22 41 30	Residential Faucets, Supplies, and Trim
22	42 00	Commercial Plumbing Fixtures
22 '	42 00 22 42 13	Commercial Water Closets, Urinals, and Bidets
	22 42 13	Commercial Water Closets
	22 42 13.16	Commercial Urinals
	22 42 16	Commercial Lavatories and Sinks
	22 42 16.13	Commercial Lavatories
	22 42 16.16	Commercial Sinks
	22 42 19	Commercial Bathtubs
	22 42 23	Commercial Showers
	22 42 26	Commercial Disposers
	22 42 29	Shampoo Bowls
	22 42 33 22 42 36	Wash Fountains Commercial Laundry Trays
	22 42 30	Commercial Faucets, Supplies, and Trim
	22 42 33	Flushometers
22	43 00	Healthcare Plumbing Fixtures
22 '	43 00 22 43 13	Healthcare Water Closets
	22 43 13	Healthcare Sinks
	22 43 10	Healthcare Bathtubs
	22 43 13	Healthcare Showers
	22 43 39	Healthcare Faucets
	22 43 43	Healthcare Plumbing Fixture Flushometers

22 45 00	Emergency Plumbing Fixtures
22 45 13	Emergency Showers
22 45 16	Eyewash Equipment
22 45 19	Self-Contained Eyewash Equipment
22 45 23	Personal Eyewash Equipment
22 45 26	Eye/Face Wash Equipment
22 45 29	Hand-Held Emergency Drench Hoses
22 45 33	Combination Emergency Fixture Units
22 45 36	Emergency Fixture Water-Tempering Equipment
22 46 00	Security Plumbing Fixtures
22 46 13	Security Water Closets and Urinals
22 46 13.13	Security Water Closets
22 46 13.16	Security Urinals
22 46 16	Security Lavatories and Sinks
22 46 16.13	Security Lavatories
22 46 16.16	Security Sinks
22 46 19	Security Showers
22 46 39	Security Faucets, Supplies, and Trim
22 46 43	Security Plumbing Fixture Flushometers
22 46 53	Security Plumbing Fixture Supports
22 47 00	Drinking Fountains and Water Coolers
22 47 13	Drinking Fountains
22 47 16	Pressure Water Coolers
22 47 19	Water-Station Water Coolers
22 47 23	Remote Water Coolers
22 50 00	Pool and Fountain Plumbing Systems
22 51 00	Swimming Pool Plumbing Systems
22 51 13	Swimming Pool Piping
22 51 16	Swimming Pool Pumps
22 51 19	Swimming Pool Water Treatment Equipment
22 51 23	Swimming Pool Equipment Controls
22 52 00	Fountain Plumbing Systems
22 52 13	Fountain Piping
22 52 16	Fountain Pumps
22 52 19	Fountain Water Treatment Equipment
22 52 23	Fountain Equipment Controls
22 60 00	
22 00 00	Gas and Vacuum Systems for Laboratory
	and Healthcare Facilities
22 61 00	Compressed-Air Systems for Laboratory and
	Healthcare Facilities
22 61 13	Compressed-Air Piping for Laboratory and Healthcare Facilities
22 61 13.53	Laboratory Compressed-Air Piping
22 61 13.70	Healthcare Compressed-Air Piping
22 61 13.74	Dental Compressed-Air Piping
22 61 19	Compressed-Air Equipment for Laboratory and Healthcare Facilities
22 61 19.53	Laboratory Compressed-Air Equipment
22 61 19 70	Healthcare Compressed-Air Equipment

- 22 61 19.70Healthcare Compressed-Air Equipment22 61 19.74Dental Compressed-Air Equipment
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22 62 00	Vacuum Systems for Laboratory and Healthcare
	Facilities
22 62 13	Vacuum Piping for Laboratory and Healthcare Facilities
22 62 13.53	Laboratory Vacuum Piping
22 62 13.70	Healthcare, Surgical Vacuum Piping
22 62 13.74	Dental Vacuum Piping
22 62 19	Vacuum Equipment for Laboratory and Healthcare Facilities
22 62 19.53	Laboratory Vacuum Equipment
22 62 19.70 22 62 19.74	Healthcare Vacuum Equipment Dental Vacuum and Evacuation Equipment
22 62 19.74	Waste Anesthesia-Gas Piping
22 63 00	
	Gas Systems for Laboratory and Healthcare Facilities
22 63 13 22 63 13.53	Gas Piping for Laboratory and Healthcare Facilities
22 63 13.53 22 63 13.70	Laboratory Gas Piping Healthcare Gas Piping
22 63 13.70	Gas Storage Tanks for Laboratory and Healthcare Facilities
22 63 19.53	Laboratory Gas Storage Tanks
22 63 19.70	Healthcare Gas Storage Tanks
	8
22 66 00	Chemical-Waste Systems for Laboratory and
22 66 00	Chemical-Waste Systems for Laboratory and Healthcare Facilities
	Healthcare Facilities
22 66 53	Healthcare Facilities Laboratory Chemical-Waste and Vent Piping
22 66 53 22 66 70	Healthcare Facilities Laboratory Chemical-Waste and Vent Piping Healthcare Chemical-Waste and Vent Piping
22 66 53 22 66 70 22 66 83	Healthcare Facilities Laboratory Chemical-Waste and Vent Piping Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks
22 66 53 22 66 70	Healthcare Facilities Laboratory Chemical-Waste and Vent Piping Healthcare Chemical-Waste and Vent Piping
22 66 53 22 66 70 22 66 83 22 66 83.13	Healthcare Facilities Laboratory Chemical-Waste and Vent Piping Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16	Healthcare Facilities Laboratory Chemical-Waste and Vent Piping Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16	Healthcare FacilitiesLaboratory Chemical-Waste and Vent PipingHealthcare Chemical-Waste and Vent PipingChemical-Waste TanksChemical-Waste Dilution TanksChemical-Waste Neutralization TanksProcessed Water Systems for Laboratory andHealthcare Facilities
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00	Healthcare FacilitiesLaboratory Chemical-Waste and Vent PipingHealthcare Chemical-Waste and Vent PipingChemical-Waste TanksChemical-Waste Dilution TanksChemical-Waste Neutralization TanksProcessed Water Systems for Laboratory and
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.13	Healthcare FacilitiesLaboratory Chemical-Waste and Vent PipingHealthcare Chemical-Waste and Vent PipingChemical-Waste TanksChemical-Waste Dilution TanksChemical-Waste Neutralization TanksProcessed Water Systems for Laboratory andHealthcare FacilitiesProcessed Water Piping for Laboratory and Healthcare FacilitiesDistilled-Water PipingReverse-Osmosis Water Piping
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.16 22 67 13.19	Healthcare Facilities Laboratory Chemical-Waste and Vent Piping Healthcare Chemical-Waste and Vent Piping Chemical-Waste Tanks Chemical-Waste Tanks Chemical-Waste Dilution Tanks Chemical-Waste Neutralization Tanks Processed Water Systems for Laboratory and Healthcare Facilities Processed Water Piping for Laboratory and Healthcare Facilities Distilled-Water Piping Reverse-Osmosis Water Piping Deionized-Water Piping
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.13 22 67 13.19 22 67 19	Healthcare FacilitiesLaboratory Chemical-Waste and Vent PipingHealthcare Chemical-Waste and Vent PipingChemical-Waste TanksChemical-Waste Dilution TanksChemical-Waste Neutralization TanksProcessed Water Systems for Laboratory andHealthcare FacilitiesProcessed Water Piping for Laboratory and Healthcare FacilitiesDistilled-Water PipingReverse-Osmosis Water PipingDeionized-Water PipingProcessed Water Equipment for Laboratory and Healthcare Facilities
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.13 22 67 13.16 22 67 13.19 22 67 19 22 67 19.13	Healthcare FacilitiesLaboratory Chemical-Waste and Vent PipingHealthcare Chemical-Waste and Vent PipingChemical-Waste TanksChemical-Waste Dilution TanksChemical-Waste Neutralization TanksProcessed Water Systems for Laboratory andHealthcare FacilitiesProcessed Water Piping for Laboratory and Healthcare FacilitiesDistilled-Water PipingReverse-Osmosis Water PipingProcessed Water Equipment for Laboratory and Healthcare FacilitiesDistilled-Water Piping
22 66 53 22 66 70 22 66 83 22 66 83.13 22 66 83.16 22 67 00 22 67 13 22 67 13.13 22 67 13.13 22 67 13.19 22 67 19	Healthcare FacilitiesLaboratory Chemical-Waste and Vent PipingHealthcare Chemical-Waste and Vent PipingChemical-Waste TanksChemical-Waste Dilution TanksChemical-Waste Neutralization TanksProcessed Water Systems for Laboratory andHealthcare FacilitiesProcessed Water Piping for Laboratory and Healthcare FacilitiesDistilled-Water PipingReverse-Osmosis Water PipingDeionized-Water PipingProcessed Water Equipment for Laboratory and Healthcare Facilities

Heating, Ventilating, and Air 23 00 00 **Conditioning (HVAC) Operation and Maintenance of HVAC Systems** 23 01 00 23 01 10 Operation and Maintenance of Facility Fuel Systems 23 01 20 Operation and Maintenance of HVAC Piping and Pumps Operation and Maintenance of HVAC Air Distribution 23 01 30 23 01 30.51 HVAC Air-Distribution System Cleaning Operation and Maintenance of Central Heating Equipment 23 01 50 23 01 60 Operation and Maintenance of Central Cooling Equipment 23 01 60.71 Refrigerant Recovery/Recycling Operation and Maintenance of Central HVAC Equipment 23 01 70 Operation and Maintenance of Decentralized HVAC Equipment 23 01 80 **Diagnostic Systems for HVAC** 23 01 90 **Common Work Results for HVAC** 23 05 00 Common Motor Requirements for HVAC Equipment 23 05 13 23 05 16 Expansion Fittings and Loops for HVAC Piping Meters and Gages for HVAC Piping 23 05 19 23 05 23 General-Duty Valves for HVAC Piping 23 05 29 Hangers and Supports for HVAC Piping and Equipment Heat Tracing for HVAC Piping 23 05 33 23 05 48 Vibration and Seismic Controls for HVAC 23 05 53 Identification for HVAC Piping and Equipment Anti-Microbial Coatings for HVAC Ducts and Equipment 23 05 63 Anti-Microbial Ultraviolet Emitters for HVAC Ducts and Equipment 23 05 66 23 05 93 Testing, Adjusting, and Balancing for HVAC 23 06 00 Schedules for HVAC 23 06 10 Schedules for Facility Fuel Service Systems Schedules for HVAC Piping and Pumps 23 06 20 23 06 20.13 Hydronic Pump Schedule 23 06 30 Schedules for HVAC Air Distribution **HVAC Fan Schedule** 23 06 30.13 23 06 30.16 Air Terminal Unit Schedule 23 06 30.19 Air Outlet and Inlet Schedule **HVAC Air Cleaning Device Schedule** 23 06 30.23 23 06 50 Schedules for Central Heating Equipment 23 06 50.13 Heating Boiler Schedule Schedules for Central Cooling Equipment 23 06 60 23 06 60.13 Refrigerant Condenser Schedule 23 06 60.16 Packaged Water Chiller Schedule Schedules for Central HVAC Equipment 23 06 70 23 06 70.13 Indoor, Central-Station Air-Handling Unit Schedule 23 06 70.16 Packaged Outdoor HVAC Equipment Schedule 23 06 80 Schedules for Decentralized HVAC Equipment Decentralized Unitary HVAC Equipment Schedule 23 06 80.13 **Convection Heating and Cooling Unit Schedule** 23 06 80.16 23 06 80.19 Radiant Heating Unit Schedule 23 07 00 HVAC Insulation 23 07 13 Duct Insulation 23 07 16 **HVAC Equipment Insulation**

23 07 19	HVAC Piping Insulation
23 08 00	Commissioning of HVAC
23 09 00	Instrumentation and Control for HVAC
23 09 13	Instrumentation and Control Devices for HVAC
23 09 13.13	Actuators and Operators
23 09 13.23	Sensors and Transmitters
23 09 13.33	Control Valves
23 09 13.43	Control Dampers
23 09 23	Direct-Digital Control System for HVAC
23 09 33	Electric and Electronic Control System for HVAC
23 09 43	Pneumatic Control System for HVAC
23 09 53	Pneumatic and Electric Control System for HVAC
23 09 93	Sequence of Operations for HVAC Controls
23 10 00	Facility Fuel Systems
23 11 00	Facility Fuel Piping
23 11 13	Facility Fuel-Oil Piping
23 11 16	Facility Gasoline Piping
23 11 23	Facility Natural-Gas Piping
23 11 26	Facility Liquefied-Petroleum Gas Piping
23 12 00	Facility Fuel Pumps
23 12 13	Facility Fuel-Oil Pumps
23 12 16	Facility Gasoline Dispensing Pumps
23 13 00	Facility Fuel-Storage Tanks
23 13 13	Facility Underground Fuel-Oil, Storage Tanks
23 13 13.13	Double-Wall Steel, Underground Fuel-Oil, Storage Tanks
23 13 13.16	Composite, Steel, Underground Fuel-Oil, Storage Tanks
23 13 13.19	Jacketed, Steel, Underground Fuel-Oil, Storage Tanks
23 13 13.23	Glass-Fiber-Reinforced-Plastic, Underground Fuel-Oil, Storage Tanks
23 13 13.33	Fuel-Oil Storage Tank Pumps
23 13 23	Facility Aboveground Fuel-Oil, Storage Tanks
23 13 23.13 23 13 23.16	Vertical, Steel, Aboveground Fuel-Oil, Storage Tanks Horizontal, Steel, Aboveground Fuel-Oil, Storage Tanks
23 13 23.10	Containment-Dike, Steel, Aboveground Fuel-Oil, Storage Tanks
23 13 23.23	Insulated, Steel, Aboveground Fuel-Oil, Storage Tanks
23 13 23.26	Concrete-Vaulted, Steel, Aboveground Fuel-Oil, Storage Tanks
23 20 00	HVAC Piping and Pumps
23 21 00	Hydronic Piping and Pumps
23 21 13	Hydronic Piping
23 21 13.13	Underground Hydronic Piping
23 21 13.23	Aboveground Hydronic Piping
23 21 13.33	Ground-Loop Heat-Pump Piping
23 21 16	Hydronic Piping Specialties
23 21 23	Hydronic Pumps
23 21 23.13	In-Line Centrifugal Hydronic Pumps
23 21 23.16 23 21 23.19	Base-Mounted, Centrifugal Hydronic Pumps Vertical-Mounted, Double-Suction Centrifugal Hydronic Pumps
23 21 23.19	Vertical-Mounted, Double-Suction Centinugal Hydronic Pumps
23 21 29	Automatic Condensate Pump Units
23 22 00	Steam and Condensate Piping and Pumps

	23 22 13 23 22 13.13 23 22 13.23 23 22 16 23 22 23 23 22 23.13 23 22 23.23	Steam and Condensate Heating Piping Underground Steam and Condensate Heating Piping Aboveground Steam and Condensate Heating Piping Steam and Condensate Heating Piping Specialties Steam Condensate Pumps Electric-Driven Steam Condensate Pumps Pressure-Powered Steam Condensate Pumps
23	23 00	Refrigerant Piping
20	23 23 13	Refrigerant Piping Valves
	23 23 16	Refrigerant Piping Specialties
	23 23 19	Refrigerant Safety Relief Valve Discharge Piping
	23 23 23	Refrigerants
23	24 00	Internal-Combustion Engine Piping
	23 24 13 23 24 16	Internal-Combustion Engine Remote-Radiator Coolant Piping Internal-Combustion Engine Exhaust Piping
23	25 00	HVAC Water Treatment
	23 25 13	Water Treatment for Closed-Loop Hydronic Systems
	23 25 16	Water Treatment for Open Hydronic Systems
	23 25 19	Water Treatment for Steam System Feedwater
	23 25 23	Water Treatment for Humidification Steam System Feedwater
23	30 00	HVAC Air Distribution
23	31 00	HVAC Ducts and Casings
	23 31 13	Metal Ducts
	23 31 13.13	Rectangular Metal Ducts
	23 31 13.16	Round and Flat-Oval Spiral Ducts
	23 31 13.19 23 31 16	Metal Duct Fittings Nonmetal Ducts
	23 31 16.13	Fibrous-Glass Ducts
	23 31 16.16	Thermoset Fiberglass-Reinforced Plastic Ducts
	23 31 16.19	PVC Ducts
	23 31 16.26	Concrete Ducts
~~	23 31 19	HVAC Casings
23	32 00	Air Plenums and Chases
	23 32 13	Fabricated, Metal Air Plenums
	23 32 33	Air-Distribution Ceiling Plenums
	23 32 36 23 32 39	Air-Distribution Floor Plenums Air-Distribution Wall Plenums
	23 32 39	Air-Distribution Wair Flendins Air-Distribution Chases Formed by General Construction
	23 32 43	Acoustical Air Plenums
23	33 00	Air Duct Accessories
20	23 33 13	Dampers
	23 33 13.13	Volume-Control Dampers
	23 33 13.16	Fire Dampers
	23 33 13.19	Smoke-Control Dampers
	23 33 13.23	Backdraft Dampers
	23 33 19	Duct Silencers
	23 33 23	Turning Vanes
	23 33 33 23 33 43	Duct-Mounting Access Doors Flexible Connectors
	20 00 40	

23 33 46 Flexible Ducts

23 33 53 23 34 00	Duct Liners HVAC Fans
23 34 13	Axial HVAC Fans
23 34 16	Centrifugal HVAC Fans
23 34 23	HVAC Power Ventilators
23 34 33	Air Curtains
23 35 00	Special Exhaust Systems
23 35 13	Dust Collection Systems
23 35 13.13	Sawdust Collection Systems
23 35 16	Engine Exhaust Systems
23 35 16.13	Positive-Pressure Engine Exhaust Systems
23 35 16.16	Mechanical Engine Exhaust Systems
23 36 00	Air Terminal Units
23 36 13	Constant-Air-Volume Units
23 36 16	Variable-Air-Volume Units
23 37 00	Air Outlets and Inlets
23 37 13	Diffusers, Registers, and Grilles
23 37 16	Fabric Air Distribution Devices
23 37 23 23 37 23.13	HVAC Gravity Ventilators HVAC Gravity Dome Ventilators
23 37 23.13	HVAC Gravity Louvered-Penthouse Ventilators
23 37 23.19	HVAC Gravity Upblast Ventilators
23 38 00	Ventilation Hoods
23 38 13	Commercial-Kitchen Hoods
23 38 13.13	
00 00 10 10	
23 38 13.16	Standard Commercial-Kitchen Hoods
23 38 13.16 23 38 16	Fume Hoods
23 38 16 23 40 00	Fume Hoods HVAC Air Cleaning Devices
23 38 16 23 40 00 23 41 00	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration
23 38 16 23 40 00 23 41 00 23 41 13	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters
23 38 16 23 40 00 23 41 00 23 41 13 23 41 16	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters
23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters
23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters
23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration
23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline \textbf{23} \ \textbf{40} \ \textbf{00} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{00} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{13} \\ 23 \ \textbf{41} \ \textbf{16} \\ 23 \ \textbf{41} \ \textbf{19} \\ 23 \ \textbf{41} \ \textbf{23} \\ 23 \ \textbf{41} \ \textbf{33} \\ 23 \ \textbf{41} \ \textbf{43} \\ 23 \ \textbf{41} \ \textbf{46} \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration
23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline \textbf{23} \ \textbf{40} \ \textbf{00} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{00} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{10} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{13} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{16} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{19} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{23} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{23} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{33} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{43} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{46} \\ \hline \textbf{23} \ \textbf{42} \ \textbf{00} \\ \hline \textbf{23} \ \textbf{42} \ \textbf{13} \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration
23 38 16 23 40 00 23 41 00 23 41 13 23 41 16 23 41 19 23 41 23 23 41 33 23 41 43 23 41 46 23 42 00	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline \textbf{23} \ \textbf{40} \ \textbf{00} \\ \hline \textbf{23} \ \textbf{41} \ \textbf{00} \\ 23 \ \textbf{41} \ \textbf{13} \\ 23 \ \textbf{41} \ \textbf{16} \\ 23 \ \textbf{41} \ \textbf{19} \\ 23 \ \textbf{41} \ \textbf{23} \\ 23 \ \textbf{41} \ \textbf{23} \\ 23 \ \textbf{41} \ \textbf{33} \\ 23 \ \textbf{41} \ \textbf{43} \\ 23 \ \textbf{41} \ \textbf{46} \\ \hline \textbf{23} \ \textbf{42} \ \textbf{00} \\ \hline \textbf{23} \ \textbf{42} \ \textbf{13} \\ 23 \ \textbf{42} \ \textbf{16} \\ 23 \ \textbf{42} \ \textbf{19} \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline 23 \ 40 \ 00 \\ 23 \ 41 \ 00 \\ 23 \ 41 \ 13 \\ 23 \ 41 \ 16 \\ 23 \ 41 \ 19 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 33 \\ 23 \ 41 \ 33 \\ 23 \ 41 \ 43 \\ 23 \ 41 \ 46 \\ \hline 23 \ 42 \ 00 \\ 23 \ 42 \ 13 \\ 23 \ 42 \ 16 \\ 23 \ 42 \ 19 \\ \hline 23 \ 43 \ 00 \\ \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline 23 \ 40 \ 00 \\ 23 \ 41 \ 00 \\ 23 \ 41 \ 13 \\ 23 \ 41 \ 16 \\ 23 \ 41 \ 19 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 33 \\ 23 \ 41 \ 43 \\ 23 \ 41 \ 46 \\ \hline 23 \ 42 \ 00 \\ 23 \ 42 \ 13 \\ 23 \ 42 \ 16 \\ 23 \ 42 \ 19 \\ \hline 23 \ 43 \ 00 \\ 23 \ 43 \ 13 \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline 23 \ 40 \ 00 \\ 23 \ 41 \ 00 \\ 23 \ 41 \ 13 \\ 23 \ 41 \ 16 \\ 23 \ 41 \ 19 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 33 \\ 23 \ 41 \ 33 \\ 23 \ 41 \ 43 \\ 23 \ 41 \ 46 \\ \hline 23 \ 42 \ 00 \\ 23 \ 42 \ 13 \\ 23 \ 42 \ 16 \\ 23 \ 42 \ 19 \\ \hline 23 \ 43 \ 00 \\ \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline 23 \ 40 \ 00 \\ 23 \ 41 \ 00 \\ 23 \ 41 \ 13 \\ 23 \ 41 \ 16 \\ 23 \ 41 \ 19 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 33 \\ 23 \ 41 \ 43 \\ 23 \ 41 \ 43 \\ 23 \ 41 \ 46 \\ \hline 23 \ 42 \ 00 \\ 23 \ 42 \ 13 \\ 23 \ 42 \ 16 \\ 23 \ 42 \ 19 \\ \hline 23 \ 43 \ 00 \\ 23 \ 43 \ 13 \\ 23 \ 43 \ 16 \\ 23 \ 43 \ 23 \\ \hline \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Washable Electronic Air Cleaners Agglomerator Electronic Air Cleaners Self-Contained Electronic Air Cleaners
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline 23 \ 40 \ 00 \\ \hline 23 \ 41 \ 00 \\ \hline 23 \ 41 \ 13 \\ \hline 23 \ 41 \ 16 \\ \hline 23 \ 41 \ 19 \\ \hline 23 \ 41 \ 23 \\ \hline 23 \ 41 \ 23 \\ \hline 23 \ 41 \ 33 \\ \hline 23 \ 41 \ 43 \\ \hline 23 \ 41 \ 43 \\ \hline 23 \ 41 \ 46 \\ \hline 23 \ 42 \ 00 \\ \hline 23 \ 42 \ 10 \\ \hline 23 \ 43 \ 10 \\ \hline 23 \ 43 \ 13 \\ \hline 23 \ 43 \ 16 \\ \hline 23 \ 43 \ 23 \\ \hline 23 \ 50 \ 00 \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Cas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Mashable Electronic Air Cleaners Self-Contained Electronic Air Cleaners
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline 23 \ 40 \ 00 \\ 23 \ 41 \ 00 \\ 23 \ 41 \ 13 \\ 23 \ 41 \ 16 \\ 23 \ 41 \ 19 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 23 \\ 23 \ 41 \ 33 \\ 23 \ 41 \ 43 \\ 23 \ 41 \ 43 \\ 23 \ 41 \ 46 \\ \hline 23 \ 42 \ 00 \\ 23 \ 42 \ 16 \\ 23 \ 42 \ 19 \\ \hline 23 \ 42 \ 10 \\ 23 \ 42 \ 19 \\ \hline 23 \ 43 \ 13 \\ 23 \ 43 \ 13 \\ 23 \ 43 \ 16 \\ 23 \ 43 \ 23 \\ \hline 23 \ 50 \ 00 \\ \hline 23 \ 51 \ 00 \\ \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Gas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Mashable Electronic Air Cleaners Agglomerator Electronic Air Cleaners Self-Contained Electronic Air Cleaners Self-Contained Electronic Air Cleaners Breechings, Chimneys, and Stacks
$\begin{array}{c} 23 \ 38 \ 16 \\ \hline 23 \ 40 \ 00 \\ \hline 23 \ 41 \ 00 \\ \hline 23 \ 41 \ 13 \\ \hline 23 \ 41 \ 16 \\ \hline 23 \ 41 \ 19 \\ \hline 23 \ 41 \ 23 \\ \hline 23 \ 41 \ 23 \\ \hline 23 \ 41 \ 33 \\ \hline 23 \ 41 \ 43 \\ \hline 23 \ 41 \ 43 \\ \hline 23 \ 41 \ 46 \\ \hline 23 \ 42 \ 00 \\ \hline 23 \ 42 \ 10 \\ \hline 23 \ 43 \ 10 \\ \hline 23 \ 43 \ 13 \\ \hline 23 \ 43 \ 16 \\ \hline 23 \ 43 \ 23 \\ \hline 23 \ 50 \ 00 \end{array}$	Fume Hoods HVAC Air Cleaning Devices Particulate Air Filtration Panel Air Filters Renewable-Media Air Filters Washable Air Filters Extended Surface Filters High-Efficiency Particulate Filtration Ultra-Low Penetration Filtration Super Ultra-Low Penetration Filtration Cas-Phase Air Filtration Activated-Carbon Air Filtration Chemically-Impregnated Adsorption Air Filtration Catalytic-Adsorption Air Filtration Electronic Air Cleaners Mashable Electronic Air Cleaners Self-Contained Electronic Air Cleaners

		Vent Dampers
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	23 51 19	Fabricated Stacks
	23 51 23	Gas Vents
	23 51 33	Insulated Sectional Chimneys
	23 51 43	Flue-Gas Filtration Equipment
	23 51 43.13	
	23 51 43.16	Particulate Filtration
23	52 00	Heating Boilers
	23 52 13	Electric Boilers
	23 52 16	Condensing Boilers
	23 52 16.13	6
	23 52 16.16 23 52 17	Aluminum Condensing Boilers Low Mass Boilers
	23 52 17	Pulse Combustion Boilers
	23 52 13	Cast-Iron Boilers
	23 52 33	Water-Tube Boilers
	23 52 33.13	Finned Water-Tube Boilers
	23 52 33.16	Steel Water-Tube Boilers
	23 52 33.19	Copper Water-Tube Boilers
	23 52 39	Fire-Tube Boilers
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23 57 00Heat Exchangers for HVAC

