

Section No.	Section Title	Water/Wastewater					Civil Eng		Building Engineering					Arch	Multidiscipline			Issue	Description	
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<b>DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS</b>																				
000000	Procurement and Contracting Requirements	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Outline Only: Single Document to specify procurement and Contract requirements. Includes topics covered in Division 00 Documents.
001116	Invitation to Bid	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Private notice for selected bidders.
002113	Instructions to Bidders	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Generic bid submission procedural requirements.
002113.11	Instructions to Bidders - AIA	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Bid submission procedural requirements incorporating and supplementing AIA A701 used with AIA Contract forms. NOTE: SpecText files do not contain referenced AIA documents.
002113.12	Instructions to Bidders - EJCDC	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Bid submission procedural requirements with EJCDC Contract forms. NOTE: SpecText files do not contain referenced EJCDC documents.
003100	Available Project Information	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	List and descriptions of geotechnical, topographic survey, existing conditions survey, and other reports.
004113	Bid Form - Stipulated Sum (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Generic lump-sum price Bid Form used with AIA, EJCDC, or other Contract forms. NOTE: SpecText files do not contain referenced AIA and EJCDC documents.
004143	Bid Form - Unit Price (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Generic unit price Bid Form used with AIA, EJCDC, or other Contract forms. NOTE: SpecText files do not contain referenced AIA and EJCDC documents.
004300	Procurement Form Supplements	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Forms to be submitted with Bid for Contractor qualifications, Subcontractor list, pricing schedules, and other information.
005213.11	Agreement Form - AIA Stipulated Sum (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Incorporates AIA form as Contract agreement. NOTE: SpecText files do not contain referenced AIA documents.
005213.12	Agreement Form - EJCDC Stipulated Sum (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Incorporates EJCDC form as Contract agreement. NOTE: SpecText files do not contain referenced EJCDC documents.
005223.11	Agreement Form - AIA Construction Management (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Incorporates AIA construction management form as Contract agreement. NOTE: SpecText files do not contain referenced AIA documents.
007213.11	General Conditions - AIA Stipulated Sum (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Incorporates AIA form as General Conditions. NOTE: SpecText files do not contain referenced AIA documents.
007213.12	General Conditions - EJCDC Stipulated Sum (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Incorporates EJCDC form as General Conditions. NOTE: SpecText files do not contain referenced EJCDC documents.

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007223.11	General Conditions - AIA Construction Management (Single-Prime Contract)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Incorporates AIA construction management form as General Conditions. NOTE: SpecText files do not contain referenced AIA documents.
007313	Supplementary Conditions - AIA	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Supplements to AIA standard general conditions. NOTE: SpecText files do not contain referenced AIA documents.
007314	Supplementary Conditions - EJCDC	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Supplements to EJCDC standard general conditions. NOTE: SpecText files do not contain referenced EJCDC documents.
007315	Supplementary Conditions - AIA (Construction Management)	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Supplements to AIA standard construction management general conditions. NOTE: SpecText files do not contain referenced AIA documents.
009113	Addenda	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	10/14	Form for preparing addenda.

## DIVISION 01 - GENERAL REQUIREMENTS

010000	General Requirements	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	04/12	Outline Only: Single section to specify general requirements. Includes topics covered in other Division 01 Sections.
011000	Summary	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Basic Contract description, work by Owner or others, Owner-furnished products, use of Site, future work, work sequence, Owner occupancy, permits, and specification conventions.
012000	Price and Payment Procedures	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Allowances, schedule of values, applications for payment, change procedures, defect assessment, unit prices, and alternates.
012500	Substitution Procedures	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Product and installer substitution procedures.
013000	Administrative Requirements	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Coordination, meetings, electrical characteristics, alterations, and special procedures.
013216	Construction Progress Schedule	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Critical path method (CPM) schedules, bar chart schedules, submittals, review and evaluation, updating, and distribution.
013300	Submittal Procedures	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Administrative and procedural requirements, product list and data, CAD files, Shop Drawings, samples, design data, reports, certificates, instructions, photographs, and reviews.
013546	Indoor Air Quality Procedures	Bas				Bas			Bas	Bas	Bas			Bas	Bas	Bas			01/15	Construction indoor air quality management plan, HVAC air filters, building flush-out, and indoor air quality testing.
014000	Quality Requirements	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Quality control, tolerances, references, labeling, mockups, testing and inspection, and manufacturer's field services.
015000	Temporary Facilities and Controls	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Temporary utilities, construction facilities, and controls.

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016000	Product Requirements	Bas	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Product description, delivery, storage, handling, and product options.
017000	Execution and Closeout Requirements	Bas	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Field engineering, startup, closeout, testing, adjusting, balancing, o&m, demonstrations and instructions, record documents, spare parts, warranties and bonds, examination, preparation, cutting & patching, and cleaning.
017419	Construction Waste Management and Disposal	Bas	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Construction waste management plan, recycling, and adaptively reusing construction waste.
018113	Sustainable Design Requirements	Bas	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	04/12	Project goals, product requirements, and documentation to support LEED certification.
019100	Commissioning	Bas	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	11/11	Administrative and procedural requirements for commissioning selected systems.

## DIVISION 02 - EXISTING CONDITIONS

024116	Structure Demolition									Bas			Bas	Bas	Bas	Bas	Bas	07/12	Demolition and removal of entire buildings or portions of buildings.
024119.13	Selective Building Demolition									Bas			Bas	Bas	Bas	Bas	Bas	01/15	Demolition of selective interior and exterior building components for renovations, alterations or additions.
024300	Structure Moving						Bas	Bas		Bas			Bas	Bas	Bas	Bas	Bas	07/12	Relocation of entire structures or portions of structures. Also includes disconnecting and reconnecting utilities.
025700	Sinkhole Remediation						Bas	Bas		Bas					Bas	Bas		04/12	Excavation within and adjacent to sinkholes and natural subsurface openings; placement of concrete or grout in bedrock openings; and backfilling.
026500	Underground Storage Tank Removal	Bas	Bas		Bas		Bas							Bas	Bas			04/12	Excavation; testing; tank decommissioning; tank removal; and backfill.
028213.33	Asbestos Abatement for Utilities	Bas	Bas		Bas		Bas							Bas				10/14	Removal of piping with coatings of asbestos-containing material (ACM).