	23 57 13 23 57 16 23 57 19 23 57 19.13 23 57 19.16 23 57 22	Steam-to-Steam Heat Exchangers Steam-to-Water Heat Exchangers Liquid-to-Liquid Heat Exchangers Plate-Type, Liquid-to-Liquid Heat Exchangers Shell-Type, Liquid-to-Liquid Heat Exchangers
22	23 57 33 60 00	Direct Geoexchange Heat Exchangers Central Cooling Equipment
	61 00	Refrigerant Compressors
23 (23 61 13	Centrifugal Refrigerant Compressors
	23 61 13.13	Non-Condensable Gas Purge Equipment
	23 61 16	Reciprocating Refrigerant Compressors
	23 61 19	Scroll Refrigerant Compressors
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23 (62 00	Packaged Compressor and Condenser Units
	23 62 13	Packaged Air-Cooled Refrigerant Compressor and Condenser Units
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23 (63 00 23 63 13	Refrigerant Condensers Air-Cooled Refrigerant Condensers
	23 63 23	Water-Cooled Refrigerant Condensers
	23 63 33	Evaporative Refrigerant Condensers
23 (64 00	Packaged Water Chillers
	23 64 13	Absorption Water Chillers
	23 64 13.13	Direct-Fired Absorption Water Chillers
	23 64 13.16	Indirect-Fired Absorption Water Chillers
	23 64 16 23 64 16.13	Centrifugal Water Chillers Air-Cooled Centrifugal Water Chillers
	23 64 16.16	Water-Cooled Centrifugal Water Chillers
	23 64 19	Reciprocating Water Chillers
	23 64 23	Scroll Water Chillers
	23 64 26	Rotary-Screw Water Chillers
23 (65 00	Cooling Towers
	23 65 13	Forced-Draft Cooling Towers
	23 65 13.13 23 65 13.16	Open-Circuit, Forced-Draft Cooling Towers Closed-Circuit, Forced-Draft Cooling Towers
	23 65 16	Natural-Draft Cooling Towers
	23 65 23	Field-Erected Cooling Towers
	23 65 33	Liquid Coolers
23	70 00	Central HVAC Equipment
23	71 00	Thermal Storage
	23 71 13	Thermal Heat Storage
	23 71 13.13	Room Storage Heaters for Thermal Storage
	23 71 13.16 23 71 13.19	Heat-Pump Boosters for Thermal Storage Central Furnace Heat-Storage Units
	23 71 13.19	Pressurized-Water Thermal Storage Tanks
	23 71 16	Chilled-Water Thermal Storage
	23 71 19	Ice Storage
	23 71 19.13	Internal Ice-on-Coil Thermal Storage
	23 71 19.16 23 71 19.19	External Ice-on-Coil Thermal Storage Encapsulated-Ice Thermal Storage

23 71 19.26 loc-Slury Thermal Storage 23 72 00 Air-to-Air Energy Recovery Equipment 23 72 13 Heat-Wheel Air-to-Air Energy-Recovery Equipment 23 72 14 Heat-Wheel Air-to-Air Energy-Recovery Equipment 23 72 23 Packaged Air-to-Air Energy-Recovery Equipment 23 73 23 Packaged Air-to-Air Energy-Recovery Units 23 73 30 Indoor Central-Station Air-Handling Units 23 73 33 Indoor Indirect Fuel-Fired Heating and Ventilating Units 23 73 33 Indoor Indirect Oil-Fired Heating and Ventilating Units 23 73 33 Indoor Indirect Gas-Fired Heating and Ventilating Units 23 74 30 Packaged Outdoor HVAC Equipment 23 74 30 Packaged, Outdoor, Central-Station Air-Handling Units 23 74 31 Packaged, Outdoor, Central-Station Air-Handling Units 23 74 32 Packaged, Outdoor, Heating-Only Makeup-Air Units 23 74 33 Packaged, Direct-Fired, Outdoor, Heating-Only Makeup-Air Units 23 75 30 Custom-Packaged Outdoor, Heating and Ventilating Units 23 74 23.18 Packaged, Outdoor, Central-Station Air-Handling Units 23 74 33 Dedicated Outdoor-Air Units 23 75 30 Custom-Packaged, Outdoor, Heating and Ventilating Makeup-Air Units
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23 73 00Indoor Central-Station Air-Handling Units23 73 13Modular Indoor Central-Station Air-Handling Units23 73 23Custom Indoor Central-Station Air-Handling Units23 73 33Indoor Indirect Fuel-Fired Heating and Ventilating Units23 73 33.16Indoor Indirect Gas-Fired Heating and Ventilating Units23 73 33Indoor Indirect Gas-Fired Heating and Ventilating Units23 74 33Packaged Outdoor HVAC Equipment23 74 400Packaged, Outdoor, Central-Station Air-Handling Units23 74 43Packaged, Outdoor, Heating-Only Makeup-Air Units23 74 23Packaged, Outdoor, Heating-Only Makeup-Air Units23 74 23Packaged, Indirect-Fired, Outdoor, Heating-Only Makeup-Air Units23 75 00Custom-Packaged Outdoor, Aeating-Only Makeup-Air Units23 75 33Custom-Packaged, Outdoor, Heating and Ventilating Makeup-Air Units23 75 34Custom-Packaged, Outdoor, Heating and Ventilating Makeup-Air Units23 75 35Custom-Packaged, Outdoor, Heating and Ventilating Makeup-Air Units23 76 10Evaporative Air-Cooling Equipment23 76 13Direct Evaporative Air Coolers23 80 00Decentralized HVAC Equipment23 81 13Packaged Terminal Air-Conditioners23 81 19Self-Contained Air-Conditioners23 81 19Self-Contained Air-Conditioners23 81 19.16Room Air-Conditioners23 81 26.13Small-Capacity Self-Contained Air-Conditioners23 81 26.14Large-Capacity Self-Contained Air-Conditioners23 81 26.15Large-Capacity Self-Containers23 81 26.
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23 81 43 Air-Source Unitary Heat Pumps
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23 81 46 Water-Source Unitary Heat Pumps
23 82 00 Convection Heating and Cooling Units
23 82 13 Valance Heating and Cooling Units
23 82 14 Chilled Beams
23 82 16 Air Coils
23 82 19 Fan Coil Units 23 82 23 Unit Ventilators
23 82 26 Induction Units

23 82 29	Radiators
23 82 33	Convectors
23 82 36	Finned-Tube Radiation Heaters
23 82 39	Unit Heaters
23 82 39.13	Cabinet Unit Heaters
23 82 39.16	Propeller Unit Heaters
23 82 39.19	Wall and Ceiling Unit Heaters
23 82 41	Water-to-Water Heat Pumps
23 83 00	Radiant Heating Units
23 83 13	Radiant-Heating Electric Cables
23 83 13.16	Radiant-Heating Electric Mats
23 83 16	Radiant-Heating Hydronic Piping
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23 84 00	Humidity Control Equipment
	Humidity Control Equipment Humidifiers
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- 23 84 19 Desiccant Dehumidification Units

25 00 00	Integrated Automation
25 01 00	Operation and Maintenance of Integrated Automation
25 01 10	Operation and Maintenance of Integrated Automation Network Equipment
25 01 20	Operation and Maintenance of Integrated Equipment
25 01 30	Operation and Maintenance of Integrated Automation Instrumentation and
	Terminal Devices
25 01 90	Diagnostic Systems for Integrated Automation
25 05 00	Common Work Results for Integrated Automation
25 05 13	Conductors and Cables for Integrated Automation
25 05 26	Grounding and Bonding for Integrated Automation
25 05 28 25 05 28.29	Pathways for Integrated Automation Hangers and Supports for Integrated Automation
25 05 28.33	Conduits and Backboxes for Integrated Automation
25 05 28.36	Cable Trays for Integrated Automation
25 05 28.39	Surface Raceways for Integrated Automation
25 05 48	Vibration and Seismic Controls for Integrated Automation
25 05 53	Identification for Integrated Automation
25 06 00	Schedules for Integrated Automation
25 06 11	Schedules for Integrated Automation Network Schedules for Integrated Automation Network Gateways
25 06 12 25 06 13	Schedules for Integrated Automation Control and Monitoring Network
25 06 13	Schedules for Integrated Automation Local Control Units
25 06 30	Schedules for Integrated Automation Instrumentation and Terminal Devices
25 08 00	Commissioning of Integrated Automation
25 10 00	
	Integrated Automation Network Equipment
25 11 00	Integrated Automation Network Equipment Integrated Automation Network Devices
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25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16	Integrated Automation Network Equipment Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways
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25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways
25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways
25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 23 25 13 00 25 13 13	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Supervisory Control
25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16	Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels
25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability
25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Control and Monitoring Network Interoperability
25 11 00 25 11 13 25 11 16 25 12 00 25 12 13 25 12 13 25 12 16 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00 25 14 13	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Gateways Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Remote Control Panels
25 11 00 25 11 13 25 11 16 25 11 19 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 16 25 13 19 25 14 00	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Control and Monitoring Network Interoperability
$\begin{array}{c} \textbf{25 11 00} \\ 25 11 13 \\ 25 11 16 \\ \\ \textbf{25 11 16} \\ \\ \textbf{25 12 00} \\ 25 12 00 \\ 25 12 13 \\ 25 12 16 \\ 25 12 19 \\ 25 12 23 \\ \\ \textbf{25 12 00} \\ 25 13 13 \\ 25 13 16 \\ 25 13 19 \\ \\ \textbf{25 13 19} \\ \textbf{25 14 00} \\ 25 14 13 \\ 25 14 16 \\ \end{array}$	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Hardwired Integration Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Control and Monitoring Network Interoperability Integrated Automation Remote Control Panels Integrated Automation Remote Control Panels Integrated Automation Application-Specific Control Panels
25 11 00 25 11 13 25 11 16 25 12 00 25 12 13 25 12 16 25 12 19 25 12 23 25 13 00 25 13 13 25 13 10 25 13 19 25 14 00 25 14 13 25 14 19	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Client-Server Information Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Remote Control Panels Integrated Automation Application-Specific Control Panels Integrated Automation Application-Specific Control Panels Integrated Automation Terminal Control Units
$\begin{array}{c} \textbf{25 11 00} \\ 25 11 13 \\ 25 11 16 \\ \\ \textbf{25 11 16} \\ \\ \textbf{25 12 00} \\ 25 12 0 \\ \textbf{25 12 13} \\ 25 12 16 \\ 25 12 19 \\ 25 12 23 \\ \textbf{25 12 23} \\ \textbf{25 13 00} \\ 25 13 13 \\ 25 13 16 \\ 25 13 19 \\ \textbf{25 14 13} \\ 25 14 10 \\ 25 14 19 \\ 25 14 23 \\ \end{array}$	Integrated Automation Network Devices Integrated Automation Network Devices Integrated Automation Network Servers Integrated Automation Network Routers, Bridges, Switches, Hubs, and Modems Integrated Automation Network Operator Workstations Integrated Automation Network Operator Workstations Integrated Automation Network Gateways Direct-Protocol Integration Network Gateways Neutral-Protocol Integration Network Gateways Client-Server Information/Database Integration Network Gateways Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Integrated Automation Control and Monitoring Network Supervisory Control Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Control and Monitoring Network Integration Panels Integrated Automation Remote Control Panels Integrated Automation Remote Control Panels Integrated Automation Application-Specific Control Panels Integrated Automation Terminal Control Units Integrated Automation Field Equipment Panels

25 15 19	Integrated Automation Software for Local Control Units
25 30 00	Integrated Automation Instrumentation
	and Terminal Devices
25 31 00	Integrated Automation Instrumentation and Terminal
	Devices for Facility Equipment
25 32 00	Integrated Automation Instrumentation and Terminal
	Devices for Conveying Equipment
25 33 00	Integrated Automation Instrumentation and Terminal
	Devices for Fire-Suppression Systems
25 34 00	Integrated Automation Instrumentation and Terminal
	Devices for Plumbing
25 35 00	Integrated Automation Instrumentation and Terminal
	Devices for HVAC
25 35 13	Integrated Automation Actuators and Operators
25 35 16 25 35 19	Integrated Automation Sensors and Transmitters Integrated Automation Control Valves
25 35 19	Integrated Automation Control Dampers
25 35 26	Integrated Automation Compressed Air Supply
25 36 00	Integrated Automation Instrumentation and Terminal
	Devices for Electrical Systems
25 36 13	Integrated Automation Power Meters
25 36 16	Integrated Automation KW Transducers
25 36 19 25 36 23	Integrated Automation Current Sensors Integrated Automation Battery Monitors
25 36 26	Integrated Automation Lighting Relays
25 36 29	Integrated Automation UPS Monitors
25 37 00	Integrated Automation Instrumentation and Terminal
	Devices for Communications Systems
25 38 00	Integrated Automation Instrumentation and Terminal
	Devices for Electronic Safety and Security Systems
25 50 00	Integrated Automation Facility Controls
25 51 00	Integrated Automation Control of Facility Equipment
25 52 00	Integrated Automation Control of Conveying
	Equipment
25 53 00	Integrated Automation Control of Fire-Suppression
	Systems
25 54 00	Integrated Automation Control of Plumbing
25 55 00	Integrated Automation Control of HVAC
25 56 00	Integrated Automation Control of Electrical Systems
25 57 00	Integrated Automation Control of Communications Systems

25 58 00	Integrated Automation Control of Electronic Safety and Security Systems
25 90 00	Integrated Automation Control Sequences
25 91 00	Integrated Automation Control Sequences for Facility Equipment
25 92 00	Integrated Automation Control Sequences for Conveying Equipment
25 93 00	Integrated Automation Control Sequences for Fire- Suppression Systems
25 94 00	Integrated Automation Control Sequences for Plumbing
25 95 00	Integrated Automation Control Sequences for HVAC
25 96 00	Integrated Automation Control Sequences for Electrical Systems
25 97 00	Integrated Automation Control Sequences for Communications Systems
25 98 00	Integrated Automation Control Sequences for Electronic Safety and Security Systems

26 00 00	Electrical
26 01 00	Operation and Maintenance of Electrical Systems
26 01 10	Operation and Maintenance of Medium-Voltage Electrical Distribution
26 01 20	Operation and Maintenance of Low-Voltage Electrical Distribution
26 01 26	Maintenance Testing of Electrical Systems
26 01 30	Operation and Maintenance of Facility Electrical Power Generating and
	Storing Equipment
26 01 40	Operation and Maintenance of Electrical and Cathodic Protection Systems
26 01 50	Operation and Maintenance of Lighting
26 01 50.51	Luminaire Relamping
26 01 50.81	Luminaire Replacement
26 05 00	Common Work Results for Electrical
26 05 13	Medium-Voltage Cables
26 05 13.13	Medium-Voltage Open Conductors
26 05 13.16 26 05 19	Medium-Voltage, Single- and Multi-Conductor Cables
26 05 19	Low-Voltage Electrical Power Conductors and Cables Undercarpet Electrical Power Cables
26 05 19.13	Manufactured Wiring Assemblies
26 05 23	Control-Voltage Electrical Power Cables
26 05 26	Grounding and Bonding for Electrical Systems
26 05 29	Hangers and Supports for Electrical Systems
26 05 33	Raceway and Boxes for Electrical Systems
26 05 33.13	Conduit for Electrical Systems
26 05 33.16	Boxes for Electrical Systems
26 05 33.23	Surface raceways for Electrical Systems
26 05 36	Cable Trays for Electrical Systems
26 05 39	Underfloor Raceways for Electrical Systems
26 05 43 26 05 46	Underground Ducts and Raceways for Electrical Systems Utility Poles for Electrical Systems
26 05 48	Vibration and Seismic Controls for Electrical Systems
26 05 53	Identification for Electrical Systems
26 05 73	Overcurrent Protective Device Coordination Study
26 05 83	Wiring Connections
26 06 00	Schedules for Electrical
26 06 10	Schedules for Medium-Voltage Electrical Distribution
26 06 20	Schedules for Low-Voltage Electrical Distribution
26 06 20.13	Electrical Switchboard Schedule
26 06 20.16	Electrical Panelboard Schedule
26 06 20.19	Electrical Motor-Control Center Schedule
26 06 20.23	Electrical Circuit Schedule
26 06 20.26	Wiring Device Schedule
26 06 30 26 06 40	Schedules for Facility Electrical Power Generating and Storing Equipment
26 06 40	Schedules for Electrical and Cathodic Protection Systems Schedules for Lighting
26 06 50.13	Lighting Panelboard Schedule
26 06 50.16	Lighting Fixture Schedule
26 08 00	Commissioning of Electrical Systems
26 09 00	Instrumentation and Control for Electrical Systems
26 09 13	Electrical Power Monitoring
26 09 15	Peak Load Controllers
200010	

Electrical Controls and Relays

26 09 16

26 09 17	Programmable Controllers
26 09 19	Enclosed Contactors
26 09 23	Lighting Control Devices
26 09 26	Lighting Control Panelboards
26 09 33	Central Dimming Controls
26 09 33.13	Multichannel Remote-Controlled Dimmers
26 09 33.16	Remote-Controlled Dimming Stations
26 09 36	Modular Dimming Controls
26 09 36.13 26 09 36.16	Manual Modular Dimming Controls Integrated Multipreset Modular Dimming Controls
26 09 43	Network Lighting Controls
26 09 43.13	Digital-Network Lighting Controls
26 09 43.16	Addressable Fixture Lighting Control
26 09 43.19	Wireless Network Lighting Controls
26 09 61	Theatrical Lighting Controls
26 10 00	Medium-Voltage Electrical Distribution
26 11 00	Substations
26 11 13	Primary Unit Substations
26 11 16	Secondary Unit Substations
26 12 00	Medium-Voltage Transformers
26 12 13	Liquid-Filled, Medium-Voltage Transformers
26 12 16	Dry-Type, Medium-Voltage Transformers
26 12 19	Pad-Mounted, Liquid-Filled, Medium-Voltage Transformers
26 13 00	Medium-Voltage Switchgear
26 13 13	Medium-Voltage Circuit Breaker Switchgear
26 13 16	Medium-Voltage Fusible Interrupter Switchgear
26 13 19	Medium-Voltage Vacuum Interrupter Switchgear
26 13 23	Medium-Voltage Metal-Enclosed Switchgear
26 13 26	Medium-Voltage Metal-Clad Switchgear
26 13 29	Medium-Voltage Compartmentalized Switchgear
26 16 00	Medium-Voltage Metering
26 18 00	Medium-Voltage Circuit Protection Devices
26 18 13	Medium-Voltage Cutouts
26 18 16	Medium-Voltage Fuses
26 18 19	Medium-Voltage Lightning Arresters
26 18 23	Medium-Voltage Surge Arresters
26 18 26	Medium-Voltage Reclosers
26 18 29	Medium-Voltage Enclosed Bus
26 18 33	Medium-Voltage Enclosed Fuse Cutouts
26 18 36	Medium-Voltage Enclosed Fuses
26 18 39	Medium-Voltage Motor Controllers
26 20 00	Low-Voltage Electrical Transmission
26 21 00	Low-Voltage Electrical Service Entrance
26 21 13	Low-Voltage Overhead Electrical Service Entrance
26 21 13	•
	Low-Voltage Underground Electrical Service Entrance
26 22 00	Low-Voltage Transformers
26 22 13	Low-Voltage Distribution Transformers

and

26 22 16	Low-Voltage Buck-Boost Transformers
26 22 19	Control and Signal Transformers
26 23 00	Low-Voltage Switchgear
26 23 13	Paralleling Low-Voltage Switchgear
26 24 00	Switchboards and Panelboards
26 24 13	Switchboards
26 24 16	
26 24 19	Motor-Control Centers
26 25 00	Enclosed Bus Assemblies
26 26 00	Power Distribution Units
26 27 00	Low-Voltage Distribution Equipment
26 27 13	Electricity Metering
26 27 16	Electrical Cabinets and Enclosures
26 27 19	Multi-Outlet Assemblies
26 27 23	Indoor Service Poles
26 27 26 26 27 73	Wiring Devices Door Chimes
26 28 00	
	Low-Voltage Circuit Protective Devices
26 28 13 26 28 16	Fuses Enclosed Switches and Circuit Breakers
26 28 16.13	
26 28 16.16	
26 29 00	Low-Voltage Controllers
26 29 13	Enclosed Controllers
26 29 13.13	
26 29 13.10	8
26 29 23	Variable-Frequency Motor Controllers
26 29 33 26 29 33.13	Controllers for Fire Pump Drivers Full-Service Controllers for Fire Pump Electric-Motor Drivers
26 29 33.10	
26 29 33.19	•
26 30 00	Facility Electrical Power Generating
~~ ~ / ~~	Storing Equipment
26 31 00	Photovoltaic Collectors
26 32 00	Packaged Generator Assemblies
26 32 13	Engine Generators
26 32 13.13	•
26 32 13.16 26 32 13.26	
26 32 16	Steam-Turbine Generators
26 32 19	Hydro-Turbine Generators
26 32 23	Wind Energy Equipment
26 32 26	Frequency Changers
26 32 29	Rotary Converters
26 32 33	Rotary Uninterruptible Power Units
26 32 36	Resistive Load Banks
26 33 00	Battery Equipment
26 33 13	Batteries

26 33 16	Battery Racks
26 33 19 26 33 23	Battery Units Central Battery Equipment
26 33 33	Static Power Converters
26 33 43	Battery Chargers
26 33 46	Battery Monitoring
26 33 53	Static Uninterruptible Power Supply
26 35 00	Power Filters and Conditioners
26 35 13	Capacitors
26 35 16	Chokes and Inductors
26 35 23	Electromagnetic-Interference Filters
26 35 26	Harmonic Filters
26 35 33	Power Factor Correction Equipment
26 35 36 26 35 43	Slip Controllers Static-Frequency Converters
26 35 45	Radio-Frequency-Interference Filters
26 35 53	Voltage Regulators
26 36 00	Transfer Switches
26 36 13	Manual Transfer Switches
26 36 23	Automatic Transfer Switches
26 40 00	Electrical and Cathodic Protection
26 41 00	Facility Lightning Protection
26 41 13	Lightning Protection for Structures
26 41 13.13	Lightning Protection for Buildings
26 41 16	Lightning Prevention and Dissipation
26 41 19	Early Streamer Emission Lightning Protection
26 41 23	Lightning Protection Surge Arresters and Suppressors
26 42 00	Cathodic Protection
26 42 13 26 42 16	Passive Cathodic Protection for Underground and Submerged Piping Passive Cathodic Protection for Underground Storage Tank
26 43 00	Surge Protective Devices
26 43 13	Surge Protective Devices for Low-Voltage Electrical Power Circuitsrical Power Circuits
26 50 00	Lighting
26 51 00	Interior Lighting
26 51 13	Interior Lighting Fixtures, Lamps, And Ballasts
26 52 00	Emergency Lighting
26 53 00	Exit Signs
26 54 00	Classified Location Lighting
26 55 00	Special Purpose Lighting
26 55 23	Outline Lighting
26 55 29	Underwater Lighting
26 55 33	Hazard Warning Lighting
26 55 36	Obstruction Lighting
26 55 39	Helipad Lighting
26 55 53	Security Lighting
26 55 59	Display Lighting

26 55 61	Theatrical Lighting
26 55 63	Detention Lighting
26 55 70	Healthcare Lighting
26 55 83	Broadcast Lighting
26 56 00	Exterior Lighting
26 56 13	Lighting Poles and Standards
26 56 16	Parking Lighting
26 56 19	Roadway Lighting
26 56 23	Area Lighting
26 56 26	Landscape Lighting
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- 26 56 33
- 26 56 36
- Site Lighting Walkway Lighting Flood Lighting Exterior Athletic Lighting 26 56 68

Communications 27 00 00 **Operation and Maintenance of Communications** 27 01 00 Systems Operation and Maintenance of Structured Cabling and Enclosures 27 01 10 27 01 20 Operation and Maintenance of Data Communications 27 01 30 Operation and Maintenance of Voice Communications Operation and Maintenance of Audio-Video Communications 27 01 40 27 01 50 Operation and Maintenance of Distributed Communications and Monitoring Common Work Results for Communications 27 05 00 **Communications Services** 27 05 13 27 05 13.13 **Dialtone Services** 27 05 13.23 T1 Services **DSL** Services 27 05 13.33 27 05 13.43 **Cable Services** 27 05 13.53 Satellite Services 27 05 26 Grounding and Bonding for Communications Systems Pathways for Communications Systems 27 05 28 27 05 29 Hangers and Supports for Communications Systems Conduits and Backboxes for Communications Systems 27 05 33 27 05 36 Cable Trays for Communications Systems Surface Raceways for Communications Systems 27 05 39 Underground Ducts and Raceways for Communications Systems 27 05 43 27 05 46 Utility Poles for Communications Systems Vibration and Seismic Controls for Communications Systems 27 05 48 Identification for Communications Systems 27 05 53 27 06 00 Schedules for Communications Schedules for Structured Cabling and Enclosures 27 06 10 27 06 20 Schedules for Data Communications Schedules for Voice Communications 27 06 30 27 06 40 Schedules for Audio-Video Communications 27 06 50 Schedules for Distributed Communications and Monitoring **Commissioning of Communications** 27 08 00 Structured Cabling 27 10 00 **Communications Equipment Room Fittings** 27 11 00 Communications Entrance Protection 27 11 13 27 11 16 Communications Cabinets, Racks, Frames, and Enclosures Communications Termination Blocks and Patch Panels 27 11 19 27 11 23 Communications Cable Management and Ladder Rack 27 11 26 Communications Rack Mounted Power Protection and Power Strips 27 13 00 Communications Backbone Cabling 27 13 13 Communications Copper Backbone Cabling Communications Copper Cable Splicing and Terminations 27 13 13.13 27 13 23 Communications Optical Fiber Backbone Cabling **Communications Optical Fiber Splicing and Terminations** 27 13 23.13 27 13 33 **Communications Coaxial Backbone Cabling** 27 13 33.13 **Communications Coaxial Splicing and Terminations** 27 13 43 **Communications Services Cabling**

27 13 43.13 Dialtone Services Cabling

27 13 43.23 27 13 43.33	T1 Services Cabling DSL Services Cabling
27 13 43.43	Cable Services Cabling
27 13 43.53	Satellite Services Cabling
27 15 00	Communications Horizontal Cabling
27 15 00.16	Voice Communications Horizontal Cabling
27 15 00.19	Data Communications Horizontal Cabling
27 15 00.23	Audio-Video Communications Horizontal Cabling
27 15 00.39	Patient Monitoring and Telemetry Communications
	Horizontal Cabling
27 15 00.43	Nurse Call and Intercom Communications Horizontal
	Cabling
27 15 00.46	Paging Communications Horizontal Cabling
27 15 00.49	Intermediate Frequency/Radio Frequency
27 13 00.43	Communications Horizontal Cabling
27 15 00.53	•
	Antennas Communications Horizontal Cabling
27 15 13 27 15 23	Communications Copper Horizontal Cabling
27 15 23	Communications Optical Fiber Horizontal Cabling Communications Coaxial Horizontal Cabling
27 15 33	Communications Faceplates and Connectors
27 16 00	Communications Connecting Cords, Devices, and
27 10 00	–
07 46 40	Adapters
27 16 13 27 16 16	Communications Custom Cable Assemblies Communications Media Converters, Adapters, and Transceivers
27 16 10	Communications Media Converters, Adapters, and Transceivers Communications Patch Cords, Station Cords, and Cross Connect Wire
27 20 00	
	Data Communications
27 21 00	Data Communications Network Equipment
27 21 13	Data Communications Firewalls
27 21 16	Data Communications Routers, CSU/DSU, Multiplexers, Codecs, and Modems
27 21 26	Data Communications Network Management
27 21 29	Data Communications Switches and Hubs
27 21 33	Data Communications Wireless Access Points
27 22 00	Data Communications Hardware
27 22 13	Data Communications Mainframes
27 22 16	Data Communications Storage and Backup
27 22 19	Data Communications Servers
27 22 23	Data Communications Desktops
27 22 26	Data Communications Laptops
27 22 29	Data Communications Handhelds
27 24 00	Data Communications Peripheral Data Equipment
27 24 13	Printers
27 24 16	Scanners
27 24 19	External Drives
27 24 23 27 24 26	Audio-Video Devices
21 24 20	Virtual Reality Equipment

27 24 29	Disaster Recovery Equipment
27 25 00	Data Communications Software
27 25 13	Virus Protection Software
27 25 16	Application Suites
27 25 19	Email Software
27 25 23	Graphics/Multimedia Software
27 25 26	Customer Relationship Management Software
27 25 29	Operating System Software
27 25 33	Database Software
27 25 37	Virtual Private Network Software
27 25 39	Internet Conferencing Software
27 26 00	Data Communications Programming and Integration
	Services
27 26 13	Web Development
27 26 16	Database Development
27 26 19	Application Development
27 26 23	Network Integration Requirements
27 26 26	Data Communications Integration Requirements
27 30 00	Voice Communications
27 31 00	Voice Communications Switching and Routing
	Equipment
27 31 13	PBX/ Key Systems
27 31 23	Internet Protocol Voice Switches
27 32 00	Voice Communications Terminal Equipment
27 32 13	Telephone Sets
27 32 16	Wireless Transceivers
27 32 23	Elevator Telephones
27 32 26	Ring-Down Emergency Telephones
27 32 29	Facsimiles and Modems
27 32 36	TTY Equipment
27 32 43	Radio Communications Equipment
27 33 00	Voice Communications Messaging
27 33 16	Voice Mail and Auto Attendant
27 33 23	Interactive Voice Response
27 33 26	Facsimile Servers
27 34 00	Call Accounting
27 34 13	Toll Fraud Equipment and Software
27 34 16	Telemanagement Software
27 35 00	Call Management
27 35 13	Digital Voice Announcers
27 35 16	Automatic Call Distributors
27 35 19	Call Status and Management Displays
27 35 23	Dedicated 911 Systems
27 40 00	Audio-Video Communications
27 41 00	Audio-Video Systems
27 41 13	Architecturally Integrated Audio-Video Equipment
07 44 40	

27 41 16 Integrated Audio-Video Systems and Equipment

- 27 41 16.25 Integrated Audio-Video Systems and Equipment for Restaurants and Bars
- 27 41 16.28 Integrated Audio-Video Systems and Equipment for Conference Rooms
- 27 41 16.29 Integrated Audio-Video Systems and Equipment for Board Rooms
- 27 41 16.51 Integrated Audio-Video Systems and Equipment for Classrooms
- Integrated Audio-Video Systems and Equipment for Religious Facilities 27 41 16.52
- Integrated Audio-Video Systems and Equipment for Theaters 27 41 16.61 Integrated Audio-Video Systems and Equipment for Auditoriums 27 41 16.62
- 27 41 16.63 Integrated Audio-Video Systems and Equipment for Stadiums and Arenas
- 27 41 19 Portable Audio-Video Equipment
- 27 41 23 Audio-Video Accessories
- 27 41 33 Master Antenna Television Systems
- 27 41 43 Audio-Video Conferencing

27 42 00 Electronic Digital Systems

- 27 42 13 Point of Sale Systems
- 27 42 16 **Transportation Information Display Systems**
- 27 42 19 Public Information Systems

27 50 00 Distributed Communications and **Monitoring Systems Distributed Audio-Video Communications Systems**

27 51 00

- 27 51 13 Paging Systems
- 27 51 13.13 **Overhead Paging Systems**
- 27 51 16 Public Address Systems
- 27 51 19 Sound Masking Systems
- 27 51 23 Intercommunications and Program Systems
- 27 51 23.20 **Commercial Intercommunications and Program Systems**
- Residential Intercommunications and Program Systems 27 51 23.30
- Educational Intercommunications and Program Systems 27 51 23.50
- Detention Intercommunications and Program Systems 27 51 23.63
- Healthcare Intercommunications and Program Systems 27 51 23.70
- 27 51 26 Assistive Listening Systems

27 52 00 Healthcare Communications and Monitoring Systems

- Patient Monitoring and Telemetry Systems 27 52 13
- 27 52 16 **Telemedicine Systems**
- 27 52 19 Healthcare Imaging Systems
- Nurse Call/Code Blue Systems 27 52 23

27 53 00 **Distributed Systems**

- 27 53 13 **Clock Systems**
- 27 53 13.13 Wireless Clock Systems
- Infrared and Radio Frequency Tracking Systems 27 53 16
- 27 53 19 Internal Cellular, Paging, and Antenna Systems

28 00 00	Electronic Safety and Security
28 01 00	Operation and Maintenance of Electronic Safety and
	Security
28 01 10	Operation and Maintenance of Electronic Access Control and Intrusion
	Detection
28 01 10.51	Maintenance and Administration of Electronic Access Control and Intrusion
28 01 10.71	Detection Revisions and Upgrades of Electronic Access Control and Intrusion Detection
28 01 20	Operation and Maintenance of Electronic Surveillance
28 01 30	Operation and Maintenance of Electronic Detection and Alarm
28 01 30.51	Maintenance and Administration of Electronic Detection and Alarm
28 01 30.71	Revisions and Upgrades of Electronic Detection and Alarm
28 01 40	Operation and Maintenance of Electronic Monitoring and Control
28 01 40.51 28 01 40.71	Maintenance and Administration of Electronic Monitoring and Control Revisions and Upgrades of Electronic Monitoring and Control
28 05 00	Common Work Results for Electronic Safety and
20 03 00	•
00.05.40	Security
28 05 13 28 05 13.13	Conductors and Cables for Electronic Safety and Security CCTV Communications Conductors and Cables
28 05 13.15	Access Control Communications Conductors and Cables
28 05 13.19	Intrusion Detection Communications Conductors and Cables
28 05 13.23	Fire Alarm Communications Conductors and Cables
28 05 26	Grounding and Bonding for Electronic Safety and Security
28 05 28	Pathways for Electronic Safety and Security
28 05 28.29	Hangers and Supports for Electronic Safety and Security
28 05 28.33 28 05 28.36	Conduits and Backboxes for Electronic Safety and Security Cable Trays for Electronic Safety and Security
28 05 28.39	Surface Raceways for Electronic Safety and Security
28 05 48	Vibration and Seismic Controls for Electronic Safety and Security
28 05 53	Identification for Electronic Safety and Security
28 06 00	Schedules for Electronic Safety and Security
28 06 10	Schedules for Electronic Access Control and Intrusion Detection
28 06 20	Schedules for Electronic Surveillance
28 06 30	Schedules for Electronic Detection and Alarm
28 06 40	Schedules for Electronic Monitoring and Control
28 08 00	Commissioning of Electronic Safety and Security
28 10 00	Electronic Access Control and Intrusion
	Detection
28 13 00	Access Control
28 13 13	Access Control Global Applications
28 13 16	Access Control Systems and Database Management
28 13 19	Access Control Systems Infrastructure
28 13 26	Access Control Remote Devices
28 13 26.11	Wireless Access Control Devices
28 13 33	Access Control Interfaces
28 13 33.16 28 13 33.26	Access Control Interfaces to Access Control Hardware Access Control Interfaces to Intrusion Detection
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28 13 33.36	Access Control Interfaces to Fire Alarm

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32 11 29.13	Lime-Fly Ash-Treated Base Courses
32 11 33	Cement-Treated Base Courses
32 11 33.13 32 11 36	Portland Cement-Stabilized Base Courses Concrete Base Courses
32 11 36.13	Lean Concrete Base Courses
32 11 36.16	Plain Cement Concrete Base Courses
32 11 36.19	Hydraulic Cement Concrete Base Courses
32 12 00	Flexible Paving
32 12 13	Preparatory Coats
32 12 13	Tack Coats
32 12 13.16	Asphaltic Tack Coats
32 12 13.19	Prime Coats
32 12 13.23	Asphaltic Prime Coats
32 12 16	Asphalt Paving
32 12 16.13	Plant-Mix Asphalt Paving
32 12 16.16	Road-Mix Asphalt Paving
32 12 16.19	Cold-Mix Asphalt Paving
32 12 16.23	Reinforced Asphalt Paving
32 12 16.26 32 12 16.29	Fiber-Modified Asphalt Paving Polymer-Modified Asphalt Paving
32 12 16.29	Granulated Rubber-Modified Asphalt Paving
32 12 16.36	Athletic Asphalt Paving
32 12 19	Asphalt Paving Wearing Courses
32 12 19.13	Road-Mix Asphalt Paving Wearing Courses
32 12 19.16	Resin-Modified Asphalt Paving Wearing Courses
32 12 19.19	Porous Friction Asphalt Paving Wearing Courses

- 32 12 33 Flexible Paving Surface Treatments
- 32 12 36 Seal Coats
- 32 12 36.13 Asphaltic Seal and Fog Coats
- 32 12 36.16 **Coal Tar Seal Coats**
- Coal Tar Seal Coats with Unvulcanized Rubber 32 12 36.19
- 32 12 36.23 **Fuel-Resistant Sealers**
- 32 12 43 Porous Flexible Paving
- 32 12 73 Asphalt Paving Joint Sealants

32 13 00 **Rigid Paving**

- 32 13 13 Concrete Paving
- Exposed Aggregate Concrete Paving 32 13 13.13
- Power-Compacted Concrete Paving 32 13 13.16
- Prestressed Concrete Paving 32 13 13.19
- 32 13 13.23 Concrete Paving Surface Treatment
- Plain Concrete Paving 32 13 13.33
- 32 13 16 Decorative Concrete Paving
- 32 13 16.13 Patterned Concrete Paving
- 32 13 16.16 Roller-Compacted Concrete Paving
- 32 13 16.19 Imprinted Concrete Paving
- Stamped Concrete Paving 32 13 16.23
- 32 13 43 Pervious Concrete Paving
- **Concrete Paving Joint Sealants** 32 13 73
- 32 13 73.13 Fuel-Resistant Concrete Paving Joint Sealants
- 32 13 73.16 Field-Molded Concrete Paving Joint Sealants
- 32 13 73.19 **Compression Concrete Paving Joint Sealants**

32 14 00

32 16 00

Unit Paving Precast Concrete Unit Paving

- 32 14 13 32 14 13.13 Interlocking Precast Concrete Unit Paving
- 32 14 13.16 Precast Concrete Unit Paving Slabs
- 32 14 13.19 Porous Precast Concrete Unit Paving
- 32 14 16 Brick Unit Paving
- 32 14 23
- Asphalt Unit Paving
- 32 14 26 Wood Paving
- **Recycled-Rubber Paving** 32 14 29
- 32 14 40 Stone Paving
- 32 14 43 Porous Unit Paving

32 15 00 Aggregate Surfacing

- Cinder Surfacing 32 15 13
- 32 15 40 Crushed Stone Surfacing

Curbs, Gutters, Sidewalks, and Driveways

- 32 16 13 Curbs and Gutters
- Cast-In-Place Concrete Curbs and Gutters 32 16 13.13
- 32 16 13.16 Steel Faced Curbs
- 32 16 13.23 Precast Concrete Curbs and Gutters
- 32 16 13.33 Asphalt Curbs
- 32 16 13.43 Stone Curbs
- 32 16 23 Sidewalks
- 32 16 33 Driveways

32 17 00 Paving Specialties

- 32 17 13 Parking Bumpers
- 32 17 13.13 Metal Parking Bumpers
- 32 17 13.16 Plastic Parking Bumpers

32 17 13.19 32 17 13.23 32 17 13.26 32 17 16 32 17 23 32 17 23.13 32 17 23.23 32 17 23.33 32 17 23.33 32 17 26 32 17 43	Precast Concrete Parking Bumpers Rubber Parking Bumpers Wood Parking Bumpers Speed Bumps Pavement Markings Painted Pavement Markings Raised Pavement Markings Plastic Pavement Markings Tactile Warning Surfacing Pavement Snow Melting Systems
32 18 00	Athletic and Recreational Surfacing
32 18 13	Synthetic Grass Surfacing
$\begin{array}{c} 32 & 18 & 16 \\ 32 & 18 & 16 \\ 32 & 18 & 23 \\ 32 & 18 \\ 32 &$	Synthetic Resilient Surfacing Playground Protective Surfacing Athletic Surfacing Baseball Field Surfacing Natural Baseball Field Surfacing Synthetic Baseball Field Surfacing Field Sport Surfacing Natural Field Sport Surfacing Synthetic Field Sport Surfacing Running Track Surfacing Natural Running Track Surfacing Synthetic Running Track Surfacing Recreational Court Surfacing Tennis Court Surfacing Natural Tennis Court Surfacing
32 18 23.59	Synthetic Tennis Court Surfacing
32 30 00	Site Improvements
32 30 00 32 31 00	Site Improvements Fences and Gates
32 30 00 32 31 00 32 31 11	Site Improvements Fences and Gates Gate Operators
32 30 00 32 31 00	Site Improvements Fences and Gates
32 30 00 32 31 00 32 31 11 32 31 13 32 31 13.23 32 31 13.26	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates
32 30 00 32 31 00 32 31 11 32 31 13 32 31 13.23 32 31 13.26 32 31 13.29	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker
32 30 00 32 31 00 32 31 11 32 31 13 32 31 13.23 32 31 13.26 32 31 13.29 32 31 13.33	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops
32 30 00 32 31 00 32 31 11 32 31 13 32 31 13.23 32 31 13.26 32 31 13.29 32 31 13.33 32 31 13.33 32 31 13.53	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates
32 30 00 32 31 00 32 31 11 32 31 13 32 31 13.23 32 31 13.26 32 31 13.29 32 31 13.33	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates
$\begin{array}{c} \textbf{32 30 00} \\ \textbf{32 31 00} \\ \textbf{32 31 11} \\ \textbf{32 31 13} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.33} \\ \textbf{32 31 13.53} \\ \textbf{32 31 13.53} \\ \textbf{32 31 16} \end{array}$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates
32 30 00 32 31 00 32 31 11 32 31 13 32 31 13.23 32 31 13.26 32 31 13.29 32 31 13.29 32 31 13.33 32 31 13.53 32 31 16 32 31 17	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates
$\begin{array}{c} \textbf{32 30 00} \\ \textbf{32 31 00} \\ \textbf{32 31 11} \\ \textbf{32 31 13} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.33} \\ \textbf{32 31 13.53} \\ \textbf{32 31 13.53} \\ \textbf{32 31 16} \\ \textbf{32 31 17} \\ \textbf{32 31 19} \\ \textbf{32 31 23} \\ \textbf{32 31 23} \\ \textbf{32 31 26} \end{array}$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Wire Fences and Gates
$\begin{array}{c} \textbf{32 30 00} \\ \textbf{32 31 00} \\ \textbf{32 31 11} \\ \textbf{32 31 13} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.33} \\ \textbf{32 31 13.53} \\ \textbf{32 31 13.53} \\ \textbf{32 31 16} \\ \textbf{32 31 17} \\ \textbf{32 31 19} \\ \textbf{32 31 23} \\ \textbf{32 31 23} \\ \textbf{32 31 26} \\ \textbf{32 31 29} \end{array}$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wire Fences and Gates
$\begin{array}{c} \textbf{32 30 00} \\ \textbf{32 31 00} \\ \textbf{32 31 11} \\ \textbf{32 31 13} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.33} \\ \textbf{32 31 13.53} \\ \textbf{32 31 13.53} \\ \textbf{32 31 16} \\ \textbf{32 31 17} \\ \textbf{32 31 19} \\ \textbf{32 31 23} \\ \textbf{32 31 23} \\ \textbf{32 31 26} \\ \textbf{32 31 29} \\ \textbf{32 31 32} \end{array}$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates
$\begin{array}{c} \textbf{32 30 00} \\ \textbf{32 31 00} \\ \textbf{32 31 11} \\ \textbf{32 31 13} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.33} \\ \textbf{32 31 13.53} \\ \textbf{32 31 13.53} \\ \textbf{32 31 16} \\ \textbf{32 31 17} \\ \textbf{32 31 17} \\ \textbf{32 31 19} \\ \textbf{32 31 23} \\ \textbf{32 31 23} \\ \textbf{32 31 26} \\ \textbf{32 31 29} \\ \textbf{32 31 32} \\ \textbf{32 31 53} \end{array}$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates Cattle Guards
32 30 00 32 31 00 32 31 11 32 31 13 32 31 13.23 32 31 13.26 32 31 13.29 32 31 13.29 32 31 13.29 32 31 13.33 32 31 13.53 32 31 16 32 31 17 32 31 19 32 31 23 32 31 23 32 31 26 32 31 29 32 31 29 32 31 53 32 32 00	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates Cattle Guards Retaining Walls
$\begin{array}{c} \textbf{32 30 00} \\ \textbf{32 31 00} \\ \textbf{32 31 11} \\ \textbf{32 31 13} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.23} \\ \textbf{32 31 13.26} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.29} \\ \textbf{32 31 13.33} \\ \textbf{32 31 13.53} \\ \textbf{32 31 13.53} \\ \textbf{32 31 16} \\ \textbf{32 31 17} \\ \textbf{32 31 17} \\ \textbf{32 31 19} \\ \textbf{32 31 23} \\ \textbf{32 31 23} \\ \textbf{32 31 29} \\ \textbf{32 31 29} \\ \textbf{32 31 29} \\ \textbf{32 31 29} \\ \textbf{32 31 53} \\ \textbf{32 32 100} \\ \textbf{32 32 13} \end{array}$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates Composite Fences and Gates Cattle Guards Retaining Walls Cast-in-Place Concrete Retaining Walls
$\begin{array}{c} \textbf{32} \ \textbf{30} \ \textbf{00} \\ \textbf{32} \ \textbf{31} \ \textbf{00} \\ \textbf{32} \ \textbf{31} \ \textbf{10} \\ \textbf{32} \ \textbf{31} \ \textbf{13} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.26} \\ \textbf{32} \ \textbf{31} \ \textbf{13.29} \\ \textbf{32} \ \textbf{31} \ \textbf{13.29} \\ \textbf{32} \ \textbf{31} \ \textbf{13.33} \\ \textbf{32} \ \textbf{31} \ \textbf{13.53} \\ \textbf{32} \ \textbf{31} \ \textbf{13.53} \\ \textbf{32} \ \textbf{31} \ \textbf{13.53} \\ \textbf{32} \ \textbf{31} \ \textbf{13} \\ \textbf{32} \ \textbf{31} \ \textbf{17} \\ \textbf{32} \ \textbf{31} \ \textbf{17} \\ \textbf{32} \ \textbf{31} \ \textbf{19} \\ \textbf{32} \ \textbf{31} \ \textbf{23} \\ \textbf{32} \ \textbf{31} \ \textbf{26} \\ \textbf{32} \ \textbf{31} \ \textbf{29} \\ \textbf{32} \ \textbf{31} \ \textbf{29} \\ \textbf{32} \ \textbf{31} \ \textbf{32} \\ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{31} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{31} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{32} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{33} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{33} \\ \textbf{32} \ \textbf{32} \ \textbf{33} \ \textbf$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates Composite Fences and Gates Cattle Guards Retaining Walls Cast-in-Place Concrete Retaining Walls Precast Concrete Retaining Walls
$\begin{array}{c} \textbf{32} \ \textbf{30} \ \textbf{00} \\ \textbf{32} \ \textbf{31} \ \textbf{00} \\ \textbf{32} \ \textbf{31} \ \textbf{10} \\ \textbf{32} \ \textbf{31} \ \textbf{13} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.26} \\ \textbf{32} \ \textbf{31} \ \textbf{13.26} \\ \textbf{32} \ \textbf{31} \ \textbf{13.29} \\ \textbf{32} \ \textbf{31} \ \textbf{13.29} \\ \textbf{32} \ \textbf{31} \ \textbf{13.29} \\ \textbf{32} \ \textbf{31} \ \textbf{13.53} \\ \textbf{32} \ \textbf{31} \ \textbf{16} \\ \textbf{32} \ \textbf{31} \ \textbf{17} \\ \textbf{32} \ \textbf{31} \ \textbf{19} \\ \textbf{32} \ \textbf{31} \ \textbf{23} \\ \textbf{32} \ \textbf{31} \ \textbf{26} \\ \textbf{32} \ \textbf{31} \ \textbf{29} \\ \textbf{32} \ \textbf{31} \ \textbf{29} \\ \textbf{32} \ \textbf{31} \ \textbf{32} \\ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{32} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{32} \\ \textbf{32} \ \textbf{32} \ \textbf{16} \\ \textbf{32} \ \textbf{32} \ \textbf{19} \end{array}$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates Composite Fences and Gates Composite Fences and Gates Cattle Guards Betaining Walls
$\begin{array}{c} \textbf{32} \ \textbf{30} \ \textbf{00} \\ \textbf{32} \ \textbf{31} \ \textbf{00} \\ \textbf{32} \ \textbf{31} \ \textbf{10} \\ \textbf{32} \ \textbf{31} \ \textbf{13} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.23} \\ \textbf{32} \ \textbf{31} \ \textbf{13.26} \\ \textbf{32} \ \textbf{31} \ \textbf{13.29} \\ \textbf{32} \ \textbf{31} \ \textbf{13.29} \\ \textbf{32} \ \textbf{31} \ \textbf{13.33} \\ \textbf{32} \ \textbf{31} \ \textbf{13.53} \\ \textbf{32} \ \textbf{31} \ \textbf{13.53} \\ \textbf{32} \ \textbf{31} \ \textbf{13.53} \\ \textbf{32} \ \textbf{31} \ \textbf{13} \\ \textbf{32} \ \textbf{31} \ \textbf{17} \\ \textbf{32} \ \textbf{31} \ \textbf{17} \\ \textbf{32} \ \textbf{31} \ \textbf{19} \\ \textbf{32} \ \textbf{31} \ \textbf{23} \\ \textbf{32} \ \textbf{31} \ \textbf{26} \\ \textbf{32} \ \textbf{31} \ \textbf{29} \\ \textbf{32} \ \textbf{31} \ \textbf{29} \\ \textbf{32} \ \textbf{31} \ \textbf{32} \\ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{31} \ \textbf{53} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{31} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{31} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{32} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{33} \\ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{32} \ \textbf{33} \\ \textbf{32} \ \textbf{32} \ \textbf{33} \ \textbf$	Site Improvements Fences and Gates Gate Operators Chain Link Fences and Gates Recreational Court Fences and Gates Tennis Court Fences and Gates Tennis Court Wind Breaker Chain Link Backstops High-Security Chain Link Fences and Gates Welded Wire Fences and Gates Expanded Metal Fences and Gates Decorative Metal Fences and Gates Plastic Fences and Gates Plastic Fences and Gates Wire Fences and Gates Wood Fences and Gates Composite Fences and Gates Composite Fences and Gates Cattle Guards Retaining Walls Cast-in-Place Concrete Retaining Walls Precast Concrete Retaining Walls

$\begin{array}{c} 32 \ 32 \ 29 \\ 32 \ 32 \ 34 \\ 32 \ 32 \ 32 \ 36 \\ 32 \ 32 \ 43 \\ 32 \ 32 \ 53 \end{array}$ $\begin{array}{c} 32 \ 34 \ 00 \\ 32 \ 34 \ 13 \\ 32 \ 34 \ 23 \\ 32 \ 34 \ 33 \end{array}$ $\begin{array}{c} 32 \ 34 \ 23 \\ 32 \ 34 \ 33 \end{array}$ $\begin{array}{c} 32 \ 35 \ 00 \\ 32 \ 35 \ 16 \\ 32 \ 39 \ 00 \\ 32 \ 39 \ 13 \\ 32 \ 39 \ 33 \end{array}$	Metal Crib Retaining Walls Timber Retaining Walls Reinforced Soil Retaining Walls Gabion Retaining Walls Soldier-Beam Retaining Walls Stone Retaining Walls Fabricated Bridges Fabricated Pedestrian Bridges Fabricated Roadway Bridges Fabricated Railway Bridges Screening Devices Screens and Louvers Sound Barriers Manufactured Site Specialties Manufactured Metal Bollards Artificial Rock Fabrications
32 70 00	Wetlands
32 71 00	Constructed Wetlands
32 72 00	Wetlands Restoration
32 80 00	Irrigation
32 82 00	Irrigation Pumps
32 84 00	Planting Irrigation
32 84 13	Drip Irrigation
32 84 23	Underground Sprinklers
32 86 00	Agricultural Irrigation
32 90 00	Planting
32 91 00	Planting Preparation
32 91 13 32 91 13 13	Soil Preparation
32 91 13 32 91 13.13 32 91 13.16	Hydro-Punching Mulching
32 91 13.13 32 91 13.16 32 91 13.19	Hydro-Punching Mulching Planting Soil Mixing
32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing
32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization
32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16 32 91 16.13	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization
32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization
$\begin{array}{c} 32 \ 91 \ 13.13 \\ 32 \ 91 \ 13.16 \\ 32 \ 91 \ 13.19 \\ 32 \ 91 \ 13.23 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 16.13 \\ 32 \ 91 \ 16.16 \\ 32 \ 91 \ 16.19 \\ 32 \ 91 \ 19 \end{array}$	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading
$\begin{array}{c} 32 \ 91 \ 13.13 \\ 32 \ 91 \ 13.16 \\ 32 \ 91 \ 13.19 \\ 32 \ 91 \ 13.23 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 16.13 \\ 32 \ 91 \ 16.16 \\ 32 \ 91 \ 16.16 \\ 32 \ 91 \ 16.19 \\ 32 \ 91 \ 19 \\ 32 \ 91 \ 19.13 \end{array}$	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading
32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16.13 32 91 16.13 32 91 16.16 32 91 16.19 32 91 19 32 91 19.13 32 92 00	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses
$\begin{array}{c} 32 \ 91 \ 13.13 \\ 32 \ 91 \ 13.16 \\ 32 \ 91 \ 13.19 \\ 32 \ 91 \ 13.23 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 16.13 \\ 32 \ 91 \ 16.16 \\ 32 \ 91 \ 16.16 \\ 32 \ 91 \ 16.19 \\ 32 \ 91 \ 19 \\ 32 \ 91 \ 19.13 \end{array}$	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading
32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16 32 91 16.13 32 91 16.16 32 91 16.19 32 91 19 32 91 19 32 91 19.13 32 92 00 32 92 13 32 92 16 32 92 19	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging Seeding
$\begin{array}{c} 32 \ 91 \ 13.13 \\ 32 \ 91 \ 13.16 \\ 32 \ 91 \ 13.16 \\ 32 \ 91 \ 13.23 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 16.13 \\ 32 \ 91 \ 16.16 \\ 32 \ 91 \ 16.19 \\ 32 \ 91 \ 16.19 \\ 32 \ 91 \ 19 \\ 32 \ 92 \ 19 \\ 32 \ 92 \ 13 \\ 32 \ 92 \ 19 \\ 32 \ 10 \ 10 \ 10 \ 10 \ 10 \ 10 \ 10 \ 1$	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging Seeding Mechanical Seeding
32 91 13.13 32 91 13.16 32 91 13.19 32 91 13.23 32 91 13.26 32 91 16 32 91 16.13 32 91 16.16 32 91 16.19 32 91 19 32 91 19 32 91 19.13 32 92 00 32 92 13 32 92 16 32 92 19	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging Seeding
$\begin{array}{c} 32 \ 91 \ 13.13 \\ 32 \ 91 \ 13.16 \\ 32 \ 91 \ 13.19 \\ 32 \ 91 \ 13.23 \\ 32 \ 91 \ 13.23 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 13.26 \\ 32 \ 91 \ 16.13 \\ 32 \ 91 \ 16.13 \\ 32 \ 91 \ 16.19 \\ 32 \ 91 \ 16.19 \\ 32 \ 91 \ 19 \\ 32 \ 92 \ 10 \\ 32 \ 92 \ 13 \\ 32 \ 92 \ 19 \\ 32 \ 10 \ 10 \ 10 \ 10 \ 10 \ 10 \ 10 \ 1$	Hydro-Punching Mulching Planting Soil Mixing Structural Soil Mixing Planting Beds Planting Soil Stabilization Blanket Planting Soil Stabilization Mat Planting Soil Stabilization Netting Planting Soil Stabilization Landscape Grading Topsoil Placement and Grading Turf and Grasses Hydro-Mulching Plugging Seeding Mechanical Seeding Hydraulic Seeding

32 92 26.13	Stolonizing
32 93 00	Plants
32 93 13	Ground Covers
32 93 23	Plants and Bulbs
32 93 33	Shrubs
32 93 43	Trees
32 93 93	Exterior Artificial Plants
32 94 00	Planting Accessories
32 94 13	Landscape Edging
32 94 16	Landscape Timbers
32 94 19	Landscape Surfacing
32 94 33	Planters
32 94 43	Tree Grates
32 94 46	Tree Grids
32 95 00	Exterior Planting Support Structures
32 96 00	Transplanting
32 96 13	Ground Cover Transplanting
32 96 23	Plant and Bulb Transplanting