## DIVISION 03 - CONCRETE

030100	Maintenance of Concrete	Bas	Bas		Bas		Bas	Bas					Bas	Bas	Bas	Bas	Bas	10/15	Patching and repair of damaged or deteriorated concrete, using cementitious and epoxy repair materials.
031000	Concrete Forming and Accessories						Bas	Bas		Bas			Bas	Bas	Bas	Bas	Bas	10/14	Form materials, water stops and accessories, as required to form cast-in-place concrete.
032000	Concrete Reinforcing						Bas	Bas		Bas			Bas	Bas	Bas	Bas	Bas	10/14	Reinforcing steel and supports for cast-in-place concrete.
033000	Cast-in-Place Concrete	Bas	Bas	Bas	Bas	Bas	Bas	Bas		Bas			Bas	Bas	Bas	Bas	Bas	07/14	Cast-in-place or in situ concrete for structural building frames, slabs on fill or grade, and other concrete components associated with building.
033500	Concrete Finishing												Bas	Bas	Bas			04/16	Surface finishing of concrete floor slabs and toppings, including special finishing that may be required with slab finishing.

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U 033523	Exposed Aggregate Concrete Finishing	Bas	Bas		Bas		Bas	Bas	Bas					Bas	Bas	Bas		10/16	Exposed architectural finishes on concrete surfaces, including final cleaning.
033713	Shotcrete						Bas	Bas	Bas				Bas	Bas	Bas			07/12	Concrete pneumatically-applied to contoured earth surfaces or prepared forms.
033800	Post-Tensioned Concrete						Bas	Bas	Bas				Bas	Bas	Bas			04/15	On-Site post-tensioning of cast-in-place concrete structural building framing members and slabs.
033900	Concrete Curing	Bas	Bas		Bas		Bas	Bas	Bas				Bas	Bas	Bas			01/16	Procedures for curing horizontal and vertical concrete surfaces.
034100	Precast Structural Concrete						Bas	Bas	Bas				Bas	Bas	Bas			01/15	Plant precast and prestressed concrete members for building structural framing members; lifting, supporting, and connection devices; standard or stressing reinforcement; and minor surface finish options.
034113	Precast Concrete Hollow Core Planks								Bas				Bas	Bas	Bas			01/15	Precast prestressed concrete for building structural roof and floor planks, cored; and lifting, supporting, and connecting devices.
034500	Precast Architectural Concrete								Bas				Bas	Bas	Bas			04/16	Plant-cast architecturally finished concrete wall panels.
034713	Tilt-Up Concrete						Bas	Bas	Bas				Bas	Bas	Bas			04/15	Site-cast, load- or non-load-bearing, precast concrete wall panels, including panel insulation.
034900	Glass-Fiber-Reinforced Concrete								Bas				Bas	Bas	Bas			07/12	Plant cast, architecturally finished glass fiber reinforced concrete wall units.
U 035216	Lightweight Insulating Concrete								Bas				Bas	Bas	Bas			10/16	Lightweight aggregate insulating concrete fill topping for sloped roof decks.
035400	Cast Underlayment												Bas	Bas	Bas			07/15	Liquid-applied, gypsum- or cementitious-base, self-leveling underlayment installed over interior wood or concrete subfloors.
036000	Grouting	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas				Bas	Bas	Bas			07/15	Portland-cement grout, rapid-curing epoxy grout, and non-shrink cementitious grout.
<b>DIVISION 04 - MASONRY</b>																			
040100	Maintenance of Masonry													Bas	Bas	Bas		07/14	Restoration of masonry surfaces of brick, stone, clay tile, terra cotta, and block by water, steam, sand blasting, or chemical cleaning.
040513	Masonry Mortaring						Bas	Bas	Bas				Bas	Bas	Bas			10/14	Mortar for masonry Work, specified by property method or by proportion method.
040516	Masonry Grouting								Bas				Bas	Bas	Bas			10/14	Grouting for masonry Work, specified by property method or by proportion method.
042000	Unit Masonry								Bas				Bas	Bas	Bas			01/13	Single-wythe, veneer, cavity, and reinforced, load or non-load bearing masonry units, CMU, brick, clay tile, and surface parging.
042300	Glass Unit Masonry												Bas	Bas	Bas			01/13	Glass block unit masonry, plain and decorative designs, reinforcement, joints, and accessories.

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042500	Unit Masonry Panels								Bas					Bas	Bas	Bas	Bas	07/13	Shop fabricated masonry panels of face brick veneer structurally attached to steel framing.
042613	Masonry Veneer													Bas	Bas	Bas		01/15	Masonry exterior or interior veneer walls using decorative and pre-faced masonry units.
042723	Cavity Wall Unit Masonry								Bas				Bas	Bas	Bas	Bas		10/13	Double-wythe cavity wall construction, load- and non-load-bearing, including related accessories.
042900	Engineered Unit Masonry								Bas				Bas	Bas	Bas	Bas		01/15	Steel reinforced, structural, and load-bearing masonry with grout- or concrete-filled cores.
044213	Masonry-Supported Stone Cladding								Bas				Bas	Bas	Bas	Bas		10/13	Natural stone, set in mortar, for veneer on exterior and interior walls, anchored to structural backup.
044216	Steel-Stud-Supported Stone Cladding								Bas				Bas	Bas	Bas	Bas		04/15	Cut stone veneer for exterior and interior walls, attached with metal anchors to structural backup.
047200	Cast Stone Masonry								Bas				Bas	Bas	Bas	Bas		10/13	Architectural cast stone fabricated by dry or wet casting methods to simulate natural cut stone, for use as veneer wall panels, window sills and lintels, copings, medallions, balustrades, cornices, and other decorative trim.

## DIVISION 05 - METALS

051200	Structural Steel Framing								Bas				Bas	Bas	Bas	Bas		07/13	Structural steel items including framing, anchor rods, base plates, structural frame accessories, and shop finishing.
052100	Steel Joist Framing								Bas				Bas	Bas	Bas	Bas		10/15	Open-web joists, long-span joists, deep long-span joists, joist girders, and anchorage and bearing plates.
053113	Steel Floor Decking								Bas				Bas	Bas	Bas	Bas		01/16	Shop-formed structural metal floor deck, cellular or non-cellular, and plain or ribbed.
053123	Steel Roof Decking								Bas				Bas	Bas	Bas	Bas		07/12	Structural metal roof deck; non-cellular, acoustic or non-acoustic types.
054000	Cold-Formed Metal Framing								Bas				Bas	Bas	Bas	Bas		07/13	Axially loaded steel studs, slotted channels, joists, purlin framing, and connections, including bracing, fasteners and accessories.
055000	Metal Fabrications	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas				Bas	Bas	Bas	Bas		07/13	Shop fabricated metal items of steel and aluminum.
055013	Metal Service Platforms								Bas	Bas	Bas		Bas	Bas	Bas	Bas		07/13	Steel service platforms consisting of grating, ladders and stairs, handrails, and railings used for accessing and servicing equipment.
055100	Metal Stairs						Bas	Bas	Bas				Bas	Bas	Bas	Bas		01/13	Shop fabricated steel stairs with concrete filled pan, checkered plate, or open grating; pre-engineered or engineer designed, preassembled stair towers; including integral handrails and balusters.
055200	Metal Railings						Bas	Bas	Bas				Bas	Bas	Bas	Bas		01/13	Pipe or tube railing system; aluminum or steel materials; custom fabricated or proprietary design.

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055300	Metal Gratings	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas					Bas	Bas	Bas	Bas	01/13	Metal and FRP bar gratings and floor plates for pedestrian or light vehicle loads.
057000	Decorative Metal													Bas	Bas	Bas		04/15	Basic metal materials and fabrication for specially designed and fabricated metal products by Project.
057113	Fabricated Metal Spiral Stairs													Bas	Bas	Bas		10/15	Production or custom-manufactured spiral stairs, with or without vertical center columns.

## DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

061000	Rough Carpentry								Bas				Bas	Bas	Bas	Bas	04/14	Wood framing, with lumber or pre-engineered studs, and sheathing to form superstructure of wood-framed buildings.
061053	Miscellaneous Rough Carpentry								Bas				Bas	Bas	Bas	Bas	01/13	Rough wood blocking and curbing for miscellaneous locations including roof curbs, roof cants, blocking in wall or roof openings, parapet framing, furring, and grounds.
061300	Heavy Timber Construction								Bas				Bas	Bas	Bas	Bas	04/14	Structural timber wood framing with 5 inches (125 mm) minimum cross sectional dimension.
061326	Heavy Timber Trusses								Bas				Bas	Bas	Bas	Bas	01/15	Structural timber truss framing with bolted metal connector plates and split ring connections.
061500	Wood Decking								Bas				Bas	Bas	Bas	Bas	01/14	Structural wood decking of softwood lumber, plywood, or glued-laminated lumber; plain or preservative treated; and single or multiple span over structural supports.
061733	Wood I-Joists								Bas				Bas	Bas	Bas	Bas	01/14	Shop-fabricated structural joists of wood top and bottom chords with plywood or oriented strand board web; glued and nailed or bolted assembly; with bridging, bracing, and anchorage.
061736	Metal-Web Wood Joists								Bas				Bas	Bas	Bas	Bas	10/13	Shop-fabricated structural joists of wooden top and bottom chords, with tubular metal-web truss, attached steel pin, bridging, bracing, and anchoring.
061753	Shop-Fabricated Wood Trusses								Bas				Bas	Bas	Bas	Bas	01/14	Shop-fabricated wood trusses with wood or steel plate connectors; preservative treatment; bridging, bracing, and anchorage.
061800	Glued-Laminated Construction								Bas				Bas	Bas	Bas	Bas	04/14	Shop-fabricated, glued-laminated structural wood beams, purlins, and arches, with steel hardware and attachment brackets.
062000	Finish Carpentry												Bas	Bas	Bas	Bas	07/12	Finished carpentry and wood work items, interior and exterior locations, usually site fabricated.
064100	Architectural Wood Casework												Bas	Bas	Bas	Bas	01/14	Custom designed casework and countertops of wood, metal, or high pressure decorative laminate veneer, usually shop fabricated and finished.

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064214	Stile and Rail Wood Paneling													Bas	Bas	Bas		01/15	High-quality, architectural, shop-prepared, shop-finished, and Site-installed wood-veneer paneling with solid wood trim and accessories.
064216	Flush Wood Paneling													Bas	Bas	Bas		01/15	High-quality, architectural, shop-prepared, shop-finished, and Site-installed wood-veneer paneling with solid wood trim and accessories.
066113	Simulated Stone Fabrications													Bas	Bas	Bas		01/15	Shop fabrication of custom-sized and -shaped cast quartz and resin components including washroom vanities with or without integral sink, countertops, shower stalls, contoured bathtubs, and many other building finishes or furnishing components.
066116	Solid Surfacing Fabrications													Bas	Bas	Bas		01/13	Shop fabricated, custom, cast plastic vanity tops, counter tops, window stools, bath tubs, and shower stalls.
068000	Composite Fabrications	Bas	Bas	Bas	Bas	Bas	Bas							Bas	Bas	Bas		01/15	Shop fabricated custom fiber reinforced epoxy or polyester resin components.