- 32 96 33 32 96 43 Shrub Transplanting Tree Transplanting

33 00 00 33 01 00 33 01 10 Operation and Maintenance of Utilities

- Operation and Maintenance of Water Utilities 33 01 10 33 01 10.71 Water Utility Storage Tank Rehabilitation **Operation and Maintenance of Wells** 33 01 20 33 01 30 Operation and Maintenance of Sewer Utilities Sewer and Manhole Testing 33 01 30.13 TV Inspection of Sewer Pipelines 33 01 30.16 Maintenance of Sewer Utilities 33 01 30.51 33 01 30.52 Pond and Reservoir Maintenance 33 01 30.61 Sewer and Pipe Joint Sealing 33 01 30.62 Manhole Grout Sealing 33 01 30.71 Rehabilitation of Sewer Utilities 33 01 30.72 **Relining Sewers** 33 01 50 Operation and Maintenance of Fuel Distribution Lines **Cleaning Fuel-Storage Tanks** 33 01 50.51 33 01 50.71 Lining of Steel Fuel-Storage Tanks Operation and Maintenance of Hydronic and Steam Energy Utilities 33 01 60 33 01 70 Operation and Maintenance of Electrical Utilities 33 01 80 Operation and Maintenance of Communications Utilities 33 05 00 Common Work Results for Utilities 33 05 13 Manholes and Structures Manhole Grade Adjustment 33 05 13.13 33 05 16 Utility Structures Precast Concrete Utility Structures 33 05 16.13 **Rebuilding Utility Structures** 33 05 16.53 33 05 19 Pressure Piping Tied Joint Restraint System **Trenchless Utility Installation** 33 05 23 Utility Horizontal Directional Drilling 33 05 23.13 33 05 23.16 Utility Pipe Jacking 33 05 23.19 Microtunneling 33 05 23.23 Utility Pipe Ramming 33 05 23.26 Utility Impact Moling Cable Trenching and Plowing 33 05 23.29 33 05 26 Utility Identification Utility Identification Signs 33 05 26.13 **Utility Identification Markers** 33 05 26.16 33 05 26.19 Utility Identification Flags 33 05 26.23 Utility Identification Trace Wires Schedules for Utilities 33 06 00 33 06 10 Schedules for Water Utilities 33 06 20 Schedules for Wells Schedules for Sanitary Sewerage Utilities 33 06 30 33 06 40 Schedules for Storm Drainage Utilities Storm Drainage Schedule 33 06 40.13 Schedules for Fuel Distribution Utilities 33 06 50 33 06 60 Schedules for Hydronic and Steam Energy Utilities 33 06 70 Schedules for Electrical Utilities
 - 33 06 80 Schedules for Communications Utilities

33 08 00 Commissioning of Utilities

33 08 10 Commissioning of Water Utilities

33 08 20	Commissioning of Wells
33 08 30	Commissioning of Sanitary Sewerage Utilities
33 08 40	Commissioning of Storm Drainage Utilities
33 08 50	Commissioning of Fuel Distribution Utilities
33 08 60	Commissioning of Hydronic and Steam Energy Utilities
33 08 70	Commissioning of Electrical Utilities
33 08 80	Commissioning of Communications Utilities
33 09 00	Instrumentation and Control for Utilities
33 09 10	Instrumentation and Control for Water Utilities
33 09 20	Instrumentation and Control for Wells
33 09 30	Instrumentation and Control for Sanitary Sewerage Utilities
33 09 40	Instrumentation and Control for Storm Drainage Utilities
33 09 50	Instrumentation and Control for Fuel Distribution Utilities
33 09 60	Instrumentation and Control for Hydronic and Steam Energy Utilities
33 09 70 33 09 80	Instrumentation and Control for Electrical Utilities
	Instrumentation and Control for Communications Utilities
33 10 00	Water Utilities
33 11 00	Water Utility Distribution Piping
33 11 13	Public Water Utility Distribution Piping
33 11 13.13	Ductile Iron Public Water Utility Distribution Piping
33 11 13.16	Cast Iron Public Water Utility Distribution Piping
33 11 13.23	Plastic Public Water Utility Distribution Piping
33 11 13.26	Galvanized Steel Public Water Utility Distribution Piping
33 11 13.33 33 11 16	Concrete Public Water Utility Distribution Piping Site Water Utility Distribution Piping
33 11 19	Fire Suppression Utility Water Distribution Piping
33 12 00	Water Utility Distribution Equipment
33 12 13	Water Service Connections
33 12 13.13	Water Supply Backflow Preventer Assemblies
33 12 16	Water Utility Distribution Valves
33 12 19	Water Utility Distribution Fire Hydrants
33 12 23	Water Utility Pumping Stations
33 12 33	Water Utility Metering
33 13 00	Disinfecting of Water Utility Distribution
33 16 00	Water Utility Storage Tanks
33 16 13	Aboveground Water Utility Storage Tanks
33 16 13.13	Steel Aboveground Water Utility Storage Tanks
33 16 13.16	Prestressed Concrete Aboveground Water Utility Storage Tanks
33 16 13.19	Plastic Aboveground Water Utility Storage Tanks
33 16 16	Underground Water Utility Storage Tanks
33 16 19	Elevated Water Utility Storage Tanks
33 20 00	Wells
33 21 00	Water Supply Wells
33 21 13	Public Water Supply Wells
33 21 16	Irrigation Water Wells
33 22 00	Test Wells
33 23 00	Extraction Wells
33 24 00	Monitoring Wells

33 24 13	Groundwater Monitoring Wells
33 25 00	Recharge Wells
33 26 00	Relief Wells
33 29 00	Well Abandonment
33 30 00	Sanitary Sewerage Utilities
33 31 00	Sanitary Utility Sewerage Piping
33 31 13	Public Sanitary Utility Sewerage Piping
33 31 16	Industrial Waste Utility Sewerage Piping
33 32 00	Wastewater Utility Pumping Stations
33 32 13	Packaged Utility Lift Stations
33 32 13.13	Packaged Sewage Lift Stations, Wet Well Type
33 32 16 33 32 16.13	Packaged Utility Wastewater Pumping Stations
33 32 10.13	Packaged Sewage Grinder Pumping Units Public Utility Wastewater Pumping Stations
33 33 00	Low Pressure Utility Sewerage
33 33 13	Sanitary Utility Sewerage
33 33 16	Combined Utility Sewerage
33 34 00	Sanitary Utility Sewerage Force Mains
33 34 13	Sanitary Utility Sewerage Inverted Siphons
33 36 00	Utility Septic Tanks
33 36 13	Utility Septic Tank and Effluent Wet Wells
33 36 13.13	Concrete Utility Septic Tank
33 36 13.16	Fiberglass Utility Septic Tank
33 36 13.19 33 36 16	Polyethylene Utility Septic Tank Utility Septic Tank Effluent Pumps
33 36 16.13	Utility Septic Tank High-Head Effluent Pump
33 36 16.16	Utility Septic Tank Effluent Pump Package
33 36 19	Utility Septic Tank Effluent Filter
33 36 19.13	Utility Septic Tank Effluent Tube Filter
33 36 19.16 33 36 33	Utility Septic Tank Effluent Textile Media Filter Utility Septic Tank Drainage Field
33 36 33.13	Utility Septic Tank Tile Drainage Field
33 36 33.16	Utility Septic Tank Shallow Pressurized Dispersal System
33 38 00	Treatment Lagoons
33 38 13	Municipal Wastewater Treatment Lagoons
33 38 16	Industrial Waste Lagoons
33 38 23	Agricultural Waste Lagoons
33 38 26	Residential Sewerage Lagoons
33 39 00	Sanitary Utility Sewerage Structures
33 39 13 33 39 23	Sanitary Utility Sewerage Manholes, Frames, and Covers Sanitary Utility Sewerage Cleanouts
33 40 00	Storm Drainage Utilities
33 41 00	Storm Utility Drainage Piping
33 41 13	Public Storm Utility Drainage Piping
33 42 00	Culverts
33 42 13	Pipe Culverts
33 42 13.13	Public Pipe Culverts

	33 42 16	Concrete Culverts
	33 42 16.13 33 42 16.16	
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33	44 00	Storm Utility Water Drains
	33 44 13	Utility Area Drains
	33 44 13.13	Catchbasins
	33 44 16	Utility Trench Drains
	33 44 19	Utility Storm Water Treatment
	33 44 19.13	In-Line Utility Storm Water Filters
	33 44 19.16 33 44 19.19	Catch Basin Insert Utility Storm Water Filters
າາ		Utility Oil and Gas Separators
	45 00	Storm Utility Drainage Pumps
33	46 00	Subdrainage
	33 46 13	Foundation Drainage
	33 46 13.13	Foundation Drainage Piping
	33 46 13.16	Geocomposite Foundation Drainage
	33 46 16	Subdrainage Piping
	33 46 16.13	Subdrainage Piping
	33 46 16.16	Geocomposite Subdrainage
	33 46 16.19	Pipe Underdrains
	33 46 19 33 46 19.13	Underslab Drainage
	33 46 19.13	Underslab Drainage Piping Geocomposite Underslab Drainage
	33 46 23	Drainage Layers
	33 46 23.16	Gravel Drainage Layers
	33 46 23.19	Geosynthetic Drainage Layers
	33 46 26	Geotextile Subsurface Drainage Filtration
	33 46 33	Retaining Wall Drainage
33	47 00	Ponds and Reservoirs
00	33 47 13	Pond and Reservoir Liners
	33 47 13.13	
	33 47 13.53	
	33 47 16	Pond and Reservoir Covers
	33 47 16.13	Pond Covers
	33 47 16.53	
	33 47 19	Water Ponds and Reservoirs
	33 47 19.13	Water Distribution Ponds
	33 47 19.16	Water Retainage Reservoirs
	33 47 19.23	Cooling Water Ponds
	33 47 19.33	Fire-Protection Water Ponds
	33 47 26 33 47 26.13	Storm Drainage Ponds and Reservoirs Stabilization Ponds
	33 47 26.13	Retention Basins
	33 47 26.19	Leaching Pits
22	49 00	Storm Drainage Structures
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	33 49 13 33 49 22	Storm Drainage Manholes, Frames, and Covers
	33 49 22 33 49 23	Storm Drainage Water Detention Structures Storm Drainage Water Retention Structures
	33 49 23 33 49 23.13	Underground Storm Drainage Water Retention Tanks
	33 49 23.13	Storm Drainage Water Storage Structures
	00 10 24	Storm Brainage Water Storage Orradiands

33 50 00 Fuel Distribution Utilities

33 51 00	Natural-Gas Distribution
33 51 13	Natural-Gas Piping
33 51 33	Natural-Gas Metering
33 52 00	Liquid Fuel Distribution
33 52 13	Fuel-Oil Distribution
33 52 13.13	Fuel-Oil Piping
33 52 13.23	Fuel-Oil Pumps
33 52 16	Gasoline Distribution
33 52 16.13 33 52 16.23	Gasoline Piping Gasoline Pumps
33 52 10.23	Diesel Fuel Distribution
33 52 19.13	Diesel Fuel Piping
33 52 19.23	Diesel Fuel Pumps
33 52 43	Aviation Fuel Distribution
33 52 43.13	Aviation Fuel Piping
33 52 43.16	Aviation Fuel Connections
33 52 43.19	Aviation Fuel Grounding
33 52 43.23	Aviation Fuel Pumps
33 56 00	Fuel-Storage Tanks
33 56 13	Aboveground Fuel-Storage Tanks
33 56 16 33 56 43	Underground Fuel-Storage Tanks Aviation Fuel-Storage Tanks
33 56 43.13	Aboveground Aviation Fuel-Storage Tanks
33 56 43.16	Underground Aviation Fuel-Storage Tanks
33 56 53	Compressed Gases Storage Tanks
33 60 00	Hydronic and Steam Energy Utilities
33 61 00	Hydronic Energy Distribution
33 61 13	Underground Hydronic Energy Distribution
33 61 23	Aboveground Hydronic Energy Distribution
33 61 33	Hydronic Energy Distribution Metering
33 63 00	Steam Energy Distribution
33 63 13	Underground Steam and Condensate Distribution Piping
33 63 23	Aboveground Steam and Condensate Distribution Piping
33 63 33	Steam Energy Distribution Metering
33 70 00	Electrical Utilities
33 71 00	Electrical Utility Transmission and Distribution
33 71 13	Electrical Utility Towers
33 71 13.13	Precast Concrete Electrical Utility Towers
33 71 13.23	Steel Electrical Utility Towers
33 71 13.33	Wood Electrical Utility Towers
33 71 16	Electrical Utility Poles
33 71 16.13 33 71 16.23	Precast Concrete Electrical Utility Poles Steel Electrical Utility Poles
33 71 16.33	Wood Electrical Utility Poles
33 71 19	Electrical Underground Ducts and Manholes
33 71 19.13	Electrical Manholes and Handholes
33 71 23	Insulators and Fittings
33 71 23.13	Suspension Insulators
33 71 23.16	Post Insulators
33 71 23.23	Potheads

	33 71 26	Transmission and Distribution Equipment
	33 71 26.13	Capacitor Banks
	33 71 26.16	Coupling Capacitors
	33 71 26.23	Current Transformers
	33 71 26.26	Potential Transformers
	33 71 36	Extra-High-Voltage Wiring
	33 71 36.13	Overhead Extra-High-Voltage Wiring
	33 71 39	High-Voltage Wiring
	33 71 39.13	Overhead High-Voltage Wiring
	33 71 39.23	Underground High-Voltage Wiring
	33 71 39.33	Underwater High-Voltage Wiring
	33 71 49	Medium-Voltage Wiring
	33 71 49.13 33 71 49.23	Overhead Medium-Voltage Wiring Underground Medium-Voltage Wiring
	33 71 49.23	Underwater Medium-Voltage Wiring
	33 71 53	Direct-Current Transmission
	33 71 73	Electrical Utility Services
	33 71 73.33	Electric Meters
	33 71 83	Transmission and Distribution Specialties
22	72 00	· · · ·
33		Utility Substations
	33 72 13	Deadend Structures
	33 72 23	Structural Bus Supports
	33 72 23.13	Bus Support Insulators
	33 72 26	Substation Bus Assemblies
	33 72 26.13 33 72 26.16	Aluminum Substation Bus Assemblies
	33 72 33	Copper Substation Bus Assemblies Control House Equipment
	33 72 33.13	Relays
	33 72 33.16	Substation Control Panels
	33 72 33.23	Power-Line Carriers
	33 72 33.26	Substation Metering
	33 72 33.33	Raceway and Boxes for Utility Substations
	33 72 33.36	Cable Trays for Utility Substations
	33 72 33.43	Substation Backup Batteries
	33 72 33.46	Substation Converter Stations
	33 72 43	Substation Control Wiring
33	73 00	Utility Transformers
	33 73 13	Liquid-Filled Utility Transformers
	33 73 23	Dry-Type Utility Transformers
33	75 00	High-Voltage Switchgear and Protection Devices
•••	33 75 13	Air High-Voltage Circuit Breaker
	33 75 16	Oil High-Voltage Circuit Breaker
	33 75 19	Gas High-Voltage Circuit Breaker
	33 75 23	Vacuum High-Voltage Circuit Breaker
	33 75 36	High-Voltage Utility Fuses
	33 75 39	High-Voltage Surge Arresters
	33 75 43	Shunt Reactors
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33	77 00	Medium-Voltage Utility Switchgear and Protection
		Devices
	33 77 13	Air Medium-Voltage Circuit Breaker
	33 77 16	Oil Medium-Voltage Circuit Breaker

- 33 77 19 Gas Medium-Voltage Circuit Breaker
- 33 77 23 Vacuum Medium-Voltage Circuit Breaker
- 33 77 26 Medium-Voltage Utility Fusible Interrupter Switchgear
- 33 77 33 Medium-Voltage Utility Cutouts
- 33 77 36 Medium-Voltage Utility Fuses
- 33 77 39 Medium-Voltage Utility Surge Arresters
- 33 77 53 Medium-Voltage Utility Reclosers

33 79 00 Site Grounding

- 33 79 13 Site Improvements Grounding
- 33 79 13.13 Electric Fence Grounding
- 33 79 16 Tower Grounding
- 33 79 16.13 Communications Tower Grounding
- 33 79 16.16 Antenna Tower Grounding
- 33 79 19 Utilities Grounding
- 33 79 19.13 Electrical Utilities Grounding
- 33 79 19.16 Communications Utilities Grounding
- 33 79 23 Utility Substation Grounding
- 33 79 83 Site Grounding Conductors
- 33 79 83.13 Grounding Wire, Bar, and Rod
- 33 79 83.16 Chemical Rod
- 33 79 83.23 Conductive Concrete
- 33 79 83.33 Earth Grounding Enhancement
- 33 79 83.43 Deep Earth Grounding
- 33 79 93 Site Lightning Protection
- 33 79 93.13 Lightning Strike Counters

33 79 93.16 Lightning Strike Warning Devices

33 80 00 Communications Utilities

Communications Structures

33 81 00

- 33 81 13 Communications Transmission Towers
- 33 81 16 Antenna Towers
- 33 81 19 Communications Utility Poles
- 33 81 23 Aerial Cable Installation Hardware
- 33 81 26 Communications Underground Ducts, Manholes, and Handholes
- 33 81 29 Communications Vaults, Pedestals, and Enclosures
- 33 81 33 Communications Blowers, Fans, and Ventilation

33 82 00 Communications Distribution

- 33 82 13 Copper Communications Distribution Cabling
- 33 82 13.13 Copper Splicing and Terminations
- 33 82 23 Optical Fiber Communications Distribution Cabling
- 33 82 23.13 Optical Fiber Splicing and Terminations
- 33 82 33 Coaxial Communications Distribution Cabling
- 33 82 33.13 Coaxial Splicing and Terminations
- 33 82 43 Grounding and Bonding for Communications Distribution
- 33 82 46 Cable Pressurization Equipment
- 33 82 53 Cleaning, Lubrication, and Restoration Chemicals

33 83 00 Wireless Communications Distribution

- 33 83 13 Laser Transmitters and Receivers
- 33 83 16 Microwave Transmitters and Receivers
- 33 83 19 Infrared Transmitters and Receivers
- 33 83 23 UHF/VHF Transmitters and Antennas

34 00 00	Transportation
34 01 00	Operation and Maintenance of Transportation
34 01 13	Operation and Maintenance of Roadways
34 01 23	Operation and Maintenance of Railways
34 01 23.13	Track Removal and Salvage
34 01 23.81	Track Crosstie Replacement
34 01 33	Operation and Maintenance of Airfields
34 01 43	Operation and Maintenance of Bridges
34 05 00	Common Work Results for Transportation
34 05 13	Common Work Results for Roadways
34 05 23	Common Work Results for Railways
34 05 33	Common Work Results for Airports
34 05 43	Common Work Results for Bridges
34 06 00	Schedules for Transportation
34 06 13	Schedules for Roadways
34 06 23	Schedules for Railways
34 06 33	Schedules for Airfields
34 06 43	Schedules for Bridges
34 08 00	Commissioning of Transportation
34 08 13	Commissioning of Roadways
34 08 23	Commissioning of Railways
34 08 33	Commissioning of Airfields
34 08 43	Commissioning of Bridges
34 10 00	Guideways/Railways
34 11 00	Rail Tracks
34 11 00 34 11 13	Rail Tracks Track Rails
34 11 00 34 11 13 34 11 13.13	Rail Tracks Track Rails Light Rail Track
34 11 00 34 11 13 34 11 13.13 34 11 13.23	Rail Tracks Track Rails Light Rail Track Heavy Rail Track
34 11 00 34 11 13 34 11 13.13	Rail Tracks Track Rails Light Rail Track
34 11 00 34 11 13 34 11 13.13 34 11 13.23 34 11 16	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails
34 11 00 34 11 13 34 11 13.13 34 11 13.23 34 11 16 34 11 16.13 34 11 16.16 34 11 16.19	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail
34 11 00 34 11 13 34 11 13.13 34 11 13.23 34 11 16 34 11 16.13 34 11 16.16 34 11 16.19 34 11 19	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints
34 11 00 34 11 13 34 11 13.13 34 11 13.23 34 11 16 34 11 16.13 34 11 16.16 34 11 16.19 34 11 19 34 11 23	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints Special Trackwork
34 11 00 34 11 13 34 11 13.13 34 11 13.23 34 11 16 34 11 16.13 34 11 16.16 34 11 16.19 34 11 19 34 11 23 34 11 23.13	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints Special Trackwork Ballasted Special Track Rail
34 11 00 34 11 13 34 11 13.13 34 11 13.23 34 11 16 34 11 16.13 34 11 16.16 34 11 16.19 34 11 19 34 11 23 34 11 23.13 34 11 23.16	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints Special Trackwork Ballasted Special Track Rail Direct-Fixation Track
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 19} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.23} \end{array}$	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints Special Trackwork Ballasted Special Track Rail Direct-Fixation Track Running Rail
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 123} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \end{array}$	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints Special Trackwork Ballasted Special Track Rail Direct-Fixation Track Running Rail Precurved Running Rail
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 123} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26} \end{array}$	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints Special Trackwork Ballasted Special Track Rail Direct-Fixation Track Running Rail Precurved Running Rail Ballasted Track Rail
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 123} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \end{array}$	Rail Tracks Track Rails Light Rail Track Heavy Rail Track Welded Track Rails In-Track Butt-Welded Track Rail Pressure-Welded Track Rail Thermite-Welded Track Rail Track Rail Joints Special Trackwork Ballasted Special Track Rail Direct-Fixation Track Running Rail Precurved Running Rail
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$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26.13} \\ \textbf{34 11 26.13} \\ \textbf{34 11 26.16} \end{array}$	Rail TracksTrack RailsLight Rail TrackHeavy Rail TrackWelded Track RailsIn-Track Butt-Welded Track RailPressure-Welded Track RailThermite-Welded Track RailTrack Rail JointsSpecial TrackworkBallasted Special Track RailDirect-Fixation TrackRunning RailPrecurved Running RailBallasted Track RailTrack Rail BallastTrack Rail Subballast
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 23} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26.13} \\ \textbf{34 11 26.16} \\ \textbf{34 11 29} \\ \textbf{34 11 33} \\ \textbf{34 11 33.13} \end{array}$	Rail TracksTrack RailsLight Rail TrackHeavy Rail TrackWelded Track RailsIn-Track Butt-Welded Track RailPressure-Welded Track RailThermite-Welded Track RailTrack Rail JointsSpecial TrackworkBallasted Special Track RailDirect-Fixation TrackRunning RailPrecurved Running RailBallasted Track RailTrack Rail BallastTrack Rail SubballastEmbedded Track Rail
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26.16} \\ \textbf{34 11 26.16} \\ \textbf{34 11 29} \\ \textbf{34 11 33} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.16} \end{array}$	Rail TracksTrack RailsLight Rail TrackHeavy Rail TrackWelded Track RailsIn-Track Butt-Welded Track RailPressure-Welded Track RailThermite-Welded Track RailTrack Rail JointsSpecial TrackworkBallasted Special Track RailDirect-Fixation TrackRunning RailPrecurved Running RailBallasted Track RailTrack Rail SubballastTrack Rail SubballastEmbedded Track RailTrack Cross TiesConcrete Track Cross TiesTimber Track Cross Ties
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 23} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26.16} \\ \textbf{34 11 26.16} \\ \textbf{34 11 29} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.16} \\ \textbf{34 11 33.19} \end{array}$	Rail TracksTrack RailsLight Rail TrackHeavy Rail TrackWelded Track RailsIn-Track Butt-Welded Track RailPressure-Welded Track RailThermite-Welded Track RailTrack Rail JointsSpecial TrackworkBallasted Special Track RailDirect-Fixation TrackRunning RailPrecurved Running RailBallasted Track RailTrack Rail BallastTrack Rail SubballastEmbedded Track RailTrack Rail SubballastEmbedded Track RailTrack Cross TiesConcrete Track Cross TiesTimber Track Cross TiesResilient Track Cross Ties
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 23} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26.16} \\ \textbf{34 11 26.16} \\ \textbf{34 11 29} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.16} \\ \textbf{34 11 33.19} \\ \textbf{34 11 36} \end{array}$	Rail TracksTrack RailsLight Rail TrackHeavy Rail TrackWelded Track RailsIn-Track Butt-Welded Track RailPressure-Welded Track RailThermite-Welded Track RailTrack Rail JointsSpecial TrackworkBallasted Special Track RailDirect-Fixation TrackRunning RailPrecurved Running RailBallasted Track RailTrack Rail SubballastEmbedded Track RailTrack Rail SubballastEmbedded Track RailTrack Cross TiesConcrete Track Cross TiesTimber Track Cross TiesTrack Rail Fasteners
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 23} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26.13} \\ \textbf{34 11 26.13} \\ \textbf{34 11 26.16} \\ \textbf{34 11 29} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.19} \\ \textbf{34 11 36} \\ \textbf{34 11 36.13} \end{array}$	Rail TracksTrack RailsLight Rail TrackHeavy Rail TrackWelded Track RailsIn-Track Butt-Welded Track RailPressure-Welded Track RailThermite-Welded Track RailTrack Rail JointsSpecial TrackworkBallasted Special Track RailDirect-Fixation TrackRunning RailPrecurved Running RailBallasted Track RailTrack Rail SubballastEmbedded Track RailTrack Rail SubballastEmbedded Track Cross TiesTimber Track Cross TiesTimber Track Cross TiesTrack Rail FastenersDirect-Fixation Fasteners
$\begin{array}{c} \textbf{34 11 00} \\ \textbf{34 11 13} \\ \textbf{34 11 13.13} \\ \textbf{34 11 13.23} \\ \textbf{34 11 13.23} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.13} \\ \textbf{34 11 16.16} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 16.19} \\ \textbf{34 11 23} \\ \textbf{34 11 23} \\ \textbf{34 11 23.13} \\ \textbf{34 11 23.16} \\ \textbf{34 11 23.23} \\ \textbf{34 11 23.26} \\ \textbf{34 11 23.26} \\ \textbf{34 11 26.16} \\ \textbf{34 11 26.16} \\ \textbf{34 11 29} \\ \textbf{34 11 33.13} \\ \textbf{34 11 33.16} \\ \textbf{34 11 33.19} \\ \textbf{34 11 36} \end{array}$	Rail TracksTrack RailsLight Rail TrackHeavy Rail TrackWelded Track RailsIn-Track Butt-Welded Track RailPressure-Welded Track RailThermite-Welded Track RailTrack Rail JointsSpecial TrackworkBallasted Special Track RailDirect-Fixation TrackRunning RailPrecurved Running RailBallasted Track RailTrack Rail SubballastEmbedded Track RailTrack Rail SubballastEmbedded Track RailTrack Cross TiesConcrete Track Cross TiesTimber Track Cross TiesTrack Rail Fasteners

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34 11 93	Track Appurtenances and Accessories
34 12 00	Monorails
34 12 13	Elevated Monorails
34 12 16	On-Grade Monorails
34 12 19	Below-Grade Monorails
34 12 23	Maglev Monorail
34 12 63	Monorail Track
34 13 00	Funiculars
34 13 13	Inclined Railway
34 14 00	Cable Transportation
34 14 13	Aerial Tramways
34 14 19	Gondolas
34 14 26	Funitels
34 14 33	Chairlifts
34 14 39	Surface Lifts
34 14 46	Ropeway Tows
34 14 53	Cable Car Systems
34 20 00	Traction Power
34 21 00	Traction Power Distribution
34 21 13	High Power Static Frequency Converters
34 21 16	Traction Power Substations
34 21 16.13	AC Traction Power Substations
34 21 16.16	DC Traction Power Substations
34 21 19	Traction Power Switchgear
34 21 19.13	AC Traction Power Switchgear
34 21 19.16	DC Traction Power Switchgear
34 21 19.23	Frequency Changer
34 21 23	Traction Power Transformer-Rectifier Units
34 23 00	Overhead Traction Power
34 23 13	Traction Power Poles
34 23 16	Overhead Cable Suspension
34 23 23	Overhead Traction Power Cables
34 24 00	Third Rail Traction Power
34 24 13	Bottom-Contact Third Rail
34 24 16	Side-Contact Third Rail
34 24 19	Top-Contact Third Rail
34 40 00	Transportation Signaling and Control
	Equipment
24 44 00	• •
34 41 00	Roadway Signaling and Control Equipment
34 41 13	Traffic Signals
34 41 16	Traffic Control Equipment
34 41 23	Roadway Monitoring Equipment
34 42 00	Railway Signaling and Control Equipment
34 42 13	Railway Signals
34 42 13.13	General Railway Signal Requirements
34 42 13.16	Signal Solid State Coded Track Circuits
34 42 16	Train Control Wires and Cables