## DIVISION 07 - THERMAL AND MOISTURE PROTECTION

070150	Maintenance of Membrane Roofing													Bas	Bas	Bas		07/14	Removal or partial removal of existing horizontal roof covering in preparation for replacing roof membrane system.
071100	Dampproofing													Bas	Bas	Bas		07/14	Hot- or cold-applied asphalt or hot-applied coal-tar bitumen dampproofing, applied in single or multiple coats at building foundation walls and at other subgrade surfaces.
071200	Built-Up Bituminous Waterproofing						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Hot or cold applied asphalt or hot applied coal tar waterproofing, with integral fabric reinforcement for foundation walls, buried structures, and concealed horizontal slabs.
071300	Sheet Waterproofing						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Sheet waterproofing membranes of various types used in vertical and horizontal applications.
071400	Fluid-Applied Waterproofing						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Liquid rubber, elastomeric, or other waterproofing compounds, hot or cold applied, used in vertical and horizontal applications.
071700	Bentonite Waterproofing						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Manufactured waterproofing panel containing bentonite clay for below grade vertical and horizontal surfaces.
071800	Traffic Coatings													Bas	Bas	Bas		07/13	Surface fluid-applied waterproofing, either elastomeric or composition membrane coating, to accommodate light foot, vehicle, or mechanical room traffic.
071900	Water Repellents													Bas	Bas	Bas		10/14	Water- or solvent-based liquid usually applied to clay brick, concrete masonry, concrete, porous stone, or stucco surfaces as penetrant sealer or coating to retard moisture absorption.

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072113	Board Insulation													Bas	Bas	Bas		04/14	Board insulation of polystyrene, polyurethane, polyisocyanurate foam, cellular glass, or glass-fiber (rigid or semi-rigid), for use as a thermal barrier.
072116	Blanket Insulation													Bas	Bas	Bas		04/14	Glass-fiber or mineral wool batt insulation, in roll or blanket form, for use as thermal barriers.
072119	Foamed-In-Place Insulation													Bas	Bas	Bas		07/14	Site-applied plastic foam insulation by spray, frothing, or pouring.
072123	Loose-Fill Insulation													Bas	Bas	Bas		07/14	Pour-grade vermiculite or perlite granular insulation used in masonry cores or other hollow wall construction.
072126	Blown Insulation													Bas	Bas	Bas		04/15	Glass-fiber or cellulose-fiber insulation, manually or pneumatically placed, for use as a thermal barrier.
072129	Sprayed Insulation													Bas	Bas	Bas		04/15	Sprayed glass fiber or treated cellulose insulation for thermal or acoustic purposes.
072400	Exterior Insulation and Finish Systems													Bas	Bas	Bas		11/11	Composite wall cladding system (EIFS) of rigid board insulation, clad with reinforced plaster finish.
072600	Vapor Retarders													Bas	Bas	Bas		11/11	Vapor seal for the building enclosure and gaps between adjacent materials forming wall and roof openings.
072700	Air Barriers													Bas	Bas	Bas		11/11	Air seal for the building enclosure and seal between adjacent materials forming wall or roof openings.
073113	Asphalt Shingles													Bas	Bas	Bas		01/13	Organic mat or glass fiber felt asphalt composition shingles, mineral granule surfaced, over sloped nailable roof deck surface, with eave (ice dam) protection, flashings, and underlayment.
073129	Wood Shingles and Shakes													Bas	Bas	Bas		07/13	Wood shingles or shakes over nailable sloped plywood or wood roof deck surface, with ice dam membrane, flashings, and underlayment.
073200	Roof Tiles													Bas	Bas	Bas		07/13	Formed clay, concrete, or metal roofing tiles over sloped plywood or wood roof deck surface, with or without horizontal wood battens, with moisture shedding underlayment, ice dam membrane, and flashings.
074113	Metal Roof Panels													Bas	Bas	Bas		10/15	Factory formed structural and architectural sheet metal roofing and soffits with concealed or exposed fasteners.
074213	Metal Wall Panels													Bas	Bas	Bas		07/12	Profiled shop painted metal siding, site assembled, insulated, with or without metal backing sheet; horizontal or vertical profile; applied to a structural framing system.



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074243	Composite Wall Panels													Bas	Bas	Bas		10/15	Preformed, prefinished metal panel system, shop assembled, with horizontal or vertical profile, insulated, and applied to a sub-girt framing system or building structural framing system.
074616	Aluminum Siding													Bas	Bas	Bas		07/13	Aluminum siding materials formed to flat board, bevel board, sheet, or other profile.
074619	Steel Siding													Bas	Bas	Bas		07/13	Steel siding materials formed to flat board, bevel board, sheet, or other profile.
074623	Wood Siding													Bas	Bas	Bas		07/12	Wood siding materials such as flat board, bevel board, plain or resin surfaced plywood, and hardboard.
074633	Plastic Siding													Bas	Bas	Bas		07/13	Plastic siding materials formed to flat board, bevel board, sheet, or other profile.
074646	Fiber-Cement Siding													Bas	Bas	Bas		07/13	Fiber-cement siding materials formed to flat board, bevel board, sheet, or other profile.
075113	Built-Up Asphalt Roofing													Bas	Bas	Bas		10/13	Multiple-ply roofing of felts and asphalt bitumen, including base flashings, primary flashings to roof protrusions and interruptions, and integral roofing control and expansion joints.
075116	Built-Up Coal Tar Roofing													Bas	Bas	Bas		10/13	Coal tar roofing materials for repairs to existing coal tar roofs.
075200	Modified Bituminous Membrane Roofing													Bas	Bas	Bas		10/13	Roofing of reinforced composite membrane of modified asphalt bitumen, heat-fused seams, substrate, base flashings, flashings for roof protrusions and penetrations, and expansion joints.
075219	Self-Adhering Modified Bituminous Membrane Roofing													Bas	Bas	Bas		07/12	Single ply rubberized asphalt bitumen factory bonded to polyethylene sheeting, adhered to substrate with a protective covering.
075403	Sheet Membrane Roofing - Fully Adhered													Bas	Bas	Bas		01/14	Single-sheet EPDM, PVC, neoprene, TPO, or other single or composite membrane roofing, fully bonded to substrate by various adhesives or bitumen, and exposed to view without ballast cover. System includes base flashings, primary flashings to roof protrusion
075404	Sheet Membrane Roofing - Loose Laid Ballasted													Bas	Bas	Bas		01/14	Single-sheet EPDM, PVC, neoprene, TPO, or other single- or composite-membrane roofing, loose laid over insulation surfaces, and with aggregate- or paver-ballast cover. The system includes base flashings, primary flashings to roof protrusions, and integral
075405	Sheet Membrane Roofing - Mechanically Attached													Bas	Bas	Bas		01/14	Sheet EPDM, PVC, neoprene, TPO, or other single- or composite-membrane roofing, placed over insulation surfaces and mechanically attached, with optional aggregate or paver-ballast cover or color-coated finish. System includes base flashings, primary flash

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075551	Built-Up Bituminous Protected Membrane Roofing													Bas	Bas	Bas		01/14	Roofing of felts and asphalt bitumen, base flashings, flashings to roof protrusions and interruptions, expansion joints, loose-laid insulation, and gravel, paver, or concrete ballast.
075552	Modified Bituminous Protected Membrane Roofing													Bas	Bas	Bas		04/14	Single or multiple ply roofing of reinforced composite membrane of modified asphalt bitumen, adhered over structural deck, loose laid insulation with gravel, paver, or concrete ballast and filter fabric over insulation.
075553	Elastomeric Protected Membrane Roofing													Bas	Bas	Bas		04/12	Single ply roof membranes of various types, over structural deck, loose laid insulation, with gravel, paver, or concrete ballast and filter fabric over.
075700	Coated Foamed Roofing													Bas	Bas	Bas		07/12	Spray applied foam insulation over a roof deck substrate, covered with a spray applied protective overcoat.
076100	Sheet Metal Roofing													Bas	Bas	Bas		10/15	Metal roofing, formed to flat, standing, or battened seams; metal gutters, downspouts, and eaves (ice dam) protection.
076200	Sheet Metal Flashing and Trim													Bas	Bas	Bas		07/15	Sheet metal, flashing, and trim associated with roofing and waterproofing membranes.
077100	Roof Specialties													Bas	Bas	Bas		04/12	Manufactured copings and facias, gravel stops, roof expansion joints, snow guards, and attic vents, snow guards.
077123	Manufactured Gutters and Downspouts													Bas	Bas	Bas		07/12	Metal or plastic rainwater gutters and downspouts.
077233	Roof Hatches													Bas	Bas	Bas		07/15	Shop-fabricated roof hatches and vents, with integral support curbs or for placement on Site-fabricated wood curbs.
078100	Applied Fireproofing													Bas	Bas	Bas		07/15	Cementitious and mineral fiber fireproofing, spray applied, and intumescent paint fireproofing to achieve fire protection.
078400	Firestopping								Bas	Bas	Bas	Bas		Bas	Bas	Bas		04/12	Opening protection for penetrations through fire rated construction and smoke seal protection at joint between the edge of a floor slab and adjacent exterior wall construction.
079000	Joint Protection	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas	Bas		07/15	Gun-grade and pourable sealants, compressible foam sealers, and gaskets for sealing static joints, dynamic joints, and joints between differing materials and components.
079500	Expansion Control													Bas	Bas	Bas		07/13	Interior floor, wall, and ceiling expansion or control joint cover assemblies.
<b>DIVISION 08 - OPENINGS</b>																			
081163	Metal Screen and Storm Doors and Frames													Bas	Bas	Bas		07/13	Modular sized, packaged, and glazed aluminum storm doors, frames, and operating hardware intended to be attached to wood-frame door openings.

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081213.13	Standard Hollow Metal Frames													Bas	Bas	Bas		01/15	Standard shop fabricated steel frames, fire rated and non-rated types.
081213.53	Custom Hollow Metal Frames													Bas	Bas	Bas		01/15	Custom shop fabricated steel frames, fire rated and non-rated types.
081313.13	Standard Hollow Metal Doors													Bas	Bas	Bas		01/15	Standard shop fabricated steel doors, door panels, fire rated and non-rated types, flush face or stile and rail designs.
081313.53	Custom Hollow Metal Doors													Bas	Bas	Bas		01/15	Custom shop fabricated steel doors, door panels, fire rated and non-rated types, flush face or stile and rail designs.
081376	Bifolding Metal Doors													Bas	Bas	Bas		10/14	Residential-quality flush, raised panel, mirrored, and louvered hollow metal and metal-framed bifolding doors.
081416	Flush Wood Doors													Bas	Bas	Bas		04/12	Solid and hollow core flush wood doors; wood veneer, plastic laminate or hardboard facing material; fire rated and non-rated types; flush or glazed design; with or without louvers.
081433	Stile and Rail Wood Doors													Bas	Bas	Bas		04/12	Stile and rail wood doors, fire rated and non-rated types; wood panel or glazed design.
081476	Bifolding Wood Doors													Bas	Bas	Bas		10/14	Residential-quality flush, raised and flat-panel, glazed, louvered, hollow- and solid-core, stile, and rail-wood doors.
081713	Integrated Metal Door Opening Assemblies													Bas	Bas	Bas		01/15	Flush, embossed, and decorative steel doors prehung in steel or wood frames, typically used as entry doors.
083113	Access Doors and Frames								Bas	Bas	Bas	Bas		Bas	Bas	Bas		01/16	Metal access doors and panels, with frames for walls, ceilings, and floors, with insulation, and with and without fire-resistance ratings.
083213	Sliding Aluminum-Framed Glass Doors													Bas	Bas	Bas		07/12	Sliding glass and aluminum doors.
083216	Sliding Plastic-Framed Glass Doors													Bas	Bas	Bas		07/12	Sliding glass and extruded plastic (PVC) doors.
083219	Sliding Wood-Framed Glass Doors													Bas	Bas	Bas		07/12	Sliding glass and wood doors, plastic or aluminum clad.
083323	Overhead Coiling Doors													Bas	Bas	Bas		01/16	Horizontal steel or aluminum interlocking slat, rolling or coiling doors and shutters, industrial or commercial quality, manual or electrical operation, and fire-rated or non-fire-rated.
083326	Overhead Coiling Grilles													Bas	Bas	Bas		01/16	Rolling or coiling grilles, with manual or electric operation, single or multiple sections of horizontal steel, and aluminum or stainless steel members.
083513	Folding Doors													Bas	Bas	Bas		07/12	Accordion folding doors, acoustic or non-acoustic type, with vinyl coated fabric finish; manual operation, with overhead track and hardware.