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	34 42 19	Vital Interlocking Logic Controllers
	34 42 23	Railway Control Equipment
	34 42 23.13	Mainline Train Control Room Equipment
	34 42 23.16	Yard Train Control Room Equipment
	34 42 23.19	Integrated Control Equipment
	34 42 23.23	Interlocking Railway Control Equipment
	34 42 26	Rail Network Equipment
	34 42 29	Station Agent Equipment
	34 42 33	Yard Management Equipment
	34 42 36	Supervisory Control and Data Acquisition
21	43 00	Airfield Signaling and Control Equipment
34		
	34 43 13	Airfield Signals
	34 43 13.13	Airfield Runway Identification Lights
	34 43 13.16	Airfield Runway and Taxiway Inset Lighting
	34 43 16	Airfield Landing Equipment
	34 43 16.13	Microwave Airfield Landing Equipment
	34 43 16.16	Instrument Airfield Landing Equipment
	34 43 16.19	Airfield Visual-Approach Slope Indicator Equipment
	34 43 16.23	Airfield Short-Approach Lighting Equipment
	34 43 16.26	Airfield Omni-Directional-Approach Lighting Equipment
	34 43 16.29	Airfield Low-Intensity-Approach Lighting Equipment
	34 43 16.33	Airfield High-Intensity-Approach Lighting Equipment
	34 43 16.36	Airfield Precision-Approach Path Indicator Equipment
	34 43 19	Airfield Traffic Control Tower Equipment
	34 43 23	Weather Observation Equipment
	34 43 23.13	Automatic Weather Observation Equipment
	34 43 23.16	Airfield Wind Cones
	34 43 26	Airfield Control Equipment
	34 43 26.13	Airfield Lighting Control Equipment
	34 43 26.16	Airfield Lighting PLC Control Equipment
~ 1	34 43 26.19	Airfield Lighting Regulator Assembly
34	48 00	Bridge Signaling and Control Equipment
	34 48 13	Operating Bridge Signals
	34 48 16	Operating Bridge Control Equipment
34	50 00	Transportation Fare Collection Equipment
34 :	52 00	Vehicle Fare Collection
	34 52 16	Vehicle Ticketing Equipment
	34 52 16.13	Vehicle Ticket Vending Machines
	34 52 26	Vehicle Fare Collection Equipment
	34 52 26.13	Vehicle Coin Fare Collection Equipment
	34 52 26.16	Vehicle Electronic Fare Collection Equipment
	34 52 33	Vehicle Fare Gates
34	54 00	Passenger Fare Collection
	34 54 16	Passenger Ticketing Equipment
	34 54 16.13	Passenger Ticket Vending Machines
	34 54 16.16	Passenger Addfare Machines
	34 54 16.23	Passenger Intermodal Transfer Machines
	34 54 26	Passenger Fare Collection Equipment
	34 54 26.13	Passenger Coin Fare Collection Equipment
	34 54 26.16	Passenger Electronic Fare Collection Equipment
	34 54 33	Passenger Fare Gates

34 70 00 Transportation Construction and Equipment

34 71 00 **Roadway Construction** 34 71 13 Vehicle Barriers 34 71 13.13 Vehicle Median Barriers 34 71 13.16 Vehicle Crash Barriers 34 71 13.19 Vehicle Traffic Barriers 34 71 13.26 Vehicle Guide Rails 34 71 13.29 Vehicle Barrier Fenders 34 71 16 Impact Attenuating Devices 34 71 19 Vehicle Delineators 34 71 19.13 Fixed Vehicle Delineators 34 71 19.16 **Flexible Vehicle Delineators** 34 72 00 Railway Construction 34 72 13 Railway Line 34 72 16 Railway Siding 34 73 00 Airfield Construction 34 73 13 Aircraft Tiedowns 34 73 16 Airfield Grounding 34 73 16.13 Aircraft Static Grounding 34 73 19 Jet Blast Barriers 34 73 23 Manufactured Airfield Control Towers 34 73 26 Manufactured Helipads 34 75 00 Roadway Equipment **Operable Roadway Equipment** 34 75 13 34 75 13.13 Active Vehicle Barriers 34 76 00 **Railway Equipment** 34 76 13 Roadway Crossing Control Equipment 34 77 00 Transportation Equipment 34 77 13 Passenger Boarding Bridges 34 77 13.13 Fixed Aircraft Passenger Boarding Bridges 34 77 13.16 Movable Aircraft Passenger Boarding Bridges 34 77 13.23 Ship Passenger Boarding Bridges 34 77 33 Baggage Scanning Equipment 34 77 36 Baggage Scales 34 77 39 **Baggage Conveying Equipment** 34 80 00 Bridges 34 81 00 Bridge Machinery Single-Swing Bridge Machinery 34 81 13 34 81 16 Double-Swing Bridge Machinery 34 81 19 Cantilever Bridge Machinery 34 81 23 Lift Bridge Machinery

- Sliding Bridge Machinery 34 81 26
 - Pontoon Bridge Machinery 34 81 29
 - 34 81 32 Bascule Bridge Machinery

34 82 00 **Bridge Specialties**

- 34 82 13 **Bridge Vibration Dampers**
- 34 82 13.13 Visco Elastic Bridge Vibration Dampers

Tuned-Mass Bridge Vibration Dampers Bridge Pier Protection Bridge Pier Ice Shields 34 82 13.16

- 34 82 19
- 34 82 19.13

35 00 00	Waterway and Marine Construction
35 01 00	Operation and Maintenance of Waterway and Marine
	Construction
35 01 30	Operation and Maintenance of Coastal Construction
35 01 40	Operation and Maintenance of Waterway Construction
35 01 40.51	Waterway Dredging
35 01 40.92	Preservation of Water Courses
35 01 50 35 01 50.51	Operation and Maintenance of Marine Construction
35 01 50.51	Marine Dredging Channel Excavation, Cleaning and Deepening
35 01 70	Operation and Maintenance of Dams
35 05 00	Common Work Results for Waterway and Marine
	Construction
35 05 30	Common Work Results for Coastal Construction
35 05 40	Common Work Results for Waterway Construction
35 05 50	Common Work Results for Marine Construction
35 05 70	Common Work Results for Dams
35 06 00	Schedules for Waterway and Marine Construction
35 06 30	Schedules for Coastal Construction
35 06 40	Schedules for Waterway Construction
35 06 50	Schedules for Marine Construction
35 06 70	Schedules for Dams
35 08 00	Commissioning of Waterway and Marine Construction
35 08 30	Commissioning of Coastal Construction
35 08 40	Commissioning of Waterway Construction
35 08 50	Commissioning of Marine Construction
35 08 70	Commissioning of Dams
35 10 00	Waterway and Marine Signaling and
	Control Equipment
35 11 00	Signaling and Control Equipment for Waterways
35 11 13	Signaling Equipment for Waterways
35 11 53	Control Equipment for Waterways
35 12 00	Marine Signaling and Control Equipment
35 12 13	Marine Signaling Equipment
35 12 13.13	Lighthouse Equipment
35 12 33	Marine Navigation Equipment
35 12 53	Marine Control Equipment
35 13 00	Signaling and Control Equipment for Dams
35 13 13	Signaling Equipment for Dams
35 13 53	Control Equipment for Dams
35 20 00	Waterway and Marine Construction and
	Equipment
35 20 13	Hydraulic Fabrications
35 20 13.13	Hydraulic Bifurcation Panels

- 35 20 13.16
- Hydraulic Bulkheads Hydraulic Manifolds 35 20 13.19

$\begin{array}{c} 35\ 20\ 13.23\\ 35\ 20\ 13.26\\ 35\ 20\ 16\\ 35\ 20\ 16.13\\ 35\ 20\ 16.19\\ 35\ 20\ 16.26\\ 35\ 20\ 16.26\\ 35\ 20\ 16.33\\ 35\ 20\ 16.46\\ 35\ 20\ 16.59\\ 35\ 20\ 16.59\\ 35\ 20\ 16.59\\ 35\ 20\ 19\\ 35\ 20\ 19\\ 35\ 20\ 19\\ 35\ 20\ 19\\ 35\ 20\ 23\\ 35\ 20\ 23.13\\ 35\ 20\ 23.33\\ 35\ 20\ 23\ 23\ 23\ 20\ 23\ 23\ 23\ 20\ 23\ 23\ 20\ 23\ 23\ 20\ 23\ 20\ 23\ 20\ 23\ 20\ 23\ 20\ 23\ 20\ 23\ 20\ 20\ 20\ 20\ 20\ 20\ 20\ 20\ 20\ 20$	Hydraulic Penstocks Hydraulic Trashracks Hydraulic Gates Hydraulic Spillway Crest Gates Hydraulic Spillway Crest Gates Hydraulic Suice Gates Hydraulic Sluice Gates Hydraulic Miter Gates Hydraulic Sector Gates Hydraulic Tainter Gates and Anchorages Hydraulic Vertical Lift Gates Hydraulic Closure Gates Hydraulic Closure Gates Hydraulic Valves Hydraulic Butterfly Valves Hydraulic Regulating Valves Dredging Mechanical Dredging Hydraulic Dredging Integrated Dredging and Dewatering
35 30 00	Coastal Construction
35 31 00	Shoreline Protection
35 31 16	Seawalls
35 31 16.13	Concrete Seawalls
35 31 16.16 35 31 16.19	Segmental Seawalls
35 31 16.19	Steel Sheet Piling Seawalls Timber Seawalls
35 31 16.40	Stone Seawalls
35 31 19	Revetments
35 31 19.13	Sacked Cement-Sand Revetments
35 31 19.16	Concrete Unit Masonry Revetments
35 31 19.36	Gabion Revetments
35 31 19.40	Stone Revetments
35 31 23	Breakwaters
35 31 23.13	Rubble Mound Breakwaters
35 31 23.16	Precast Breakwater Modules
35 31 26	Jetties
35 31 26.13	Concrete Jetties
35 31 26.16	Concrete Unit Masonry Jetties
35 31 26.36	Gabion Jetties
35 31 26.40 35 31 29	Stone Jetties Groins
35 31 29	Concrete Groins
35 31 29.15	Concrete Unit Masonry Groins
35 31 29.26	Steel Groins
35 31 29.36	Gabion Groins
35 31 29.40	Stone Groins
35 32 00	Artificial Reefs
35 32 13	Scrap Material Artificial Reefs
35 32 13.13	Scrap Concrete Artificial Reefs
35 32 13.19	Scrap Steel Artificial Reefs
35 32 13.33	Sunken Ship Artificial Reefs
35 32 16	Constructed Artificial Reefs
35 32 16.13	Constructed Concrete Artificial Reefs

35 32 16.19 Constructed Steel Artificial Reefs

35 40 00 35 41 00	Waterway Construction and Equipment
35 41 13 35 41 13.13	
35 41 13.16 35 41 16 35 41 19	Seepage Landside Levee Berms Levee Cutoff Trenches Levee Relief Wells
35 42 00	Waterway Bank Protection
35 42 13 35 42 13.19	Piling Bank Protection Steel Sheet Piling Bank Protection
35 42 13.23	Timber Piling Bank Protection
35 42 13.26 35 42 29	Plastic Piling Bank Protection Grout-Bag Bank Protection
35 42 34	Soil Reinforcement Bank Protection
35 42 35	Slope Protection Bank Protection
35 42 36	Gabion Bank Protection
35 42 37 35 42 53	Riprap Bank Protection Wall Bank Protection
35 42 53.16	Concrete Unit Masonry Wall Bank Protection
35 42 53.19	Segmental Wall Bank Protection
35 42 53.40 35 43 00	Stone Wall Bank Protection Waterway Scour Protection
35 43 34	Soil Reinforcement Scour Protection
35 43 35	Slope Protection Scour Protection
	• •
35 43 53.13	Concrete Unit Masonry Wall Scour Protection
35 43 53.16	Segmental Wall Scour Protection
35 49 13.13	Concrete Floodwalls
35 49 13.16	Masonry Floodwalls
35 49 23.23	
35 49 26	Floodgate Machinery
35 50 00	Marine Construction and Equipment
35 51 00	Floating Construction
35 51 13	Floating Piers
35 51 23	Pontoons
35 52 00	Offshore Platform Construction
35 52 13	Fixed Offshore Platform Construction
35 52 23 35 52 33	Semi-Submersible Offshore Platform Construction Floating Offshore Platform Construction
$\begin{array}{c} 35 43 29\\ 35 43 34\\ 35 43 35\\ 35 43 35\\ 35 43 53\\ 35 43 53\\ 35 43 53\\ 35 43 53\\ 35 43 53\\ 35 43 53\\ 40 13\\ 35 49 13\\ 35 49 13\\ 35 49 13\\ 35 49 13\\ 35 49 13\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 49 23\\ 35 51 13\\ 35 51 13\\ 23\\ 35 51 13\\ 23\\ 5 51 13\\ 23\\ 5 51 13\\ 23\\ 5 51 13\\ 23\\ 35 51 13\\ 23\\ 35 51 23\\ 35 51 23\\ 35 52 23\\ \end{array}$	Grout-Bag Scour Protection Soil Reinforcement Scour Protection Slope Protection Scour Protection Gabion Scour Protection Riprap Scour Protection Wall Scour Protection Concrete Unit Masonry Wall Scour Protection Segmental Wall Scour Protection Stone Wall Scour Protection Waterway Structures Floodwalls Concrete Floodwalls Masonry Floodwalls Waterway Locks Concrete Waterway Locks Floodgate Machinery Marine Construction and Equipment Floating Piers Floating Piers Floating Piers Floating Plastic Piers Pontoons Offshore Platform Construction Fixed Offshore Platform Construction Semi-Submersible Offshore Platform Construction

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35 53 00	Underwater Construction
35 53 23	Underwater Harbor Deepening
35 53 33	Underwater Pipeline Construction
35 53 43	Underwater Foundation Construction
35 53 53	Underwater Structures Construction
35 53 63	Underwater Waterproofing
35 59 00	Marine Specialties
35 59 13	Marine Fenders
35 59 13.13	6
35 59 13.16	
35 59 13.19	Rubber Marine Fenders
35 59 23	Buoys
35 59 23.13	Mooring Buoys
35 59 23.16	Anchor Pendant Buoys
35 59 23.19 35 59 29	Navigation Buoys Mooring Devices
35 59 29.13	Quick-Release Mooring Hooks
35 59 29.16	Laser Docking Systems
35 59 29.19	Capstans
35 59 33	Marine Bollards and Cleats
35 59 33.13	Cast-Steel Marine Bollards and Cleats
35 59 33.16	Cast-Iron Marine Bollards and Cleats
35 59 33.19	
35 59 33.23	Plastic Marine Bollards and Cleats
35 59 93	Marine Chain and Accessories
35 59 93.13	
35 59 93.16	
35 59 93.19 25 70 00	Marine Chain Tensioners
35 70 00	Dam Construction and Equipment
35 71 00	Gravity Dams
35 71 13	Concrete Gravity Dams
35 71 16	Masonry Gravity Dams
35 71 19	Rockfill Gravity Dams
35 72 00	Arch Dams
35 72 13	Concrete Arch Dams
35 73 00	Embankment Dams
35 73 13	Earth Embankment Dam
35 73 16	Rock Embankment Dams
35 74 00	Buttress Dams
35 74 13	Concrete Buttress Dams
35 79 00	Auxiliary Dam Structures

35 79 13Fish Ladders35 79 13.13Concrete Fish Ladders

40 00 00	Process Integration
40 01 00	Operation and Maintenance of Process Integration
40 01 10	Operation and Maintenance of Gas and Vapor Process Piping
40 01 20	Operation and Maintenance of Liquids Process Piping
40 01 30	Operation and Maintenance of Solid and Mixed Materials Piping and Chutes
40 01 40	Operation and Maintenance of Process Piping and Equipment Protection
40 05 00	Common Work Results for Process Integration
40 05 13	Common Work Results for Process Piping
40 05 13.13	Steel Process Piping
40 05 13.16	Lined or Internally-Coated Steel Process Piping
40 05 13.19 40 05 13.23	Stainless-Steel Process Piping Aluminum Alloys Process Piping
40 05 13.23	Brass, Bronze, Copper, and Copper Alloys Process Piping
40 05 13.43	Nickel and Nickel Alloys Process Piping
40 05 13.53	Ductile, Malleable, and Cast Iron Alloys Process Piping
40 05 13.63	Titanium and Titanium Alloys Process Piping
40 05 13.73 40 05 13.76	Plastic Process Piping Fiberglass-Reinforced Plastic and Resins Process Piping
40 05 13.78	Other Metals Process Piping
40 05 23	Common Work Results for Process Valves
40 05 23.13	Carbon Steel Process Valves
40 05 23.16	Low and Intermediate Alloy Steel Process Valves
40 05 23.19	Stainless-Steel Process Valves
40 05 23.33 40 05 23.43	Brass and Iron Process Valves Nickel and Nickel Alloys Steel Process Valves
40 05 23.73	Plastic and Plastic Lined Process Valves
40 05 23.93	Other Metals Process Valves
40 06 00	Schedules for Process Integration
40 06 10	Schedules for Gas and Vapor Process Piping
40 06 20	Schedules for Liquids Process Piping
40 06 30	Schedules for Solid and Mixed Materials Piping and Chutes
40 06 40	Schedules for Process Piping and Equipment Protection
40 10 00	Gas and Vapor Process Piping
40 11 00	Steam Process Piping
40 11 13	Low-Pressure Steam Process Piping
40 11 16	Intermediate-Pressure Steam Process Piping
40 11 19	High-Pressure Steam Process Piping
40 11 23	Condensate Process Piping
40 12 00	Compressed Air Process Piping
40 12 13	Breathing Compressed Air Process Piping
40 12 16	Non-Breathing Compressed Air Process Piping
40 13 00	Inert Gases Process Piping
40 13 13	Argon Process Piping
40 13 16	Carbon-Dioxide Process Piping
40 13 19 40 13 23	Helium Process Piping
40 13 23 40 13 26	Krypton Process Piping Neon Process Piping
40 13 20	Nitrogen Process Piping

40 13 33	Xenon Process Piping
40 13 93	Mixed Inert Gases Process Piping
40 14 00	Fuel Gases Process Piping
40 14 13	Blast Furnace Piping
40 14 16	Blue (Water) Fuel Gas Piping
40 14 19	Butane Piping
40 14 23	Carbon-Monoxide Piping
40 14 26	Chlorine Fuel Gas Piping
40 14 29	Coke Oven Gas Piping
40 14 33	Ethane-Gas Piping
40 14 36 40 14 39	Hydrogen Fuel Gas Piping Liquid Natural-Gas Process Piping
40 14 39	Methylacetylene-Propadiene Fuel Gas Piping
40 14 49	Natural-Gas Process Piping
40 14 49.13	Synthetic Natural-Gas Piping
40 14 49.23	Propane-Air Mixes Fuel Gas Piping
40 14 53	Octane Fuel Gas Piping
40 14 59	Propane Fuel Gas Process Piping
40 14 63	Sewage Fuel Gas Piping
40 14 93	Mixed Fuel Gases Piping
40 15 00	Combustion System Gas Piping
40 15 13	Combustion Air Piping
40 15 16	Oxygen Combustion System Gas Piping
40 15 19	Flue-Gas Combustion System Piping
40 15 23	Exothermic-Gas Combustion System Piping Endothermic-Gas Combustion System Piping
40 15 26	
40 15 29	Disassociated-Ammonia-Gas Combustion System Piping
40 15 29 40 16 00	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping
40 15 29 40 16 00 40 16 13	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping
40 15 29 40 16 00	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping
40 15 29 40 16 00 40 16 13 40 16 16	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26 40 16 29 40 16 33 40 16 36	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26 40 16 29 40 16 33 40 16 36 40 16 39	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26 40 16 29 40 16 33 40 16 36 40 16 39 40 16 43	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40\ 16\ 00}\\ 40\ 16\ 13\\ 40\ 16\ 16\\ 40\ 16\ 26\\ 40\ 16\ 29\\ 40\ 16\ 33\\ 40\ 16\ 36\\ 40\ 16\ 39\\ 40\ 16\ 43\\ 40\ 16\ 43\\ 40\ 16\ 46\end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40}\ \textbf{16}\ \textbf{00}\\ 40\ 16\ 13\\ 40\ 16\ 16\\ 40\ 16\ 26\\ 40\ 16\ 29\\ 40\ 16\ 33\\ 40\ 16\ 36\\ 40\ 16\ 39\\ 40\ 16\ 43\\ 40\ 16\ 46\\ 40\ 16\ 49\end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40\ 16\ 00}\\ 40\ 16\ 13\\ 40\ 16\ 16\\ 40\ 16\ 26\\ 40\ 16\ 29\\ 40\ 16\ 33\\ 40\ 16\ 36\\ 40\ 16\ 39\\ 40\ 16\ 43\\ 40\ 16\ 43\\ 40\ 16\ 49\\ 40\ 16\ 53\end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40\ 16\ 00}\\ 40\ 16\ 13\\ 40\ 16\ 16\\ 40\ 16\ 26\\ 40\ 16\ 29\\ 40\ 16\ 33\\ 40\ 16\ 39\\ 40\ 16\ 39\\ 40\ 16\ 43\\ 40\ 16\ 43\\ 40\ 16\ 49\\ 40\ 16\ 53\\ 40\ 16\ 53\\ 40\ 16\ 56\end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26 40 16 29 40 16 33 40 16 36 40 16 39 40 16 43 40 16 43 40 16 43 40 16 53 40 16 56 40 17 00	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26 40 16 29 40 16 33 40 16 36 40 16 39 40 16 43 40 16 43 40 16 43 40 16 45 40 16 55 40 17 00 40 17 13	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping Acetylene Welding and Cutting Piping
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26 40 16 29 40 16 33 40 16 33 40 16 39 40 16 43 40 16 43 40 16 45 40 16 53 40 16 55 40 17 00 40 17 13 40 17 16	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping Acetylene Welding and Cutting Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40}\ \textbf{16}\ \textbf{00}\\ \\ 40\ 16\ 13\\ \\ 40\ 16\ 16\\ \\ 40\ 16\ 26\\ \\ 40\ 16\ 29\\ \\ 40\ 16\ 33\\ \\ 40\ 16\ 39\\ \\ 40\ 16\ 39\\ \\ 40\ 16\ 43\\ \\ 40\ 16\ 43\\ \\ 40\ 16\ 53\\ \\ 40\ 16\ 56\\ \textbf{40}\ 16\ 56\\ \textbf{40}\ 17\ \textbf{00}\\ \\ \\ 40\ 17\ 13\\ \\ 40\ 17\ 16\\ \\ 40\ 17\ 19\\ \end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping Acetylene Welding and Cutting Piping Acetylene-Hydrogen Mix Welding and Cutting Piping Methylacetylene-Propadiene Welding and Cutting Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40\ 16\ 00}\\ 40\ 16\ 13\\ 40\ 16\ 16\\ 40\ 16\ 26\\ 40\ 16\ 29\\ 40\ 16\ 29\\ 40\ 16\ 33\\ 40\ 16\ 39\\ 40\ 16\ 39\\ 40\ 16\ 43\\ 40\ 16\ 43\\ 40\ 16\ 43\\ 40\ 16\ 53\\ 40\ 16\ 55\\ \textbf{40\ 16\ 56}\\ \textbf{40\ 17\ 00}\\ 40\ 17\ 13\\ 40\ 17\ 19\\ 40\ 17\ 23\\ \end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping Acetylene Welding and Cutting Piping Acetylene-Hydrogen Mix Welding and Cutting Piping Methylacetylene-Propadiene Welding and Cutting Piping Oxygen Welding and Cutting Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40}\ \textbf{16}\ \textbf{00}\\ \\ 40\ 16\ 13\\ \\ 40\ 16\ 16\\ \\ 40\ 16\ 26\\ \\ 40\ 16\ 29\\ \\ 40\ 16\ 33\\ \\ 40\ 16\ 39\\ \\ 40\ 16\ 39\\ \\ 40\ 16\ 43\\ \\ 40\ 16\ 43\\ \\ 40\ 16\ 53\\ \\ 40\ 16\ 53\\ \\ 40\ 16\ 56\\ \textbf{40}\ \textbf{17}\ \textbf{00}\\ \\ \begin{array}{c} 40\ 17\ 13\\ \\ 40\ 17\ 13\\ \\ 40\ 17\ 19\\ \\ 40\ 17\ 23\\ \\ 40\ 17\ 26\\ \end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping Acetylene Welding and Cutting Piping Acetylene-Hydrogen Mix Welding and Cutting Piping Methylacetylene-Propadiene Welding and Cutting Piping Oxygen Welding and Cutting Piping Inert Gas Welding and Cutting Piping
40 15 29 40 16 00 40 16 13 40 16 16 40 16 26 40 16 29 40 16 33 40 16 33 40 16 39 40 16 43 40 16 43 40 16 46 40 16 53 40 16 55 40 17 00 40 17 13 40 17 13 40 17 23 40 17 26 40 18 00	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping Acetylene Welding and Cutting Piping Acetylene-Hydrogen Mix Welding and Cutting Piping Methylacetylene-Propadiene Welding and Cutting Piping Oxygen Welding and Cutting Piping Inert Gas Welding and Cutting Piping Vacuum Systems Process Piping
$\begin{array}{c} 40\ 15\ 29\\ \textbf{40}\ \textbf{16}\ \textbf{00}\\ \\ 40\ 16\ 13\\ \\ 40\ 16\ 16\\ \\ 40\ 16\ 26\\ \\ 40\ 16\ 29\\ \\ 40\ 16\ 33\\ \\ 40\ 16\ 39\\ \\ 40\ 16\ 39\\ \\ 40\ 16\ 43\\ \\ 40\ 16\ 43\\ \\ 40\ 16\ 53\\ \\ 40\ 16\ 53\\ \\ 40\ 16\ 56\\ \textbf{40}\ \textbf{17}\ \textbf{00}\\ \\ \begin{array}{c} 40\ 17\ 13\\ \\ 40\ 17\ 13\\ \\ 40\ 17\ 19\\ \\ 40\ 17\ 23\\ \\ 40\ 17\ 26\\ \end{array}$	Disassociated-Ammonia-Gas Combustion System Piping Specialty and High-Purity Gases Piping Ammonia Gas Piping Boron Gas Piping Diborane Gas Piping Flourine Gas Piping Hydrogen Sulfide Gas Piping Nitrous-Oxide Gas Process Piping Ozone Gas Piping Phosphine Gas Piping Silane Gas Piping Sulphur-Dioxide Gas Piping Specialty Gas Mixtures Piping High-Purity Gas Piping Components Welding and Cutting Gases Piping Acetylene Welding and Cutting Piping Acetylene-Hydrogen Mix Welding and Cutting Piping Methylacetylene-Propadiene Welding and Cutting Piping Oxygen Welding and Cutting Piping Inert Gas Welding and Cutting Piping

40 20 00	Liquids Process Piping
40 21 00	Liquid Fuel Process Piping
40 21 13	Bio Fuels Process Piping
40 21 16	Gasoline Process Piping
40 21 19	Diesel Process Piping
40 21 23	Fuel-Oils Process Piping
40 21 23.13	No. 2 Fuel-Oil Process Piping
40 21 23.16	No. 4 Fuel-Oil Process Piping
40 21 23.19	No. 5 Fuel-Oil Process Piping
40 21 23.23	No. 6 Fuel-Oil Process Piping
40 21 23.26 40 21 23.29	Kerosene Process Piping Tar Process Piping
40 22 00	Petroleum Products Piping
40 22 13	Heavy-Fractions Petroleum Products Piping
40 22 16	Light-Fractions Petroleum Products Piping
40 23 00	Water Process Piping
40 23 13	Deionized Water Process Piping
40 23 13	Distilled-Water Process Piping
40 23 10	Process Plant Water Piping
40 23 19	Potable Water Process Piping
40 23 29	Recirculated Water Process Piping
40 23 33	Reverse-Osmosis Water Process Piping
40 23 36	Sanitary Water Process Piping
40 24 00	Specialty Liquid Chemicals Piping
40 24 13	Alcohol Piping
40 24 16	Gel Piping
40 24 19	Slurries Process Piping
40 24 23	Thixotropic Liquid Piping
40 25 00	Liquid Acids and Bases Piping
40 25 13	Liquid Acids Piping
40 25 16	Liquid Bases Piping
40 26 00	Liquid Polymer Piping
40 30 00	Solid and Mixed Materials Piping and
	Chutes
40 32 00	Bulk Materials Piping and Chutes
40 32 13	Abrasive Materials Piping and Chutes
40 32 16	Nonabrasive Materials Piping and Chutes
40 33 00	Bulk Materials Valves
40 33 13	Airlock Bulk Materials Valves
40 33 16	Blind Bulk Materials Valves
40 33 19	Butterfly Bulk Materials Valves
40 33 23	Cone Bulk Materials Valves
40 33 26	Diverter Bulk Materials Valves
40 33 29	Double or Single Dump Bulk Materials Valves
40 33 33	Knife and Slide Gate Bulk Materials Valves
40 33 36	Pinch Bulk Materials Valves
40 33 39	Swing Bulk Materials Valves