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083613	Sectional Doors													Bas	Bas	Bas		04/16	Wood, steel, and aluminum overhead sectional doors, with manual and electric operation.
083813	Flexible Strip Doors	Bas												Bas	Bas	Bas	Bas	07/16	Plastic hanging-strip doors to accommodate personnel and light traffic, with mounting frame and accessories.
083816	Flexible Traffic Doors	Bas												Bas	Bas	Bas	Bas	07/16	Plastic hanging-strip doors to accommodate vehicular and crane traffic, with mounting frame and accessories.
083819	Rigid Traffic Doors	Bas												Bas	Bas	Bas	Bas	07/16	Swinging, double-action, rigid doors to accommodate personnel and vehicular traffic, with mounting frame and accessories.
084113	Aluminum-Framed Entrances and Storefronts													Bas	Bas	Bas		04/16	Aluminum-framed storefronts for exterior and interior applications, including aluminum and glass doors, door frames, and glazed lights.
084226	All-Glass Entrances													Bas	Bas	Bas		07/12	Structural glass doors and sidelights for exterior and interior applications.
084229	Automatic Entrances													Bas	Bas	Bas		07/12	Electrically powered horizontally sliding or swinging automatic entrance door systems, with electromechanical, pneumatic, or hydraulic operating equipment.
084233	Revolving Door Entrances													Bas	Bas	Bas		07/12	Revolving door unit of glass and metal construction, manual or motor assisted operation, and collapsing door wings for emergency egress.
084413	Glazed Aluminum Curtain Walls													Bas	Bas	Bas		07/12	Tubular aluminum exterior curtain wall system for multi-story cladding; site assembled or shop fabricated subassemblies; factory finished, vision glass, infill panels, louvers, and glazing.
084426	Structural Glass Curtain Walls													Bas	Bas	Bas		07/12	Interior aluminum frame supporting an exterior glazed wall, site assembled or shop fabricated subassemblies.
084426.19	Point Supported Structural Glass													Bas	Bas	Bas		01/15	This section includes a suspended tempered glass, single pane wall system, shop fabricated, including perimeter glazing frame, anchors, and glass joint plates.
084433	Sloped Glazing Assemblies													Bas	Bas	Bas		07/12	Exterior glazing in aluminum extruded sections, self supporting or supported by structural framing, shop fabricated, factory finished, vision glass or plastic glazing, single or double pane.
084500	Translucent Wall and Roof Assemblies													Bas	Bas	Bas		01/16	Factory-assembled panels of translucent skins bonded to aluminum grid core or extruded translucent plastic cellular panels, for vertical or sloped applications.

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085113	Aluminum Windows													Bas	Bas	Bas		01/15	Residential, commercial, and light institutional factory-finished, extruded aluminum windows, with fixed or operable sash, glass and glazing, operating hardware, and insect screens.
085200	Wood Windows													Bas	Bas	Bas		01/15	High-quality residential and commercial quality wood windows of production quality; Site finished or plastic- or metal clad-finished, with fixed or operable sash, glass and glazing, operating hardware, and insect screens.
085300	Plastic Windows													Bas	Bas	Bas		07/16	Extruded PVC windows with fixed or operable sash, screens, and hardware.
086200	Unit Skylights													Bas	Bas	Bas		07/16	Factory-fabricated skylights with plastic dome and aluminum frame and with or without support curb and counterflashings.
086300	Metal-Framed Skylights													Bas	Bas	Bas		04/12	Site assembled metal-framed skylight systems with glass or plastic glazing.
087100	Door Hardware													Bas	Bas	Bas		04/16	Door hardware, gaskets, and thresholds, written as a preamble to a door schedule.
088000	Glazing													Bas	Bas	Bas		04/16	An outline approach to the wide range of available glass and plastic glazing types, exterior and interior glazing materials, and methods.
088300	Mirrors													Bas	Bas	Bas		07/12	Custom glass and plastic mirror types, various attachment and glazing methods, site installed.
089100	Louvers													Bas	Bas	Bas		07/16	Fixed- and operable-blade wall louvers and frame, and blank-out sheeting.
<b>DIVISION 09 - FINISHES</b>																			
092116	Gypsum Board Assemblies													Bas	Bas	Bas		07/16	Metal-channel and stud framing, with paper- or vinyl-faced gypsum board; for walls, ceilings, soffits, furred space enclosures, and shaftwall systems; includes taped-joint or batten-joint closures.
092213	Metal Furring													Bas	Bas	Bas		10/14	Metal furring usually associated with gypsum or cement plaster finish.
092216	Non-Structural Metal Framing													Bas	Bas	Bas		07/12	Lightweight, non-axial load bearing metal stud framing and bracing.
092236	Lath													Bas	Bas	Bas		10/14	Framing and lathing, usually associated with gypsum or cement plaster finish.
092300	Gypsum Plastering													Bas	Bas	Bas		04/12	Gypsum plaster for interior finish; two coat application over solid surfaces, or a three coat application over metal lath.
092400	Cement Plastering													Bas	Bas	Bas		04/12	Portland cement plaster for an interior or exterior finish; two coat application over solid surfaces; or a three coat application over metal lath. Sometimes referred to as stucco.