40 33 43	Specialty Bulk Materials Valves
40 34 00	Pneumatic Conveying Lines
40 34 13	Dense Phase Pneumatic Conveying Lines
40 34 16	Dilute Phase Pneumatic Conveying Lines
40 40 00	Process Piping and Equipment Protection
40 41 00	Process Piping and Equipment Heat Tracing
40 41 13	Process Piping Heat Tracing
40 41 13.13	Process Piping Electrical Resistance Heat Tracing
40 41 13.16	Process Piping Electrical Conductance Heat Tracing
40 41 13.19	Process Piping Gas Heat Tracing
40 41 13.23	Process Piping Steam Heat Tracing
40 41 13.26 40 41 23	Process Piping Thermal Fluids Heat Tracing
40 41 23.13	Process Equipment Heat Tracing Process Equipment Electrical Resistance Heat Tracing
40 41 23.16	Process Equipment Electrical Conductance Heat Tracing
40 41 23.19	Process Equipment Gas Heat Tracing
40 41 23.23	Process Equipment Steam Heat Tracing
40 41 23.26	Process Equipment Thermal Fluids Heat Tracing
40 42 00	Process Piping and Equipment Insulation
40 42 13	Process Piping Insulation
40 42 13.13	Cryogenic Temperature Process Piping Insulation
40 42 13.16	Low Temperature Process Piping Insulation
40 42 13.19	Intermediate Temperature Process Piping Insulation
40 42 13.23 40 42 13.26	High Temperature Process Piping Insulation Process Piping Insulation for Specialty Applications
40 42 13.20	Process Equipment Insulation
40 42 23.13	Cryogenic Temperature Process Equipment Insulation
40 42 23.16	Low Temperature Process Equipment Insulation
40 42 23.19	Intermediate Temperature Process Equipment Insulation
40 42 23.23	High Temperature Process Equipment Insulation
40 42 23.26	Process Equipment Insulation for Specialty Applications
40 46 00	Process Corrosion Protection
40 46 16	Coatings and Wrappings for Process Corrosion Protection
40 46 42	Cathodic Process Corrosion Protection
40 47 00	Refractories
40 47 13	Silica Refractories
40 47 16	Alumina Refractories
40 47 19	Carbon and Graphite Refractories
40 47 23	Castable Refractories
40 47 26	Rammed Refractories
40 47 29	Refractory Concrete
40 80 00	Commissioning of Process Systems
40 90 00	Instrumentation and Control for Process
	Systems
40 91 00	Primary Process Measurement Devices
40 91 13	Chemical Properties Process Measurement Devices
40 91 13.13	Ammonia Process Measurement Devices
40 91 13.16	Chlorine Process Measurement Devices

- 40 91 13.16Chlorine Process Measurement Devices40 91 13.19Fluoride Process Measurement Devices
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40 91 13.23	Gas Analysis Process Measurement Devices
40 91 13.26	Gas Chromatograph Process Measurement Devices
40 91 13.29	pH Level Process Measurement Devices
40 91 16	Electromagnetic Process Measurement Devices
40 91 16.13	Amperes Process Measurement Devices
40 91 16.16	Capacitance Process Measurement Devices
40 91 16.19	Conductivity Process Measurement Devices
40 91 16.23	Inductance Process Measurement Devices
40 91 16.26	Lumens Process Measurement Devices
40 91 16.29	Magnetic Field Process Measurement Devices
40 91 16.33	Electrical Power Process Measurement Devices
40 91 16.36	Radiation Process Measurement Devices
40 91 16.39	Electrical Resistance Process Measurement Devices
40 91 16.43	Ultraviolet Sensors
40 91 16.46	Voltage Process Measurement Devices
40 91 19	Physical Properties Process Measurement Devices
40 91 19.13	Density Process Measurement Devices
40 91 19.16	Humidity Process Measurement Devices
40 91 19.19	Mass Process Measurement Devices
40 91 19.23	Particle Counters Process Measurement Devices
40 91 19.26	Gas Pressure Process Measurement Devices
40 91 19.29	Liquid Pressure Process Measurement Devices
40 91 19.33	Stress/Strain Process Measurement Devices
40 91 19.36	Temperature Process Measurement Devices
40 91 19.39	Vapor Pressure Process Measurement Devices
40 91 19.43	Weight Process Measurement Devices
40 91 23	Miscellaneous Properties Measurement Devices
40 91 23.13	Acceleration Process Measurement Devices
40 91 23.16	Angle Process Measurement Devices
40 91 23.19	Color Process Measurement Devices
40 91 23.23	Count Process Measurement Devices
40 91 23.26	Distance Process Measurement Devices
40 91 23.29	Energy Process Measurement Devices
40 91 23.33	Flow Process Measurement Devices
40 91 23.36	Level Process Measurement Devices
40 91 23.39	Physical Resistance Process Measurement Devices
40 91 23.43	RPM Process Measurement Devices
40 91 23.46	Time Process Measurement Devices
40 91 23.49	Turbidity Process Measurement Devices
40 91 23.53	Velocity Process Measurement Devices
40 92 00	Primary Control Devices
40 92 13	Primary Control Valves
40 92 13.13	Electrically-Operated Primary Control Valves
40 92 13.16	Hydraulically-Operated Primary Control Valves
40 92 13.19	Pneumatically-Operated Primary Control Valves
40 92 13.23	Pressure-Relief Primary Control Valves
40 92 13.26	Solenoid Primary Control Valves
40 92 13.29	Specialty Primary Control Valves
40 92 29	Current-To-Pressure Converters
40 92 33	Self-Contained Flow Controllers
40 92 36	Linear Actuators and Positioners
40 92 39	Self-Contained Pressure Regulators
40 92 43	Rotary Actuators
40 92 46	Saturable Core Reactors

40 92 49	Variable Frequency Drives
40 92 53	Voltage-To-Pressure Converters
40 93 00	Analog Controllers/Recorders
40 93 13	Analog Controllers
40 93 13.13	Electronic Analog Controllers
40 93 13.16	Electro-Hydraulic Analog Controllers
40 93 13.19	Electro-Pneumatic Analog Controllers
40 93 13.23	Hydraulic Analog Controllers
40 93 13.26	Pneumatic Analog Controllers
40 93 23	Chart Recorders
40 94 00	Digital Process Controllers
40 94 13	Digital Process Control Computers
40 94 13.13	Host Digital Process Control Computers
40 94 13.15	Personal Digital Process Control Computers
40 94 13.10	Personal Digital Assistant Digital Process Control Computers
40 94 23	Distributed Process Control Systems
40 94 33	Human – Machine Interfaces
40 94 43	
	Programmable Logic Process Controllers
40 95 00	Process Control Hardware
40 95 13	Process Control Panels and Hardware
40 95 13.13	Local Process Control Panels and Hardware
40 95 13.23	Main Process Control Panels and Hardware
40 95 20	Process Control Display Devices
40 95 23	Process Control Input/Output Modules
40 95 26	Process Control Instrument Air Piping and Devices
40 95 33	Process Control Networks
40 95 33.13	Cabled Process Control Networks
40 95 33.23	Fiber Optic Process Control Networks
40 95 33.33	Wireless Process Control Networks
40 95 43	Process Control Hardware Interfaces
40 95 46	Process Control Mounting Racks and Supports
40 95 49	Process Control Routers
40 95 53	Process Control Switches
40 95 56	Process Control Transformers
40 95 63	Process Control Wireless Equipment
40 95 63.13	Process Control Wireless Transmitters
40 95 63.16	Process Control Wireless Receivers
40 95 63.19	Process Control Wireless Repeaters
40 95 73	Process Control Wiring
40 95 73.23	Process Control Cable
40 95 73.33	Process Control Conduit, Raceway and Supports
40 95 73.43	Process Control Junction Boxes
40 96 00	Process Control Software
40 96 10	Process Control Software Architecture
40 96 15	Process Control Software Input/Output Lists
40 96 20	Process Control Software Instrument Lists
40 96 25	Process Control Software Logic Diagrams
40 96 30	Process Control Software Loop Diagrams
40 96 35	Process Control Software Programming
40 96 40	Process Control Software Reports
40 97 00	Process Control Auxiliary Devices
	T TOUESS CONTINUE AUXILIALY DEVICES

- 40 97 10Process Control Annunciators40 97 15Process Control Gages40 97 20Process Control Rotameters
- 40 97 25 Process Control Potentiometers
- 40 97 30 Process Control Test Equipment

Material Processing and Handling 41 00 00 Equipment **Operation and Maintenance of Material Processing and** 41 01 00 Handling Equipment Operation and Maintenance of Bulk Material Processing Equipment 41 01 10 Operation and Maintenance of Piece Material Handling Equipment 41 01 20 Operation and Maintenance of Manufacturing Equipment 41 01 30 Operation and Maintenance of Container Processing and Packaging 41 01 40 Operation and Maintenance of Material Storage 41 01 50 41 01 60 Operation and Maintenance of Mobile Plant Equipment Schedules for Material Processing and Handling 41 06 00 Equipment 41 06 10 Schedules for Bulk Material Processing Equipment 41 06 20 Schedules for Piece Material Handling Equipment Schedules for Manufacturing Equipment 41 06 30 Schedules for Container Processing and Packaging 41 06 40 41 06 50 Schedules for Material Storage Schedules for Mobile Plant Equipment 41 06 60 41 08 00 Commissioning of Material Processing and Handling Equipment Commissioning of Bulk Material Processing Equipment 41 08 10 Commissioning of Piece Material Handling Equipment 41 08 20 Commissioning of Manufacturing Equipment 41 08 30 Commissioning of Container Processing and Packaging 41 08 40 Commissioning of Material Storage 41 08 50 Commissioning of Mobile Plant Equipment 41 08 60 **Bulk Material Processing Equipment** 41 10 00 41 11 00 Bulk Material Sizing Equipment **Bulk Material Agglomerators** 41 11 13 Bulk Material Air Mill Classifiers 41 11 16 41 11 19 **Bulk Material Centrifuges** 41 11 23 **Bulk Material Crushers** 41 11 26 **Bulk Material Cyclones** 41 11 29 **Bulk Material Fluid Bed Separators** 41 11 33 **Bulk Material Grinders** 41 11 36 Bulk Material Homogenizers 41 11 39 Bulk Material Lump Breakers 41 11 43 **Bulk Material Mills** 41 11 46 **Bulk Material Pulverizers** 41 11 49 **Bulk Material Screens** 41 11 53 Bulk Material Shredders 41 11 56 **Bulk Material Sieves** 41 12 00 Bulk Material Conveying Equipment 41 12 13 **Bulk Material Conveyors** Airslide Bulk Material Conveyors 41 12 13.13

- 41 12 13.16 Auger Bulk Material Conveyors
- 41 12 13.19 Belt Bulk Material Conveyors
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- 41 12 13.23 Container Bulk Material Conveyors
- 41 12 13.26 Drag Chain Bulk Material Conveyors
- 41 12 13.29 Hopper Bulk Material Conveyors
- 41 12 13.33 Reciprocating Bulk Material Conveyors
- 41 12 13.36 Screw Bulk Material Conveyors
- 41 12 13.39 Stacking and Reclaim Bulk Material Conveyors
- 41 12 13.43 Trough Bulk Material Conveyors
- 41 12 13.46 Tube Bulk Material Conveyors
- 41 12 13.49 Vibratory Bulk Material Conveyors
- 41 12 13.53 Weigh-Belt Bulk Material Conveyors
- 41 12 16 Bucket Elevators
- 41 12 19 Pneumatic Conveyors
- 41 12 19.13 Dense Phase Pneumatic Conveyors
- 41 12 19.16 Dilute Phase Pneumatic Conveyors

41 13 00 Bulk Material Feeders

- 41 13 13 Bin Activators/Live Bin Bottoms
- 41 13 23 Feeders
- 41 13 23.13 Airlock Bulk Material Feeders
- 41 13 23.16 Apron Bulk Material Feeders
- 41 13 23.19 Rotary-Valve Bulk Material Feeders
- 41 13 23.23 Screw Bulk Material Feeders
- 41 13 23.26 Vibratory Bulk Material Feeders
- 41 13 23.29 Volumetric Bulk Material Feeders
- 41 13 23.33 Weigh Bulk Material Feeders

41 14 00 Batching Equipment

- 41 14 13 Bag-Handling Batching Equipment
- 41 14 16 Batch Cars/Transports
- 41 14 19 Batch Hoppers
- 41 14 23 Bulk Bag-Handling Batching Equipment
- 41 14 26 Blenders
- 41 14 29 Drum-Handling Batching Equipment
- 41 14 33 Mixers
- 41 14 36 Weigh Scales

Piece Material Handling Equipment

41 21 00

41 20 00

- 41 21 13 Automatic Guided Vehicle Systems
- 41 21 23 Piece Material Conveyors

Conveyors

- 41 21 23.13 Belt Piece Material Conveyors
- 41 21 23.16 Container Piece Material Conveyors
- 41 21 23.19 Drag-Chain Piece Material Conveyors
- 41 21 23.23 Hopper Piece Material Conveyors
- 41 21 23.26 Monorail Piece Material Conveyors
- 41 21 23.29 Power and Free Piece Material Conveyors
- 41 21 23.33 Reciprocating Piece Material Conveyors
- 41 21 23.36 Roller Piece Material Conveyors
- 41 21 23.39 Vibratory Piece Material Conveyors
- 41 21 23.43 Walking-Beam Piece Material Conveyors
- 41 21 23.46 Weigh-Belt Piece Material Conveyors
- 41 21 23.53 Postal Conveyors
- 41 21 26 Piece Material Diverter Gates
- 41 21 29 Piece Material Gravity Slides
- 41 21 33 Piece Material Transfer Cars

41 21 36	Piece Material Turntables
41 21 39	Piece Material Feeders
41 21 39.13	Piece Material Vibratory Feeders
41 22 00	Cranes and Hoists
41 22 13	Cranes
41 22 13.13	Bridge Cranes
41 22 13.16 41 22 13.19	Gantry Cranes
41 22 13.19	Jib Cranes Mobile Cranes
41 22 13.26	Tower Cranes
41 22 13.29	Specialty Cranes
41 22 23	Hoists
41 22 23.13	Fixed Hoists
41 22 23.16	Portable Hoists
41 22 23.19	
41 22 23.23	Specialty Hoists
41 22 33	Derricks
41 23 00	Lifting Devices
41 23 13	Clamps
41 23 16	Grabs
41 23 19	Hooks
41 23 23	Lifts
41 23 26	Slings
41 23 29	Spreader Bars/Beams
41 23 33	Tongs
41 24 00	Specialty Material Handling Equipment
41 24 13	Aeration Devices
41 24 16	Bin Vibrators
41 24 19	Dehydrators
41 24 19 41 24 23	Dehydrators Hydrators
41 24 19 41 24 23 41 24 26	Dehydrators Hydrators Hydraulic Power Systems
41 24 19 41 24 23 41 24 26 41 24 29	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39 41 24 43	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39 41 24 43 41 24 43	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39 41 24 43 41 24 43 41 24 46	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39 41 24 43 41 24 43	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39 41 24 43 41 24 43 41 24 46	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39 41 24 43 41 24 43 41 24 46 41 24 46 13 41 30 00	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Manufacturing Equipment Manufacturing Lines and Equipment
41 24 19 41 24 23 41 24 26 41 24 29 41 24 33 41 24 36 41 24 39 41 24 39 41 24 43 41 24 43 41 24 46 41 24 46.13 41 30 00 41 31 00	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Manufacturing Equipment
$\begin{array}{c} 41\ 24\ 19\\ 41\ 24\ 23\\ 41\ 24\ 26\\ 41\ 24\ 29\\ 41\ 24\ 33\\ 41\ 24\ 36\\ 41\ 24\ 39\\ 41\ 24\ 39\\ 41\ 24\ 43\\ 41\ 24\ 46\\ 41\ 24\ 46\\ 13\\ \textbf{41\ 24\ 46}\\ \textbf{41\ 31\ 13}\\ \textbf{41\ 31\ 13}\\ \textbf{41\ 31\ 13.13}\\ \textbf{41\ 31\ 13.13}\\ \textbf{41\ 31\ 13.16}\\ \end{array}$	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Manufacturing Equipment Manufacturing Lines and Equipment Manufacturing Lines Assembly Lines Casting Lines
$\begin{array}{c} 41\ 24\ 19\\ 41\ 24\ 23\\ 41\ 24\ 26\\ 41\ 24\ 29\\ 41\ 24\ 33\\ 41\ 24\ 36\\ 41\ 24\ 39\\ 41\ 24\ 39\\ 41\ 24\ 43\\ 41\ 24\ 46\\ 41\ 24\ 46\\ 13\\ 131\ 13\\ 41\ 31\ 13.13\\ 41\ 31\ 13.16\\ 41\ 31\ 13.19\end{array}$	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Manufacturing Equipment Manufacturing Lines and Equipment Manufacturing Lines Assembly Lines Casting Lines Coating Lines
$\begin{array}{c} 41\ 24\ 19\\ 41\ 24\ 23\\ 41\ 24\ 26\\ 41\ 24\ 29\\ 41\ 24\ 33\\ 41\ 24\ 36\\ 41\ 24\ 39\\ 41\ 24\ 39\\ 41\ 24\ 43\\ 41\ 24\ 46\\ 41\ 24\ 46\\ 41\ 24\ 46.13\end{array}$ $\begin{array}{c} \textbf{41\ 30\ 00}\\ \textbf{41\ 31\ 13}\\ 41\ 31\ 13.13\\ 41\ 31\ 13.16\\ 41\ 31\ 13.19\\ 41\ 31\ 13.23\end{array}$	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Postal Sorting Machines Manufacturing Lines and Equipment Manufacturing Lines Assembly Lines Casting Lines Coating Lines Converting Lines
$\begin{array}{c} 41\ 24\ 19\\ 41\ 24\ 23\\ 41\ 24\ 26\\ 41\ 24\ 29\\ 41\ 24\ 33\\ 41\ 24\ 36\\ 41\ 24\ 36\\ 41\ 24\ 39\\ 41\ 24\ 43\\ 41\ 24\ 46\\ 41\ 24\ 46\\ 41\ 24\ 46.13\end{array}$ $\begin{array}{c} \textbf{41\ 30\ 00}\\ \textbf{41\ 31\ 13}\\ \textbf{41\ 31\ 13.13}\\ 41\ 31\ 13.16\\ 41\ 31\ 13.23\\ 41\ 31\ 13.23\\ 41\ 31\ 13.26\end{array}$	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Manufacturing Lines and Equipment Manufacturing Lines Assembly Lines Casting Lines Coating Lines Converting Lines Disassembly Lines
$\begin{array}{c} 41\ 24\ 19\\ 41\ 24\ 23\\ 41\ 24\ 26\\ 41\ 24\ 29\\ 41\ 24\ 33\\ 41\ 24\ 36\\ 41\ 24\ 39\\ 41\ 24\ 39\\ 41\ 24\ 43\\ 41\ 24\ 46\\ 41\ 24\ 46\\ 41\ 24\ 46.13\end{array}$ $\begin{array}{c} \textbf{41\ 30\ 00}\\ \textbf{41\ 31\ 13}\\ 41\ 31\ 13.13\\ 41\ 31\ 13.16\\ 41\ 31\ 13.23\\ 41\ 31\ 13.26\\ 41\ 31\ 13.29\end{array}$	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Manufacturing Lines and Equipment Manufacturing Lines Assembly Lines Coating Lines Coating Lines Converting Lines Disassembly Lines Extrusion Lines
$\begin{array}{c} 41\ 24\ 19\\ 41\ 24\ 23\\ 41\ 24\ 26\\ 41\ 24\ 29\\ 41\ 24\ 33\\ 41\ 24\ 36\\ 41\ 24\ 36\\ 41\ 24\ 39\\ 41\ 24\ 43\\ 41\ 24\ 46\\ 41\ 24\ 46\\ 41\ 24\ 46.13\end{array}$ $\begin{array}{c} \textbf{41\ 30\ 00}\\ \textbf{41\ 31\ 13}\\ \textbf{41\ 31\ 13.13}\\ 41\ 31\ 13.16\\ 41\ 31\ 13.23\\ 41\ 31\ 13.23\\ 41\ 31\ 13.26\end{array}$	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Postal Sorting Machines Manufacturing Lines and Equipment Manufacturing Lines Assembly Lines Casting Lines Converting Lines Disassembly Lines Extrusion Lines Machining Lines
$\begin{array}{c} 41\ 24\ 19\\ 41\ 24\ 23\\ 41\ 24\ 26\\ 41\ 24\ 29\\ 41\ 24\ 33\\ 41\ 24\ 36\\ 41\ 24\ 39\\ 41\ 24\ 39\\ 41\ 24\ 43\\ 41\ 24\ 46\\ 41\ 24\ 46\\ 41\ 24\ 46.13\end{array}$ $\begin{array}{c} \textbf{41\ 31\ 24\ 46}\\ 41\ 24\ 46.13\\ \textbf{41\ 31\ 13.13}\\ 41\ 31\ 13.13\\ 41\ 31\ 13.16\\ 41\ 31\ 13.23\\ 41\ 31\ 13.26\\ 41\ 31\ 13.29\\ 41\ 31\ 13.33\end{array}$	Dehydrators Hydrators Hydraulic Power Systems Lubrication Systems Magnetic Separators Metal Detectors Railcar Movers Turnheads/Distributors Sorting Machines Postal Sorting Machines Manufacturing Lines and Equipment Manufacturing Lines Assembly Lines Coating Lines Coating Lines Converting Lines Disassembly Lines Extrusion Lines

41 31 13.43 Painting Lines

41 31 13.46	Pickling Lines
41 31 13.49	Plating Lines
41 31 13.53	Polishing Lines
41 31 13.56	Press Lines
41 31 13.59	Rolling/Calendaring Lines
41 31 13.63	Web Processing Lines
41 31 16	Pick and Place Systems
41 31 19	Manufacturing-Line Robots
41 31 23	Specialty Assembly Machines
41 32 00	Forming Equipment
41 32 13	Bending Equipment
41 32 16	Blow-Molding Equipment
41 32 19	Brake-Forming Equipment
41 32 23	Cold-Forming Equipment
41 32 26	Die-Casting Equipment
41 32 29	Drawing Equipment
41 32 33	Electroforming Equipment
41 32 36	Forging Equipment
41 32 39	Extruding Equipment
41 32 43	Metal-Spinning Equipment
41 32 46	Piercing Equipment
41 32 49	Powder Metal-Forming Equipment
41 32 53	Pressing Equipment
41 32 56	Roll-Forming Equipment
41 32 59	Shearing Equipment
41 32 63	Spinning Equipment
41 32 66	Stretching/Leveling Equipment
41 32 69	Swaging Equipment
41 33 00	
	Machining Equipment
41 33 13	Automatic Screw Machining Equipment
41 33 16	Boring Equipment
41 33 19	Broaching Equipment
41 33 23	Drilling Equipment
41 33 26	Electro-Discharge Machining Equipment
41 33 29	Grinding Equipment
41 33 33	Hobbing Equipment
41 33 36	Lapping Equipment
41 33 39	Lathe Equipment
41 33 43	Leveling Equipment
41 33 46	Machining Center Equipment
41 33 53	Milling Equipment
41 33 53.13	Horizontal Milling Equipment
41 33 53.16	Vertical Milling Equipment
41 33 60	Multi-Axis Machine Equipment
41 33 63	Planing Equipment
41 33 66	Reaming Equipment
41 33 69	Routing Equipment
41 33 73	Sawing Equipment
41 33 76	Shaping Equipment
41 33 79	Threading Equipment

41 34 00 Finishing Equipment

	41 34 13 41 34 16 41 34 23 41 34 23.13 41 34 23.16 41 34 23.19 41 34 23.23 41 34 23.23 41 34 23.26 41 34 23.29 41 34 23.33 41 34 26 41 34 36 41 34 46 41 34 49 41 34 53 41 34 56 41 34 59	Anodizing Equipment Barrel Tumbling Equipment Coating Equipment Diffusion Coating Equipment Dipping Coating Equipment Film Coating Equipment Phosphatizing Coating Equipment Plasma Coating Equipment Hardface Welding Coating Equipment Spray Painting Booth Deburring Equipment Electroplating Equipment Grinding Equipment Honing Equipment Lapping Equipment Shot Peening Equipment
41	35 00	Dies and Molds
	41 35 13	Dies Description
	41 35 13.13 41 35 13.16	Drawing Dies Extrusion Dies
	41 35 13.19	Press Dies
	41 35 13.23	Rotary Dies
	41 35 13.26	Rule Dies
	41 35 33	Molds
41	36 00	Assembly and Testing Equipment
	41 36 13	Applicators
	41 36 13.13 41 36 13.16	Adhesive Applicators Lubricant Applicators
	41 36 13.19	Sealer Applicators
	41 36 16	Fixtures and Jigs
	41 36 19	Joining Equipment
	41 36 19.13	Adhesive Joining Equipment
	41 36 19.16	Arc-Welding Equipment
	41 36 19.19 41 36 19.23	Brazing Equipment Resistance-Welding Equipment
	41 36 19.26	Riveting Equipment
	41 36 19.29	Sintering Equipment
	41 36 19.33	Soldering Equipment
	41 36 23	Cutting Equipment
	41 36 23.13 41 36 23.16	Cutting Torches High-Pressure Water Cutting Equipment
	41 36 23.19	Laser Cutting Equipment
	41 36 23.23	Plasma Cutting Equipment
	41 36 26	Process Tools
	41 36 26.13	Air Process Tools
	41 36 26.16 41 36 26.19	Electric Process Tools Hydraulic Process Tools
	41 36 26.23	Manual Process Tools
	41 36 29	Manufacturing Measurement and Testing Equipment
	41 36 29.13	Gages, Rules, and Blocks
	41 36 29.16	Penetrant Measurement and Testing Equipment
	41 36 29.19	Laser Measurement and Testing Equipment

- 41 36 29.23 Magnaflux Measurement and Testing Equipment
- 41 36 29.26 **Optical Comparators**
- 41 36 29.29 **Profilometers**
- Radiograph Measurement and Testing Equipment 41 36 29.33
- 41 36 29.36 Surface Tables
- Ultrasonic Measurement and Testing Equipment 41 36 29.39
- 41 36 29.43 **Test Weigh Scales**

Container Processing and Packaging 41 40 00

41 41 00

- Container Filling and Sealing **Bulk Container Fillers/Packers** 41 41 13
- 41 41 16 **Container Cappers**
- 41 41 19 **Container Fillers**
- **Bag Fillers** 41 41 19.13
- **Box Fillers** 41 41 19.16
- 41 41 19.19 **Bottle Fillers**
- 41 41 23 Container Sealers
 - **Container Packing Equipment**

41 42 00

- 41 42 13 Box Packing Equipment
- 41 42 13.13 Box Makers
- 41 42 13.16 Box Packers
- **Bulk Material Loaders** 41 42 16
- 41 42 16.13 **Container Bulk Material Loaders**
- 41 42 16.23 **Truck Bulk Material Loaders**
- 41 42 16.26 **Railcar Bulk Material Loaders**
- 41 42 16.29 Ship Bulk Material Loaders
- 41 42 16.33 **Barge Bulk Material Loaders**
- **Carton Packers** 41 42 19
- 41 42 23 Carton Sealers
- 41 42 26 **Carton Shrink Wrappers**
- 41 42 29 Carton Stackers

41 43 00

Shipping Packaging

- 41 43 13 Banding/Strapping Equipment
- 41 43 16 **Barcode Equipment**
- 41 43 16.13 **Barcode Readers**
- 41 43 16.16 **Barcode Printers**
- 41 43 19 Labeling Equipment
- Pallet Stacking/Wrapping Equipment 41 43 23

41 50 00 Material Storage

Automatic Material Storage

- 41 51 00 41 51 13
- Automatic Storage/Automatic Retrieval Systems Bulk Material Storage

41 52 00

- 41 52 13 **Bins and Hoppers**
- 41 52 13.13 Fixed Bins and Hoppers
- 41 52 13.23 Portable Bins and Hoppers
- **Bulk Material Containers** 41 52 13.33
- **Returnable Bins and Hoppers** 41 52 13.43
- Throwaway Bins and Hoppers 41 52 13.53
- 41 52 16 Silos
- 41 52 16.13 **Concrete Silos**
- 41 52 16.16 Concrete Masonry Unit Silos
- 41 52 16.19 Steel Silos

41 52 19 41 52 19.13 41 52 19.23 41 52 19.33 41 53 00 41 53 13	Material Storage Tanks Horizontal Material Storage Tanks Vertical Material Storage Tanks Portable Material Storage Tanks Storage Equipment and Systems Storage Cabinets
41 53 16	Container Storage Systems
41 53 19	Flat Files
41 53 23 41 53 23.13	Storage Racks Mobile Storage Racks
41 53 26	Mezzanine Storage Systems
41 60 00	Mobile Plant Equipment
41 61 00	Mobile Earth Moving Equipment
41 61 13	Backhoes
41 61 16	Bulldozers
41 61 19	Compactors
41 61 23	Excavators
41 61 26	Graders
41 61 29	Payloaders
41 61 33	Trenchers
41 62 00	Trucks
41 62 13	Cement Mixer Trucks
41 62 16	Dump Trucks
41 62 19	Flatbed Trucks
41 62 23 41 62 26	Forklift Trucks
41 62 20	Pickup Trucks Tank Trucks
41 63 00	General Vehicles
41 63 13	Bicycles
41 63 16	Carts
41 63 19	Maintenance Vehicles
41 63 23	Utility Vehicles
41 63 26	Vans
41 63 29	Wagons
41 64 00	Rail Vehicles
41 64 13	Locomotives
41 64 13.13	Diesel Locomotives
41 64 13.23 41 64 16	Electric Locomotives Mobile Railcar Movers
41 65 00	
41 65 13	Mobile Support Equipment
41 65 16	Mobile Air Compressors Mobile Generators
41 65 19	Mobile Welders
41 66 00	Miscellaneous Mobile Equipment
41 66 13	Mobile Boring and Drilling Rigs
41 66 16	Mobile Lifts and Cherrypickers
41 66 19	Mobile Paving Equipment
41 66 23	Mobile Sweepers/Vacuums

Plant Maintenance Equipment Plant Lube Oil System Plant Fall Protection Equipment Plant Safety Equipment 41 67 00

- 41 67 13
- 41 67 16
- 41 67 19
- Plant Maintenance Tools 41 67 23
- Plant Maintenance Washing Equipment 41 67 26

42 00 00	Process Heating, Cooling, and Drying
	Equipment
42 01 00	Operation and Maintenance of Process Heating,
	Cooling, and Drying Equipment
42 01 10	Operation and Maintenance of Process Heating Equipment
42 01 20	Operation and Maintenance of Process Cooling Equipment
42 01 30	Operation and Maintenance of Process Drying Equipment
42 06 00	Schedules for Process Heating, Cooling, and Drying
40.00.40	Equipment
42 06 10 42 06 20	Schedules for Process Heating Equipment Schedules for Process Cooling Equipment
42 06 20	Schedules for Process Drying Equipment
42 08 00	Commissioning of Process Heating, Cooling, and
	Drying Equipment
42 08 10	Commissioning of Heating Equipment
42 08 20	Commissioning of Cooling Equipment
42 08 30	Commissioning of Drying Equipment
42 10 00	Process Heating Equipment
42 11 00	Process Boilers
42 11 13	Low-Pressure Process Boilers
42 11 16	Intermediate-Pressure Process Boilers
42 11 19 42 11 23	High-Pressure Process Boilers Specialty Process Boilers
42 12 00	Process Heaters
42 12 13	Electric Process Heaters
42 12 16	Fuel-Fired Process Heaters
42 12 19	Thermoelectric Process Heaters
42 12 23	Solar Process Heaters
42 12 26	Specialty Process Heaters
42 13 00	Industrial Heat Exchangers and Recuperators
42 13 13	Industrial Gas-to-Gas Heat Exchangers Industrial Liquid-to-Gas/Gas-to-Liquid Heat Exchangers
42 13 16 42 13 19	Industrial Liquid-to-Liquid Heat Exchangers
42 13 23	Industrial Gas Radiation Heat Exchangers
42 13 26	Industrial Solar Radiation Heat Exchangers
42 14 00	Industrial Furnaces
42 14 13	Annealing Furnaces
42 14 16	Atmosphere Generators
42 14 19	Industrial Baking Furnaces
42 14 23 42 14 26	Industrial Brazing Furnaces Industrial Calcining Furnaces
42 14 29	Industrial Heat-Treating Furnaces
42 14 33	Industrial Melting Furnaces
42 14 33.13	Ceramics and Glass Melting Furnaces
42 14 33.16 42 14 33.19	Ferrous Melting Furnaces Non-Ferrous Melting Furnaces
72 17 33.13	

42 14 36 42 14 43	Primary Refining Furnaces Reactor Furnaces
42 14 46	Industrial Reheat Furnaces
42 14 53	Industrial Sintering Furnaces
42 14 56	Industrial Vacuum Furnaces
42 15 00	Industrial Ovens
42 15 13	Industrial Drying Ovens
42 15 16	Industrial Curing Ovens
42 15 19	Industrial Specialty Ovens
42 20 00	Process Cooling Equipment
42 21 00	Process Cooling Towers
42 21 13	Open-Circuit Process Cooling Towers
42 21 16	Closed-Circuit Process Cooling Towers
42 22 00	Process Chillers and Coolers
42 22 13	Centrifugal Process Chillers and Coolers
42 22 16	Reciprocating Process Chillers and Coolers
42 22 19	Refrigerant Process Chillers and Coolers
42 22 23	Rotary Process Chillers and Coolers
42 22 26	Thermoelectric Process Chillers and Coolers
42 23 00	Process Condensers and Evaporators
42 23 13	Process Condensers
42 23 13 42 23 16	Process Condensers Process Cooling Evaporators
42 23 16	Process Cooling Evaporators
42 23 16 42 23 19	Process Cooling Evaporators Process Humidifiers Process Drying Equipment
42 23 16 42 23 19 42 30 00	Process Cooling Evaporators Process Humidifiers
42 23 16 42 23 19 42 30 00 42 31 00	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers
42 23 16 42 23 19 42 30 00 42 31 00 42 31 13 42 31 16 42 31 19	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators
42 23 16 42 23 19 42 30 00 42 31 00 42 31 13 42 31 16	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment
42 23 16 42 23 19 42 30 00 42 31 00 42 31 13 42 31 16 42 31 19	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers
42 23 16 42 23 19 42 30 00 42 31 00 42 31 13 42 31 16 42 31 19 42 31 23	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers
42 23 16 42 23 19 42 30 00 42 31 00 42 31 13 42 31 16 42 31 19 42 31 23 42 32 00	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Material Dryers
$\begin{array}{r} 42\ 23\ 16\\ 42\ 23\ 19\\ \hline 42\ 23\ 19\\ \hline 42\ 30\ 00\\ \hline 42\ 31\ 00\\ 42\ 31\ 13\\ 42\ 31\ 16\\ 42\ 31\ 19\\ 42\ 31\ 23\\ \hline 42\ 32\ 12\\ \hline 42\ 32\ 13\\ 42\ 32\ 16\\ 42\ 32\ 19\\ \end{array}$	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Material Dryers Centrifugal Material Dryers
$\begin{array}{r} 42\ 23\ 16\\ 42\ 23\ 19\\ \hline 42\ 23\ 19\\ \hline 42\ 31\ 00\\ 42\ 31\ 13\\ 42\ 31\ 16\\ 42\ 31\ 16\\ 42\ 31\ 19\\ 42\ 31\ 23\\ \hline 42\ 32\ 12\\ \hline 42\ 32\ 13\\ 42\ 32\ 16\\ 42\ 32\ 19\\ 42\ 32\ 23\\ \end{array}$	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Material Dryers Centrifugal Material Dryers Conveyor Material Dryers Flash Material Dryers Fluid-Bed Material Dryers
$\begin{array}{r} 42\ 23\ 16\\ 42\ 23\ 19\\ \hline 42\ 23\ 19\\ \hline 42\ 31\ 00\\ 42\ 31\ 13\\ 42\ 31\ 16\\ 42\ 31\ 19\\ 42\ 31\ 23\\ \hline 42\ 32\ 12\\ \hline 42\ 32\ 13\\ 42\ 32\ 16\\ 42\ 32\ 19\\ 42\ 32\ 23\\ 42\ 32\ 23\\ 42\ 32\ 26\end{array}$	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Material Dryers Centrifugal Material Dryers Flash Material Dryers Fluid-Bed Material Dryers Material Roasters
$\begin{array}{r} 42\ 23\ 16\\ 42\ 23\ 19\\ \hline 42\ 23\ 19\\ \hline 42\ 31\ 00\\ 42\ 31\ 13\\ 42\ 31\ 16\\ 42\ 31\ 19\\ 42\ 31\ 23\\ \hline 42\ 31\ 23\\ \hline 42\ 32\ 13\\ 42\ 32\ 13\\ 42\ 32\ 13\\ 42\ 32\ 16\\ 42\ 32\ 19\\ 42\ 32\ 23\\ 42\ 32\ 26\\ 42\ 32\ 29\end{array}$	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Material Dryers Centrifugal Material Dryers Flash Material Dryers Fluid-Bed Material Dryers Material Roasters Rotary-Kiln Material Dryers
$\begin{array}{r} 42\ 23\ 16\\ 42\ 23\ 19\\ \hline 42\ 23\ 19\\ \hline 42\ 31\ 9\\ \hline 42\ 31\ 00\\ 42\ 31\ 13\\ 42\ 31\ 16\\ 42\ 31\ 19\\ 42\ 31\ 23\\ \hline 42\ 32\ 12\\ \hline 42\ 32\ 13\\ 42\ 32\ 16\\ 42\ 32\ 19\\ 42\ 32\ 19\\ 42\ 32\ 23\\ \hline 42\ 32\ 29\\ 42\ 32\ 29\\ 42\ 32\ 33\\ \end{array}$	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Material Dryers Centrifugal Material Dryers Flash Material Dryers Flash Material Dryers Fluid-Bed Material Dryers Material Roasters Rotary-Kiln Material Dryers Spray Material Dryers
$\begin{array}{r} 42\ 23\ 16\\ 42\ 23\ 19\\ \hline 42\ 23\ 19\\ \hline 42\ 31\ 9\\ 42\ 31\ 00\\ 42\ 31\ 13\\ 42\ 31\ 16\\ 42\ 31\ 19\\ 42\ 31\ 23\\ \hline 42\ 32\ 12\\ \hline 42\ 32\ 13\\ 42\ 32\ 16\\ 42\ 32\ 19\\ 42\ 32\ 23\\ 42\ 32\ 26\\ 42\ 32\ 29\\ 42\ 32\ 23\\ 42\ 32\ 36\\ \end{array}$	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Refrigerant Dryers Centrifugal Material Dryers Conveyor Material Dryers Flash Material Dryers Fluid-Bed Material Dryers Material Roasters Rotary-Kiln Material Dryers Spray Material Dryers Tower Material Dryers
$\begin{array}{r} 42\ 23\ 16\\ 42\ 23\ 19\\ \hline 42\ 23\ 19\\ \hline 42\ 31\ 9\\ \hline 42\ 31\ 00\\ 42\ 31\ 13\\ 42\ 31\ 16\\ 42\ 31\ 19\\ 42\ 31\ 23\\ \hline 42\ 32\ 12\\ \hline 42\ 32\ 13\\ 42\ 32\ 16\\ 42\ 32\ 19\\ 42\ 32\ 19\\ 42\ 32\ 23\\ \hline 42\ 32\ 29\\ 42\ 32\ 29\\ 42\ 32\ 33\\ \end{array}$	Process Cooling Evaporators Process Humidifiers Process Drying Equipment Gas Dryers and Dehumidifiers Drying Evaporators Desiccant Equipment Regenerative Dryers Refrigerant Dryers Material Dryers Centrifugal Material Dryers Flash Material Dryers Flash Material Dryers Fluid-Bed Material Dryers Material Roasters Rotary-Kiln Material Dryers Spray Material Dryers

43 00 00

	Purification, and Storage Equipment
43 01 00	Operation and Maintenance of Process Gas and Liquid
	Handling, Purification, and Storage Equipment
43 01 10	Operation and Maintenance of Gas Handling Equipment
43 01 10.13	Gas Blowers Maintenance and Rehabilitation
43 01 10.16	Gas Compressors Maintenance and Rehabilitation
43 01 20	Operation and Maintenance of Liquid Handling Equipment
43 01 20.13 43 01 20.16	Liquid Pumps Maintenance and Rehabilitation Liquid Process Equipment Maintenance and Rehabilitation
43 01 30	Operation and Maintenance of Gas and Liquid Hi-Purification Equipment
43 01 40	Operation and Maintenance of Gas and Liquid Storage
43 01 40.13	Non-pressurized Tanks Cleaning, Maintenance, and Rehabilitation
43 01 40.16	Pressurized Tanks Cleaning, Maintenance, and Rehabilitation
43 05 00	Common Work Results for Process Gas and Liquid
	Handling, Purification, and Storage Equipment
43 05 10	Common Work Results for Gas Handling Equipment
43 05 20	Common Work Results for Liquid Handling Equipment
43 05 30	Common Work Results for Gas and Liquid Hi-Purification Equipment
43 05 40	Common Work Results for Gas and Liquid Storage
43 06 00	Schedules for Process Gas and Liquid Handling,
	Purification, and Storage Equipment
43 06 10	Schedules for Gas Handling Equipment
43 06 20	Schedules for Liquid Handling Equipment
43 06 30	Schedules for Gas and Liquid Hi-Purification Equipment
43 06 40 43 08 00	Schedules for Gas and Liquid Storage
43 00 00	Commissioning of Process Gas and Liquid Handling,
12 00 10	Purification, and Storage Equipment
43 08 10 43 08 20	Commissioning of Gas Handling Equipment Commissioning of Liquid Handling Equipment
43 08 20	Commissioning of Gas and Liquid Purification Equipment
43 08 40	Commissioning of Gas and Liquid Storage
43 10 00	Gas Handling Equipment
43 11 00	Gas Fans, Blowers, Pumps and Boosters
43 11 11 43 11 12	Direct Drive Single Stage Centrifugal Blowers Integrally Geared Single Stage Centrifugal Blowers
43 11 12	Separately Geared Single Stage Centrifugal Blowers
43 11 14	Direct Drive Integral Shaft Single Stage Centrifugal Blowers
43 11 17	Horizontally Split Multistage Centrifugal Blowers
43 11 18	Vertically Split Multistage Centrifugal Blowers
43 11 19	Centrifugal Fans
43 11 23	Axial Blowers
43 11 26	Axial Fans
43 11 31	Rotary Helical Screw Blowers
43 11 33	Rotary Lobe Blowers
43 11 34	Regenerative Rotary Blowers
43 11 36	Rotary Vane Blowers

Process Gas and Liquid Handling,

43 11 41	Gas-handling Venturi Jet Pumps
43 11 43	Gas-handling Vacuum Pumps
43 11 46	Gas Boosters
43 12 00	Gas Compressors
43 12 11	Centrifugal Compressors
43 12 13	Diagonal or Mixed-flow Compressors
43 12 16	Axial-flow Compressors
43 12 33 43 12 34	Single-acting Reciprocating Compressors
43 12 34	Double-acting Reciprocating Compressors Diaphragm Reciprocating Compressors
43 12 51	Rotary Screw Compressors
43 12 53	Rotary Vane Compressors
43 12 56	Rotary Liquid-ring Compressors
43 12 57	Rotary Scroll Compressors
43 13 00	Gas Process Equipment
43 13 13	Gas Blenders
43 13 19	Gas Mixers
43 13 23	Gas Pressure Regulators
43 13 31	Gas Separation Equipment
43 13 33	Gas Dehydration Equipment
43 13 36	Combined Gas Separation and Dehydration Equipment
43 13 39 43 13 43	Gas Recovery and Condensing Equipment
43 13 45	Waste Gas Burner System Gas Control and Safety Equipment
43 15 00	Process Air and Gas Filters
43 15 13	Blower Intake and Turbine Air Filters
43 15 13.13	Static Prefilters
43 15 13.16	
43 13 13.10	Static Final Filters
43 15 13.19	Static HEPA Filters
43 15 13.19 43 15 13.23	Static HEPA Filters Pulse Filters
43 15 13.19 43 15 13.23 43 15 33	Static HEPA Filters Pulse Filters Grease Filters
43 15 13.19 43 15 13.23 43 15 33 43 15 43	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators
43 15 13.19 43 15 13.23 43 15 33 43 15 43 43 15 63	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters
43 15 13.19 43 15 13.23 43 15 33 43 15 43	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators
43 15 13.19 43 15 13.23 43 15 33 43 15 43 43 15 63 43 15 73 43 15 73.11 43 15 73.12	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters
43 15 13.19 43 15 13.23 43 15 33 43 15 43 43 15 63 43 15 73 43 15 73.11 43 15 73.12 43 15 73.13	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters
43 15 13.19 43 15 13.23 43 15 33 43 15 43 43 15 63 43 15 73 43 15 73.11 43 15 73.12 43 15 73.13 43 15 73.15	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters
43 15 13.19 43 15 13.23 43 15 33 43 15 43 43 15 63 43 15 73 43 15 73.11 43 15 73.12 43 15 73.13 43 15 73.15 43 15 73.17	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters
$\begin{array}{c} 43 \ 15 \ 13.19 \\ 43 \ 15 \ 13.23 \\ 43 \ 15 \ 33 \\ 43 \ 15 \ 43 \\ 43 \ 15 \ 43 \\ 43 \ 15 \ 63 \\ 43 \ 15 \ 73 \\ 43 \ 15 \ 73.11 \\ 43 \ 15 \ 73.12 \\ 43 \ 15 \ 73.13 \\ 43 \ 15 \ 73.15 \\ 43 \ 15 \ 73.17 \\ 43 \ 15 \ 73.17 \\ 43 \ 15 \ 76 \end{array}$	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters
43 15 13.19 43 15 13.23 43 15 33 43 15 43 43 15 63 43 15 73 43 15 73 43 15 73.11 43 15 73.12 43 15 73.13 43 15 73.15 43 15 73.17 43 15 76 43 20 00	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment
43 15 13.19 43 15 13.23 43 15 33 43 15 43 43 15 63 43 15 73 43 15 73.11 43 15 73.12 43 15 73.13 43 15 73.13 43 15 73.15 43 15 73.17 43 15 76 43 20 00 43 21 00	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment Liquid Pumps
$\begin{array}{c} 43 15 13.19 \\ 43 15 13.23 \\ 43 15 33 \\ 43 15 33 \\ 43 15 43 \\ 43 15 63 \\ 43 15 73 \\ 43 15 73.11 \\ 43 15 73.12 \\ 43 15 73.13 \\ 43 15 73.15 \\ 43 15 73.17 \\ 43 15 76 \end{array}$	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment Liquid Pumps Centrifugal Liquid Pumps
$\begin{array}{c} 431513.19\\ 431513.23\\ 431533\\ 431533\\ 431543\\ 431563\\ 431573\\ 431573.11\\ 431573.12\\ 431573.13\\ 431573.15\\ 431573.17\\ 431576\end{array}$	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment Liquid Pumps Centrifugal Liquid Pumps Diaphragm Liquid Pumps
$\begin{array}{c} 431513.19\\ 431513.23\\ 431533\\ 431543\\ 431563\\ 431563\\ 431573\\ 431573.11\\ 431573.12\\ 431573.13\\ 431573.15\\ 431573.17\\ 431576\\ \hline \textbf{43}\textbf{20}\textbf{00}\\ \textbf{43}\textbf{21}13\\ 432116\\ 432119\\ \end{array}$	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment Liquid Pumps Centrifugal Liquid Pumps Diaphragm Liquid Pumps
$\begin{array}{c} 431513.19\\ 431513.23\\ 431533\\ 431543\\ 431563\\ 431563\\ 431573.12\\ 431573.12\\ 431573.12\\ 431573.13\\ 431573.15\\ 431573.17\\ 431576\end{array}$	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment Liquid Pumps Centrifugal Liquid Pumps Diaphragm Liquid Pumps Dispensing Liquid Pumps Drum Liquid Pumps
$\begin{array}{c} 431513.19\\ 431513.23\\ 431533\\ 431533\\ 431543\\ 431563\\ 431573\\ 431573.11\\ 431573.12\\ 431573.13\\ 431573.15\\ 431573.17\\ 431576\end{array}$	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment Liquid Pumps Diaphragm Liquid Pumps Dispensing Liquid Pumps Dispensing Liquid Pumps Drum Liquid Pumps Gear Liquid Pumps
$\begin{array}{c} 431513.19\\ 431513.23\\ 431533\\ 431543\\ 431563\\ 431563\\ 431573.12\\ 431573.12\\ 431573.12\\ 431573.13\\ 431573.15\\ 431573.17\\ 431576\end{array}$	Static HEPA Filters Pulse Filters Grease Filters Mist Eliminators High-temperature Air Filters Multiple-application Air Filters Air Filter Media Permanent Washable Filters Poly-ring Air Filters Rigid Cell Filters Automatic Roll-type Air Filters Chemical Media for Air and Gas Filters Liquid Handling Equipment Liquid Pumps Centrifugal Liquid Pumps Diaphragm Liquid Pumps Dispensing Liquid Pumps Drum Liquid Pumps

43 21 36 Positive Displacement Liquid Pumps

	43 21 39	Submersible Liquid Pumps
	43 21 43	Sump Liquid Pumps
	43 21 46	Vane Liquid Pumps
43	22 00	Liquid Process Equipment
	43 22 13	Liquid Aeration Devices
	43 22 16	Liquid Agitators
	43 22 19	Liquid Blenders
	43 22 23	Liquid Centrifuges
	43 22 26	Liquid Deaerators
	43 22 29	Drum Handling Liquid Process Equipment
	43 22 33	Liquid Emulsifiers
	43 22 36	Liquid Evaporators
	43 22 39	Liquid Feeders
	43 22 56	Liquid Process Mixers
	43 22 59	Liquid Process Pressure Regulators
	43 22 63	Liquid Separation Towers
	43 22 66	Liquid Weigh Systems
	43 22 69	Liquid Grease Receiving and Dewatering Systems Liquid Fillers
	43 22 73 43 22 76	Liquid Screeners
	43 22 70	Liquid Clarifiers
	43 22 83	Liquid Classifiers
	43 22 86	Liquid Homogenizers
	43 22 89	Liquid Presses
	43 22 96	Liquid Versators
	43 22 99	Liquid Votators
43	27 00	Process Liquid Filters
	43 27 13	Cyclonic Liquid Filters
	43 27 16	Centrifugal Horizontal Pressure Leaf Liquid Filters
	43 27 19	Press Liquid Filters
	43 27 23	Liquid Bag Filters
	43 27 33	Mechanically Cleaned Liquid Filters
	43 27 43	Tubular Backwashing Liquid Filters
	43 27 53	Vacuum Belt Liquid Filters
	43 27 63	Woven Media Liquid Filters
	43 27 63.13 43 27 63.23	Disc Liquid Filters Rotating Drum Liquid Filters
	43 27 63.33	Layer Liquid Filters
	43 27 63.43	Candle Liquid Filters
	43 27 63.53	Vertical Leaf Liquid Filters
	43 27 73	Nonwoven Media Liquid Filters
	43 27 73.13	Surface Liquid Filters
	43 27 73.23	Depth Liquid Filters
43	30 00	Gas and Liquid Purification Equipment
43	31 00	Gas and Liquid Purification Filtration Equipment
	43 31 13	Gas and Liquid Purification Filters
	43 31 13.13	Activated Carbon-Gas and Liquid Purification Filters
	43 31 13.16 43 31 13.19	Gas and Liquid Purification Filter Presses High-Purity Cartridge Gas and Liquid Purification Filters
	43 31 13.19	Membrane Diaphragm Gas and Liquid Purification Filters

43 31 13.26 43 31 13.29 43 31 13.33	Multimedia Gas and Liquid Purification Filters Pretreatment Cartridge Gas and Liquid Purification Filters Ultrafilter Units
43 32 00	Gas and Liquid Purification Process Equipment
$\begin{array}{c} 43 \ 32 \ 13 \\ 43 \ 32 \ 13.13 \\ 43 \ 32 \ 13.16 \\ 43 \ 32 \ 23 \\ 43 \ 32 \ 26 \\ 43 \ 32 \ 29 \\ 43 \ 32 \ 29 \\ 43 \ 32 \ 33 \\ 43 \ 32 \ 36 \\ 43 \ 32 \ 39 \\ 43 \ 32 \ 39 \\ 43 \ 32 \ 39 \\ 43 \ 32 \ 39 \\ 43 \ 32 \ 56 \\ 43 \ 32 \ 56 \\ 43 \ 32 \ 59 \\ 43 \ 32 \ 59 \\ 43 \ 32 \ 66 \\ 43 \ 32 \ 69 \\ 43 \ 32 \ 73 \end{array}$	Gas and Liquid Purification Process Beds Anion-Gas and Liquid Purification Process Beds Cation-Gas and Liquid Purification Process Beds Gas and Liquid Purification Process Clarifier Systems Gas and Liquid Purification Decarbonators Electronic Deionization Purification Units External Regeneration Systems Mixed-Bed Ion-Exchange Vessels Gas and Liquid Purification Mixed Beds Externally Regenerable Gas and Liquid Purification Mixed Beds In-Situ Regenerable Gas and Liquid Purification Mixed Beds Packed-Bed Ion-Exchange Vessels Reverse-Osmosis Purification Units Gas and Liquid Purification Units Gas and Liquid Purification Units Gas and Liquid Purification Scrubbers Ultraviolet Sterilizers Vacuum Degasifiers Chemical Feed Systems Ozonation Equipment
43 32 76	Chlorination Equipment
43 40 00	Gas and Liquid Storage
43 41 00	Non-pressurized Tanks and Vessels
43 41 11 43 41 13	Bolted Steel Tanks Welded Steel Tanks
$\begin{array}{c} 43 \ 41 \ 13.13 \\ 43 \ 41 \ 13.23 \\ 43 \ 41 \ 13.33 \\ 43 \ 41 \ 13.43 \\ 43 \ 41 \ 23 \\ 43 \ 41 \ 23 \\ 43 \ 41 \ 26 \\ 43 \ 41 \ 26 \\ 43 \ 41 \ 31 \\ 43 \ 41 \ 41 \\ 43 \ 41 \ 43 \\ 43 \ 41 \ 43 \\ 43 \ 41 \ 53 \\ 43 \ 41 \ 53 \\ 43 \ 41 \ 53 \\ 43 \ 41 \ 73 \\ 43 \ 41 \ 83 \end{array}$	Glass-lined Welded Steel Tanks Rubber-lined Welded Steel Tanks Epoxy-lined Welded Steel Tanks Ceramic-lined Welded Steel Tanks Stainless Steel Tanks Aluminum Tanks Metallic Specialty Tanks Polyvinyl Chloride Tanks Polyethylene Tanks Fiberglass Reinforced Plastic Tanks Wood Stave Tanks Precast Concrete Tanks Ceramic Tanks Non-metallic Specialty Tanks
43 41 13.23 43 41 13.33 43 41 13.43 43 41 23 43 41 26 43 41 26 43 41 31 43 41 41 43 41 43 43 41 43 43 41 53 43 41 63 43 41 73	Glass-lined Welded Steel Tanks Rubber-lined Welded Steel Tanks Epoxy-lined Welded Steel Tanks Ceramic-lined Welded Steel Tanks Stainless Steel Tanks Aluminum Tanks Metallic Specialty Tanks Polyvinyl Chloride Tanks Polyethylene Tanks Fiberglass Reinforced Plastic Tanks Wood Stave Tanks Precast Concrete Tanks Ceramic Tanks