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092613	Gypsum Veneer Plastering													Bas	Bas	Bas		04/12	Interior gypsum veneer plaster in one or two coats applied to various substrates and over electric radiant heating cable.
U 092713	Glass-Fiber-Reinforced Gypsum Fabrications													Bas	Bas	Bas		10/16	Glass-fiber, reinforced gypsum fabrications and attachment accessories for interior applications.
093000	Tiling													Bas	Bas	Bas		04/12	Ceramic, quarry, and paver tile for floor, wall, base, and stair tread applications.
U 095113	Acoustical Panel Ceilings													Bas	Bas	Bas		10/16	Acoustic ceiling systems, consisting of suspension system, metal grid, and drop-in acoustic tile or panels, fire or non-fire rated.
U 095123	Acoustical Tile Ceilings													Bas	Bas	Bas		10/16	Acoustic tile ceiling finish, adhesive applied to substrate surface.
095416	Luminous Ceilings													Bas	Bas	Bas		07/12	Luminous ceilings comprised of a translucent finished ceiling element suspended below an illuminated ceiling cavity.
095423	Linear Metal Ceilings													Bas	Bas	Bas		07/12	Suspended, pre-finished ceiling or soffit system; of formed steel or aluminum.
095800	Integrated Ceiling Assemblies													Bas	Bas	Bas		07/12	Integrated ceiling system, flat or vaulted acoustic panels, integral light fixtures, air handling devices, accommodation for fire sprinkler heads, audio speakers and perimeter trim.
096313	Brick Flooring													Bas	Bas	Bas		07/12	Decorative fired brick flooring; set in Portland cement bedding mortar with Portland cement or chemical-resistant grout jointing
096340	Stone Flooring													Bas	Bas	Bas		04/12	Thin stone floor units bases, thresholds, stair treads and risers, set in bedding mortar or thinset with mortar jointing.
096423	Wood Parquet Flooring													Bas	Bas	Bas		10/14	Hardwood parquet flooring, glued to substrate surface.
096429	Wood Strip and Plank Flooring													Bas	Bas	Bas		10/14	Hardwood strip or plank flooring with vapor barrier, sleepers, and plywood subfloor.
096500	Resilient Flooring													Bas	Bas	Bas		11/11	Vinyl, vinyl composition, rubber, and composite materials for sheet and tile flooring, perimeter bases, and stair treads and risers.
096613	Portland Cement Terrazzo Flooring													Bas	Bas	Bas		07/12	Portland cement terrazzo flooring, base, border and curbs with monolithic underbed, sand cushion underbed, and bonded terrazzo application methods.
096623	Resinous Matrix Terrazzo Flooring													Bas	Bas	Bas		04/12	Terrazzo composed of epoxy, polyacrylate/portland cement, or polyester matrix for flooring, base, and border; bonded to subfloor.
096700	Fluid-Applied Flooring													Bas	Bas	Bas		04/12	Fluid-applied flooring of any type, except plastic matrix terrazzo.

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096713	Elastomeric Liquid Flooring													Bas	Bas	Bas		07/12	Resilient, fluid applied, polyurethane elastomeric, self leveling flooring of various thicknesses.
096813	Tile Carpeting													Bas	Bas	Bas		07/12	Carpet tile, fully adhered to substrate or loose laid with edges and selected rows adhered.
096816	Sheet Carpeting													Bas	Bas	Bas		07/12	Carpet laid on cushion, power stretched, with trim accessories and carpet adhered to subfloor with contact adhesive, with trim accessories.
096900	Access Flooring													Bas	Bas	Bas		07/12	Access flooring, elevated above a structural floor with removable floor panels.
097200	Wall Coverings													Bas	Bas	Bas		11/11	Vinyl coated fabric wall covering, adhesive bonded to substrate, includes prime painting.
097713	Stretched-Fabric Wall Systems													Bas	Bas	Bas		11/11	Stretched fabric acoustic panels site fabricated with track, core and fabric face.
099000	Painting and Coating	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas		10/14	Preparing, priming, painting, staining, and applying finishes to scheduled surfaces, including mechanical, electrical, and equipment finishing.
099400	Decorative Finishing													Bas	Bas	Bas		10/14	Spray- or trowel-applied decorative aggregate surfacing set into an epoxy or cementitious bed.
099600	High-Performance Coatings	Bas	Bas	Bas	Bas	Bas	Bas	Bas	Bas					Bas	Bas	Bas		10/14	Fluid-applied coatings intended for applications requiring improved scrubability and durability, increased chemical resistance, or increased corrosion protection.
099635	Chemical-Resistant Coatings	Bas	Bas		Bas	Bas	Bas							Bas				10/14	Coating to surfaces requiring protection from process chemicals.

## DIVISION 10 - SPECIALTIES

101100	Visual Display Units													Bas	Bas	Bas		07/12	Chalkboards, markerboards, and tackboards; framed or frameless type; with accessories.
101400	Signage	Bas	Bas	Bas		Bas								Bas	Bas	Bas		07/12	Plastic plaque door or wall signs with engraved or raised characters; sign of individual mounted plastic characters; signs of silk screened or sand blasted characters on plastic.
102113	Toilet Compartments													Bas	Bas	Bas		07/12	Baked enamel and plastic laminate toilet compartments and accessories; floor, wall, or ceiling mounted.
102113.16	Plastic-Laminate-Clad Toilet Compartments													Bas	Bas	Bas		01/15	Shop-fabricated plastic laminate clad toilet compartments and accessories; floor, wall, and ceiling mounted.
102113.19	Plastic Toilet Compartments													Bas	Bas	Bas		01/15	Shop-fabricated solid plastic toilet compartments and accessories; floor, wall, and ceiling mounted.
102123	Cubicle Curtains and Tracks													Bas	Bas	Bas		07/12	Curtains and overhead track used for privacy screening in medical facilities.