- Fiberglass Reinforced Plastic Pressure Tanks Non-metallic Specialty Pressure Tanks 43 42 53
- 43 42 83

44 00 00	Pollution and Waste Control
	Equipment
44 01 00	Operation and Maintenance of Pollution and Waste
	Control Equipment
44 01 10	Operation and Maintenance of Air Pollution Control
44 01 20	Operation and Maintenance of Noise Pollution Control
44 01 30	Operation and Maintenance of Odor Control Equipment
44 01 40	Operation and Maintenance of Water Pollution Control Equipment
44 01 50	Operation and Maintenance of Solid Waste Control and Reuse
44 01 60	Operation and Maintenance of Waste Thermal Processing Equipment
44 05 00	Common Work Results for Pollution and Waste Control
	Equipment
44 06 00	Schedules for Pollution and Waste Control Equipment
44 06 10	Schedules for Air Pollution Control
44 06 20	Schedules for Noise Pollution Control
44 06 30	Schedules for Odor Control Equipment
44 06 40	Schedules for Water Pollution Control Equipment
44 06 50	Schedules for Solid Waste Control and Reuse
44 06 60	Schedules for Waste Thermal Processing Equipment
44 08 00	Commissioning of Pollution and Waste Control
	Equipment
44 08 10	Commissioning of Air Pollution Control
44 08 20	Commissioning of Noise Pollution Control
44 08 30	Commissioning of Odor Control Equipment
44 08 40	Commissioning Water Pollution Control Equipment
44 08 50	Commissioning Solid Waste Control and Reuse
44 08 60	Commissioning of Waste Thermal Processing Equipment
44 10 00	Air Pollution Control
44 11 00	Particulate Control Equipment
44 11 13	Fugitive Dust Control
44 11 16	Fugitive Dust Barrier Systems
44 11 19	Atmospheric Air Quality Monitoring Equipment
44 11 20	Gravitational Separators
44 11 31	Venturi Scrubbing Equipment
44 11 33	Spray Tower/Chamber Scrubbing Equipment
44 11 36	Cyclone Scrubbing Equipment
44 11 51	Pulse Jet Fabric Filtration Equipment
44 11 53	Reverse Flow Fabric Filtration Equipment
44 11 54 44 11 56	Shake/Deflate Fabric Filtration Equipment
44 11 50	Cartridge Filtration Equipment Disposable Dry Filtration Equipment
44 11 59	Cyclone Dust Collection Equipment
44 11 73	Multicylone Dust Collection Equipment
44 11 76	Mist Elimination Equipment
44 11 93	Wet Electrostatic Precipitator Equipment
44 11 96	Dry Plate Electrostatic Precipitator Equipment

44 13 00	Gaseous Air Pollution Control Equipment
44 13 11	Spray Tower/Chamber Absorption Equipment
44 13 13	Packed Tower/Chamber Absorption Equipment
44 13 14	Tray Tower Absorption Equipment
44 13 16	Jet Bubbling Reactor Equipment
44 13 17	Venturi Absorption Equipment
44 13 20	Vacuum Extraction Systems
44 13 31	Powdered Injection Adsorption Equipment
44 13 33	Fluidized Bed Adsorption Equipment
44 13 34	Fixed Bed Adsorption Equipment
44 13 36	Rotary Bed Adsorption Equipment
44 13 39	Radial Bed Adsorption Equipment
44 13 51	Thermal Oxidation Equipment
44 13 53	Catalytic Oxidation Equipment
44 13 56	Flare Oxidation Equipment
44 13 59	Claus Sulfur Recovery Equipment
44 13 71	Thermal Reduction Equipment
44 13 73	Catalytic Reduction Equipment
44 13 76	Non-catalytic Reduction Equipment
44 13 77	Selective Non-catalytic Reduction Equipment
44 13 81	Condensation Systems
44 13 83	Contact Condensing Equipment
44 13 86	Solvent Recovery Equipment
44 13 91	Biofilter Media
44 13 93	Fixed Bed Biofilter Equipment
44 13 96	Fixed Bed Biotrickling Filter Equipment
44 13 97	Fixed Bed Bioscrubbing Equipment
44 20 00	Noise Pollution Control
44 21 00	Noise Pollution Control Equipment
44 21 13	Fixed Noise Abatement Barriers
44 21 16	Flexible Noise Abatement Barriers
44 21 19	Portable Noise Abatement Barriers
44 21 23	Noise Pollution Silencers
44 21 26	Frequency Cancellers
44 30 00	Odor Control
44 31 00	Odor Treatment Equipment
44 31 11	Wet Chemical Packed Tower Odor Control Equipment
44 31 13	Chemical Mist System Odor Control Equipment
44 31 16	Activated Carbon Adsorption Odor Control Equipment
44 31 19	Packaged Odor Control Systems
44 31 21	Odor Control Biofilters
44 31 28	Odor Control Biofilter Aeration Floor
44 31 29	Odor Control Biofilter Media
44 31 31	Odor Control Biotrickling Filter Equipment
44 31 33	Odor Control Bioscrubbing Equipment

- 44 31 41
- Odor Control Vapor Combustion Equipment Adjusting and Balancing Odor Control Systems 44 31 83

44 32 00	Odor Dispersing and Masking/Counteracting
	Equipment
44 32 13	Odor Dispersing Exhaust Stacks
44 32 13.13	Fan-equipped Odor Dispersing Exhaust Stacks
44 32 23	Odor Masking/Counteracting Equipment
44 40 00	Water Pollution Control Equipment
44 41 00	Water Pollution Containment and Cleanup Equipment
44 41 13	Spill Cleanup
44 41 21	Containment Booms
44 41 23	Marine Spill Accessories
44 41 31	Spill Decks
44 41 32	Drum Containment Units
44 41 33	Containment Pallets
44 41 34	Prefabricated Spill Containment Curbing
44 41 36	Prefabricated Spill Containment Berms
44 41 37	Prefabricated Berms for Tank Containment
44 41 41	Collapsible Storage Tanks
44 50 00	Solid Waste Control and Reuse
44 51 00	Solid Waste Collection, Transfer, and Hauling
	Equipment
44 51 13	Solid Waste Portable Containers
44 51 16	Solid Waste Stationary Containers
44 51 23	Solid Waste Transfer Trailers
44 53 00	Solid Waste Processing Equipment
44 53 11	Live-floor Storage Bins
44 53 13	Refuse Cranes and Accessories
44 53 16	Solid Waste Screens
44 53 21	Car Crushers
44 53 23	Shears and Guillotines
44 53 26	Shredders and Grinders
44 53 27	Perforators
44 53 31	Bag Breakers
44 53 33	Granulators
44 53 36	Crumb Rubber Systems
44 53 39	Briquetters
44 53 41	Vibratory Table Separation Equipment
44 53 43	Ferrous Metals Separation Equipment
44 53 44	Eddy Current Separators
44 53 46	Single-stream Materials Separation Equipment
44 53 49	Ballistic Separators
44 53 51	Air Classifying Equipment
44 53 52	Air Knives
44 53 53	Optical Sorting Equipment
44 53 56	Packaged Sorting Stations
44 53 59 44 53 61	Packaged Reclaimer Stations Solid Waste Compactors
44 53 61	Solid Waste Compactors Solid Waste Baling Equipment
44 53 64	Bagging Equipment

44 53 66	Wrappers
44 53 73	Solid Waste Liquid Extraction Equipment
44 55 00	Composting Equipment
44 55 11	Electromechanical Composters
44 55 13	Compost Screening Equipment
44 55 16	Compost Shredding Equipment
44 55 23	Compost Pile Turning Equipment
44 55 26	Compost Mixing and Blending Equipment
44 55 33	In-vessel Composing Equipment
44 55 43	Compost Pad System
44 55 73	Compost Liquid Extraction Equipment
44 60 00	Waste Thermal Processing Equipment
44 61 00	Waste-to-Energy Plants
44 61 13	Waste Receiving, Management, and Feed Equipment
44 61 16	Mass Burn Combustion Equipment
44 61 23	Refuse-derived Fuel Feed Equipment
44 61 26	Refuse-derived Fuel Combustion Equipment
44 61 29	Modular Combustion System Equipment
44 61 31	Ash Handling Equipment
44 61 33	Post-combustion Ferrous Metals Recovery Equipment
44 61 36	Post-combustion Non-ferrous Metals Recovery Equipment
44 62 00	Fluidized Bed Combustion Equipment
44 63 00	Rotary Kiln Incinerators
44 64 00	Gasification Equipment
44 64 13	Counter-current Fixed Bed Gasification Equipment
44 64 23	Co-current Fixed Bed Gasification Equipment
44 64 33	Fluidized Bed Gasification Equipment
44 64 43	Entrained Flow Gasification Equipment
44 64 53	Plasma Arc Gasification Equipment
44 65 00	Pyrolysis Equipment
44 66 00	Hazardous Waste and Medical Waste Incinerators
44 67 00	Heat Recovery Equipment for Waste Thermal
	Processing
44 68 00	Synthesis Gas Cleanup and Handling Equipment

45 00 00	Industry-Specific Manufacturing
	Equipment
45 08 00	Commissioning of Industry-Specific Manufacturing
	Equipment
45 11 00	Oil and Gas Extraction Equipment
45 11 01	Operation and Maintenance of Oil and Gas Extraction Equipment
45 11 06	Schedules for Oil and Gas Extraction Equipment
	45 12 99 User-Defined Oil and Gas Extraction Equipment
45 13 00	Mining Machinery and Equipment
45 13 01 45 13 06	Operation and Maintenance of Mining Machinery and Equipment Schedules for Mining Machinery and Equipment
	45 14 99 User-Defined Mining Machinery and Equipment
45 15 00	Food Manufacturing Equipment
45 15 01	Operation and Maintenance of Food Manufacturing Equipment
45 15 06	Schedules for Food Manufacturing Equipment
	45 16 99 User-Defined Food Manufacturing Equipment
45 17 00	Beverage and Tobacco Manufacturing Equipment
45 17 01	Operation and Maintenance of Beverage and Tobacco Manufacturing
	Equipment
45 17 06	Schedules for Beverage and Tobacco Manufacturing Equipment
	45 18 99 User-Defined Beverage and Tobacco Manufacturing Equipment
45 19 00	Textiles and Apparel Manufacturing Equipment
45 19 01	Operation and Maintenance of Textiles and Apparel Manufacturing Equipment
45 19 06	Schedules for Textiles and Apparel Manufacturing Equipment
	45 20 99 User-Defined Textiles and Apparel Manufacturing Equipment
45 21 00	Leather and Allied Product Manufacturing Equipment
45 21 01	Operation and Maintenance of Leather and Allied Product Manufacturing
	Equipment
45 21 06	Schedules for Leather and Allied Product Manufacturing Equipment
45 21 10 to 4	45 22 99 User-Defined Leather and Allied Product Manufacturing Equipment
45 23 00	Wood Product Manufacturing Equipment
45 23 01	Operation and Maintenance of Wood Product Manufacturing Equipment
45 23 06	Schedules for Wood Product Manufacturing Equipment
	45 24 99 User-Defined Wood Product Manufacturing Equipment
45 25 00	Paper Manufacturing Equipment
45 25 01	Operation and Maintenance of Paper Manufacturing Equipment
45 25 06 45 25 10 to .	Schedules for Paper Manufacturing Equipment 45 26 99 User-Defined Paper Manufacturing Equipment
45 27 00	Printing and Related Manufacturing Equipment
45 27 00 45 27 01	Operation and Maintenance of Printing and Related Manufacturing
	Equipment
45 27 06	Schedules for Printing and Related Manufacturing Equipment
45 27 10 to 4	45 28 99 User-Defined Printing and Related Manufacturing Equipment

45 29 00	Petroleum and Coal Products Manufacturing
	Equipment
45 29 01	Operation and Maintenance of Petroleum and Coal Products Manufacturing Equipment
45 29 06	Schedules for Petroleum and Coal Products Manufacturing Equipment
45 29 10 to 45 30 99 User-Defined Petroleum and Coal Products Manufacturing Equipment	
45 31 00	Chemical Manufacturing Equipment
45 31 01	Operation and Maintenance of Chemical Manufacturing Equipment
45 31 06	Schedules for Chemical Manufacturing Equipment
45 31 10 to	45 32 99 User-Defined Chemical Manufacturing Equipment
45 33 00	Plastics and Rubber Manufacturing Equipment
45 33 01	Operation and Maintenance of Plastics and Rubber Manufacturing Equipment
45 33 06	Schedules for Plastics and Rubber Manufacturing Equipment
45 33 10 to	45 34 99 User-Defined Plastics and Rubber Manufacturing Equipment
45 35 00	Nonmetallic Mineral Product Manufacturing Equipment
45 35 01	Operation and Maintenance of Nonmetallic Mineral Product Manufacturing Equipment
45 35 06	Schedules for Nonmetallic Mineral Product Manufacturing Equipment
45 35 10 to	45 36 99 User-Defined Nonmetallic Mineral Product Manufacturing Equipment
45 37 00	Primary Metal Manufacturing Equipment
45 37 01	Operation and Maintenance of Primary Metal Manufacturing Equipment
45 37 06	Schedules for Primary Metal Manufacturing Equipment
45 37 10 to	45 38 99 User-Defined Primary Metal Manufacturing Equipment
45 39 00	Fabricated Metal Product Manufacturing Equipment
45 39 01	Operation and Maintenance of Fabricated Metal Product Manufacturing Equipment
45 39 06	Schedules for Fabricated Metal Product Manufacturing Equipment
45 39 10 to	45 40 99 User-Defined Fabricated Metal Product Manufacturing Equipment
45 41 00	Machinery Manufacturing Equipment
45 41 01	Operation and Maintenance of Machinery Manufacturing Equipment
45 41 06	Schedules for Machinery Manufacturing Equipment
45 41 10 to	45 42 99 User-Defined Machinery Manufacturing Equipment
45 43 00	Computer and Electronic Product Manufacturing
	Equipment
45 43 01	Operation and Maintenance of Computer and Electronic Product
	Manufacturing Equipment
45 43 06	Schedules for Computer and Electronic Product Manufacturing Equipment
45 43 10 to 45 44 99 User-Defined Computer and Electronic Product Manufacturing Equipment	
45 45 00	Electrical Equipment, Appliance, and Component
	Manufacturing Equipment
45 45 01	Operation and Maintenance of Electrical Equipment, Appliance, and Component Manufacturing Equipment

45 45 06 Schedules for Electrical Equipment, Appliance, and Component Manufacturing Equipment

45 45 10 to 45 46 99 User-Defined Electrical Equipment, Appliance, and Component Manufacturing Equipment

45 47 00 Transportation Manufacturing Equipment

- 45 47 01 Operation and Maintenance of Transportation Manufacturing Equipment
- 45 47 06 Schedules for Transportation Manufacturing Equipment
- 45 47 10 to 45 48 99 User-Defined Transportation Manufacturing Equipment

45 49 00 Furniture and Related Product Manufacturing Equipment

- 45 49 01 Operation and Maintenance of Furniture and Related Product Manufacturing Equipment
- 45 49 06 Schedules for Furniture and Related Product Manufacturing Equipment
- 45 49 10 to 45 50 99 User-Defined Furniture and Related Product Manufacturing Equipment

45 51 00 Other Manufacturing Equipment

- 45 51 01 Operation and Maintenance of Other Manufacturing Equipment
- 45 51 06 Schedules for Other Manufacturing Equipment

45 51 10 to 45 52 99 User-Defined Other Manufacturing Equipment

46 00 00	Water and Wastewater Equipment
46 01 00	Operation and Maintenance of Water and Wastewater
	Equipment
46 01 07	Operation and Maintenance of Packaged Treatment Equipment
46 01 20	Operation and Maintenance of Preliminary Treatment Equipment
46 01 30	Operation and Maintenance of Chemical Feed Equipment
46 01 40	Operation and Maintenance of Clarification and Mixing Equipment
46 01 50	Operation and Maintenance of Secondary Treatment Equipment
46 01 60	Operation and Maintenance of Advanced Treatment Equipment
46 01 70	Operation and Maintenance of Residuals Handling and Treatment
46 05 00	Common Work Results for Water and Wastewater
	Equipment
46 06 00	Schedules for Water and Wastewater Equipment
46 06 07	Schedules for Packaged Treatment Equipment
46 06 20	Schedules for Preliminary Treatment Equipment
46 06 30	Schedules for Chemical Feed Equipment
46 06 40	Schedules for Clarification and Mixing Equipment
46 06 50	Schedules for Secondary Treatment Equipment
46 06 60	Schedules for Advanced Treatment Equipment
46 06 70	Schedules for Residuals Handling and Treatment
46 07 00	Packaged Water and Wastewater Treatment Equipment
46 07 13	Packaged Water Treatment Equipment
46 07 53	Packaged Wastewater Treatment Equipment
46 08 00	Commissioning of Water and Wastewater Equipment
46 08 07	Commissioning of Packaged Treatment Equipment
46 08 20	Commissioning of Preliminary Treatment Equipment
46 08 30	Commissioning of Chemical Feed Equipment
46 08 40	Commissioning of Clarification and Mixing Equipment
46 08 50	Commissioning of Secondary Treatment Equipment
46 08 60 46 08 70	Commissioning of Advanced Treatment Equipment
	Commissioning of Residuals Handling and Treatment
46 20 00	Water and Wastewater Preliminary
	Treatment Equipment
46 21 00	Screening Equipment
46 21 11	Climber-type Bar Screens
46 21 13	Chain-and-Rake Bar Screens
46 21 16	Flexible Rake Bar Screens
46 21 17	Catenary Bar Screens
46 21 19	Continuous Belt Screens
46 21 23	Cylindrical Bar Screens
46 21 26	Step Screens
46 21 33	Rotary Drum Screens
46 21 39	Spiral Screens
46 21 43 46 21 46	Band Screens Disc Screens
46 21 51	Traveling Water Screens
402131	

- 46 21 53 Perforated Plate Screens
- 46 21 56 Wedge Wire Screens
- 46 21 57 Element Screens
- 46 21 71 Trash Raking Equipment
- 46 21 73 Screenings Washing and Compacting Equipment
- 46 21 76 Vacuum Screenings Conveying Equipment
- 46 21 79 Screenings Storage Containers
- 46 21 83 Septage Receiving Equipment

46 23 00 Grit Removal and Handling Equipment

- 46 23 13 Chain-and-Bucket Grit Removal Equipment
- 46 23 16 Chain-and-Flight Grit Removal Equipment
- 46 23 23 Vortex Grit Removal Equipment
- 46 23 27 Cyclone Degritters
- 46 23 33 Aerated Grit Removal Equipment
- 46 23 43 Inline Baffled Grit Removal Equipment
- 46 23 53 Traveling Bridge Grit Removal Equipment
- 46 23 63 Grit Classifying and Washing Equipment
- 46 23 66 Grit Storage Containers

Grinding and Shredding Equipment

- 46 24 13 Macerators
- 46 24 16 Comminutors
- 46 24 23 Inline Grinders
- 46 24 33 Open-channel Grinders
- 46 24 36 Modular Grinding-Screening-Compacting Equipment

46 25 00 Oil and Grease Separation and Removal Equipment

- 46 25 13 Coalescing Oil-Water Separators
- 46 25 16 API Oil-Water Separators
- 46 25 23 Grease Traps
- 46 25 33 Dissolved Air Flotation Grease and Oil Separation Equipment
- 46 25 41 Helical Scum Skimming and Removal Equipment
- 46 25 43 Tipping Trough Scum Škimming and Removal Equipment
- 46 25 46 Chain and Flight Scum Collection and Removal Equipment
- 46 25 47 Floating Scum Skimming and Removal Equipment

46 30 00 Water and Wastewater Chemical Feed

Equipment Gas Chemical Feed Equipment

46 31 00

46 24 00

- 46 31 11 Chlorine Gas Feed Equipment
- 46 31 13 Sulfur Dioxide Gas Feed Equipment
- 46 31 16 Ammonia Gas Feed Equipment
- 46 31 23 Gas Storage, Weighing, and Leak Detection Equipment
- 46 31 26 Emergency Gas Treatment Systems
- 46 31 33 Chlorine Dioxide Reactors
- 46 31 43 Carbon Dioxide Gas Feed Equipment
- 46 31 53 Ozone Generating and Feed Equipment
- 46 31 56 Liquid Oxygen Storage and Feed Equipment
- 46 31 59 Cleaning Requirements for Oxygen Service
- 46 31 83 Gas Chemical Feed Accessories and Safety Equipment

46 33 00 Liquid Chemical Feed Equipment

- 46 33 13 Sodium Hypochlorite Generating Equipment
- 46 33 23 Liquid Chemical Weighing Equipment
- 46 33 33 Polymer Blending and Feed Equipment
- 46 33 41 Liquid Chemical Feed System Coordination and Integration
- 46 33 42 Diaphragm-type Metering Pumps
- 46 33 44 Peristaltic Metering Pumps
- 46 33 46 Progressing Cavity Metering Pumps
- 46 33 48 Lobe Metering Pumps
- 46 33 53 Drum Pumps
- 46 33 66 Liquid Chemical Transfer Pumps
- 46 33 73 Liquid Chemical Diffusers
- 46 33 83 Liquid Chemical Feed Accessories and Safety Equipment

Dry Chemical Feed Equipment

- 46 36 11 Dry Chemical Feed System Coordination and Integration
- 46 36 13 Storage Silos

46 36 00

- 46 36 23 Dry Chemical Weighing Equipment
- 46 36 33 Volumetric Feed Equipment
- 46 36 36 Gravimetric Feed Equipment
- 46 36 43 Lime Slaking Equipment
- 46 36 53 Chemical Tablet Feeding Equipment
- 46 36 83 Dry Chemical Feed Accessories and Safety Equipment

46 40 00 Water and Wastewater Clarification and Mixing Equipment

46 41 00 Mixing Equipment

- 46 41 11 Rapid Mixers
- 46 41 13 Inline Blender-type Rapid Mixers
- 46 41 16 Induction-type Rapid Mixing Equipment
- 46 41 17 Inline Static Mixers
- 46 41 21 Jet Mixing Equipment
- 46 41 23 Submersible Mixers
- 46 41 26 Floating Mechanical Mixers
- 46 41 27 Paddle Mixers
- 46 41 29 Pin Mixers
- 46 41 31 Vertical Reel Flocculation Equipment
- 46 41 33 Horizontal Reel Flocculation Equipment
- 46 41 34 Vertical Turbine Flocculation Equipment
- 46 41 36 Walking-beam Flocculation Equipment
- 46 41 38 Horizontal Oscillating Flocculation Equipment
- 46 41 41 Top-entering Tank Mixers
- 46 41 43 Side-entry Tank Mixers
- 46 41 46 Portable Tank Mixers

46 43 00 Clarifier Equipment

- 46 43 11 Chain-and-Flight Clarifier Equipment
- 46 43 14 Traveling Bridge Clarifier Equipment
- 46 43 16 Differential Head Clarifier Equipment
- 46 43 18 Oscillating Scraper-type Clarifier Equipment
- 46 43 21 Circular Clarifier Equipment
- 46 43 53 Solids Contact Clarifier Equipment
- 46 43 61 Flocculating Clarifier, Pulsating Sludge Blanket Type

46 43 63	Dissolved Air Flotation Equipment for Water Treatment
46 43 66	Ballasted High-rate Clarifier Equipment
46 43 67	High rate Clarification/Thickening Equipment
46 43 73	Tube Settlers
46 43 76	Inclined Plate Settlers
46 46 00	Sediment Removal Equipment
46 46 13	Tipping Sediment Flushing Tanks
46 46 16	Flushing Gates
46 46 23	Water Cannon
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46 50 00	Water and Wastewater Secondary
	Treatment Equipment
46 51 00	Air and Gas Diffusion Equipment
46 51 11	Fixed Mechanical Aerators
46 51 13	Floating Mechanical Aerators
46 51 16	Submersible Aspirating Aerator Equipment
46 51 17	Jet Aeration Equipment
46 51 21	Coarse Bubble Diffusers
46 51 23	Swing-type Channel Aeration Equipment
46 51 26 46 51 31	Shear Box Diffusers Flexible Membrane Tube Diffusers
46 51 31	Flexible Membrane Disc Diffusers
46 51 36	Ceramic Disc Fine Bubble Diffusers
46 51 43	Floating Membrane Diffusers
46 51 46	Membrane Diffusers
46 51 53	Cascading Aerators
46 51 63	Pure-oxygen Generating Equipment
46 53 00	Biological Treatment Systems
46 53 13	Rotating Biological Contactors
46 53 23	Trickling Filter Rotary Distributor Equipment
46 53 24	Trickling Filter Media
46 53 26	Bio-towers
46 53 33	Moving-bed Biological Reactors
46 53 36	Integrated Fixed-film Activated Sludge Equipment
46 53 41 46 53 43	Intermittent Sand Filters for Wastewater Treatment Deep-bed Denitrification Filters
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46 53 49	Biologically Activated Filters Membrane Biological Reactors
46 53 53	Sequencing Batch Reactors
46 53 61	Oxidation Ditch Equipment
46 53 63	Vertical Loop Reactors
46 60 00	Water and Wastewater Advanced
+0 00 00	
46 61 00	Treatment Equipment
	Filtration Equipment
46 61 13 46 61 16	Filter Media Filter Surface Wash Agitators
46 61 16	Filter Surface Wash Agitators Filter Air Scour Equipment

- 46 61 19 Wash Water Troughs
- **Pressure Filters** 46 61 21
- 46 61 23 Gravity Filters
- High-rate Sand Filters 46 61 26
- Traveling Bridge Filters 46 61 29
- 46 61 33 Microfiltration and Ultrafiltration Membrane Equipment
- 46 61 41 **Disc Cloth Filters**
- 46 61 43 Rotary Drum Cloth Filters
- Automatic Backwash Cloth Filter Equipment 46 61 46
- 46 61 53 Cartridge Filters
- 46 61 63 **Bag Filters**
- 46 61 73 Automatic Straining Equipment

46 63 00 **Demineralization Equipment**

- 46 63 11 Ion-exchange Vessel Media
- 46 63 13 Mixed Bed Ion-exchange Vessel Systems
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- Electrodialysis Reversal Equipment 46 63 17
- 46 63 23 **Reverse-Osmosis and Nanofiltration Membrane Equipment**
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- 46 66 13 Closed-vessel Low-pressure/Low-intensity Ultraviolet Treatment Equipment
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- 46 66 23 Closed-vessel Medium-pressure Ultraviolet Treatment Equipment
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Open-channel Medium-pressure Ultraviolet Treatment Equipment

Water and Wastewater Residuals Handling 46 70 00 and Treatment

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- 46 71 16 **Gravity Belt Thickeners**
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- Rotary Drum Thickening Equipment 46 71 33
- 46 71 36 Centrifuge Thickening Equipment
- Disc Thickeners 46 71 43
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46 73 00 **Residuals Stabilization**

- 46 73 11 Radial Beam Fixed Digester Covers
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- 46 73 14 Radial Beam Floating Digester Covers
- 46 73 16 Dual Deck Truss-type Floating Digester Covers
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- 46 73 24 Autothermal Thermophilic Aerobic Digestion Equipment
- 46 73 26 Egg-shaped Digesters
- 46 73 31 External Draft Tube Digester Mixing System
- 46 73 32 Internal Draft Tube Digester Mixing System
- 46 73 33 Confined Gas Mixing System
- 46 73 34 Unconfined Gas Mixing System
- 46 73 41 Digester Heating Equipment
- 46 73 63 Residuals Pasteurization Equipment

46 76 00 F

Residuals Dewatering Equipment

- 46 76 13 Vacuum Filters
- 46 76 21 Belt Filter Presses
- 46 76 23 Plate-and-Frame Filter Presses
- 46 76 26 Rotary Presses
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- 46 76 33 Dewatering Centrifuges
- 46 76 53 Belt Dryers
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46 78 00 Thermal Treatment of Residuals

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- 46 78 33 Ash Handling Equipment
- 46 78 41 Recuperative Air Preheating Equipment
- 46 78 46 Regenerative Thermal Oxidizers
- 46 78 47 Waste Heat Recovery Boilers
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48 16 00	Geothermal Energy Electrical Power Generation
	Equipment
48 16 13	Geothermal Energy Heat Pumps
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48 16 19	Geothermal Energy Steam Turbines
48 16 23	Geothermal Energy Electrical Power Generators
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