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102213	Wire Mesh Partitions													Bas	Bas	Bas		04/12	Woven or expanded metal wire mesh partitions; steel or aluminum frame; hinged doors or access panel; operating hardware, and accessories.
102219	Demountable Partitions													Bas	Bas	Bas		07/12	Demountable interior gypsum board partitions, reusable components, modular sized framing, framed openings; concealed or exposed jointing methods.
102223.23	Movable Panel Systems													Bas	Bas	Bas		01/15	Operable panel partitions of various types, floor to ceiling acoustic type.
102233	Accordion Folding Partitions													Bas	Bas	Bas		01/15	Accordion folding partitions, acoustic or non-acoustic type, with vinyl coated fabric finish; manual and electric operation, with overhead track and hardware.
102600	Wall and Door Protection													Bas	Bas	Bas		04/12	Manufactured wall and corner guard devices used to protect interior wall surfaces and corners.
102800	Toilet, Bath, and Laundry Accessories													Bas	Bas	Bas		07/12	This section is intended to cover any type of toilet, bath, shower, washroom and utility room accessories.
103100	Manufactured Fireplaces													Bas	Bas	Bas		11/11	Manufactured steel cabinet fireplaces with chimney, optional doors or face screen, and accessories.
104400	Fire Protection Specialties													Bas	Bas	Bas		01/14	Fire extinguishers, cabinets, mounting hardware, and fire blankets.
105113	Metal Lockers													Bas	Bas	Bas		11/11	Metal wardrobe lockers, shop fabricated, with locker benches and accessories.
105513	Central Mail Delivery Boxes													Bas	Bas	Bas		04/12	Multiple mail boxes often used in office, apartment, and multiple tenant buildings.
105591	Mail Chutes													Bas	Bas	Bas		07/12	Vertical mail chutes for multi-story buildings, including receiving box at chute bottom.
107313	Awnings													Bas	Bas	Bas		07/12	Fixed awnings of special or custom shape, plastic and synthetic fabric covering over a formed pipe or tube framing system.
107500	Flagpoles						Bas	Bas	Bas					Bas	Bas	Bas		04/12	Metal and glass fiber flagpoles, primed for site painting or prefinished, ground or building mounted, with manual or electric operation.

## DIVISION 11 - EQUIPMENT

111200	Parking Control Equipment													Bas	Bas	Bas		04/12	Parking gate arm and activator units, devices for ticket, card, coin, or remote controlled access, and vehicle detection activators.
111313	Loading Dock Bumpers													Bas	Bas	Bas		07/12	Reinforced molded rubber bumpers or fabric reinforced laminated rubber bumpers for loading docks, with steel frame, steel rod joiners and anchor bolts.
111316	Loading Dock Seals and Shelters													Bas	Bas	Bas		07/12	Loading dock seals and shelters for vehicular truck traffic.



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111319	Stationary Loading Dock Equipment													Bas	Bas	Bas		07/12	Loading dock levelers, manual, hydraulic or spring/torsion operation; mechanical restraint safety vehicle locks.
114000	Foodservice Equipment													Bas	Bas	Bas		07/12	Outline of specification statements supplementing a food service equipment list or schedule.
115213	Projection Screens													Bas	Bas	Bas		04/12	Electrically and manually operated projection screens.
115300	Laboratory Equipment	Bas	Bas	Bas		Bas								Bas	Bas	Bas		04/14	General requirements to precede a detailed laboratory equipment schedule, including laboratory equipment, connections to utilities, service fittings, and outlets.
116623.13	Basketball Equipment													Bas	Bas	Bas		04/12	Indoor and outdoor basketball backstops including masts, backboards, goals and nets.
118213	Solid Waste Bins	Bas												Bas	Bas	Bas	Bas	07/16	Indoor, outdoor, and roll-off containers for the collection of recyclables or trash and other solid waste.
118226	Facility Waste Compactors													Bas	Bas	Bas		07/12	Commercial waste compactors.

## DIVISION 12 - FURNISHINGS

N 122113.13	Metal Horizontal Louver Blinds													Bas	Bas	Bas		10/16	Interior horizontal slat window blinds, of steel or aluminum, with lifting cord and cord or wand for tilting slats.
N 122113.23	Wood Horizontal Louver Blinds													Bas	Bas	Bas		10/16	Interior horizontal slat window blinds, of wood, with lifting cord and cord or wand for tilting slats.
122216	Drapery Track and Accessories													Bas	Bas	Bas		07/12	Drapery track, manual or electric operated; formed steel or extruded aluminum channel, single or double track; end and intermediate supports and nylon carriers.
123100	Manufactured Metal Casework													Bas	Bas	Bas		04/12	Shop fabricated metal casework, usually modular dimension, including a common range of counter top types and laboratory service fittings.
123530	Residential Casework													Bas	Bas	Bas		11/11	Shop fabricated and modular sized residential quality casework, of proprietary manufacture, site installed.
124813	Entrance Floor Mats and Frames													Bas	Bas	Bas		04/12	Surface or recessed entry floor mats, carpet, vinyl link, rubber link, or cocoa types; with or without custom design inlay.

## DIVISION 13 - SPECIAL CONSTRUCTION

131100	Swimming Pools													Bas	Bas	Bas		11/11	Site fabricated shotcrete swimming pool and shop fabricated, site assembled swimming pool and pool accessories.
131713	Hot Tubs													Bas	Bas	Bas		11/11	Shop fabricated and site assembled or site constructed hot tub or spa, decking, and equipment.

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132126	Cold Storage Rooms													Bas	Bas	Bas		07/12	Shop fabricated and site assembled, modular sized insulated panels for cold room walls and ceilings including an integral or remote refrigeration unit.
132416	Saunas													Bas	Bas	Bas		11/11	Shop fabricated site assembled or site constructed sauna room enclosure and equipment.
132426	Steam Baths													Bas	Bas	Bas		07/12	Shop fabricated site assembled or site constructed steam room enclosure and equipment.
133419	Metal Building Systems								Bas				Bas	Bas	Bas	Bas		07/12	Standard package pre-engineered steel building frame, metal wall and sloped roof system.
134713	Cathodic Protection	Bas	Bas	Bas	Bas		Bas		Bas	Bas		Bas		Bas	Bas		01/15	Passive cathodic protection to buried metallic utility piping, buried metal structures, and buried metal tanks using sacrificial galvanic anodes.	
134900	Radiation Protection													Bas	Bas	Bas		07/12	X-ray radiation protection achieved by lead sheet and lead sheet laminated products including view windows and film transfer cabinets.

## DIVISION 14 - CONVEYING EQUIPMENT

141000	Dumbwaiters													Bas	Bas	Bas		07/12	Standard manufactured electrically operated dumbwaiters, drum or traction drive.
142113	Electric Traction Freight Elevators													Bas	Bas	Bas		07/12	Electric freight elevator systems, with one or multiple cars, including common available options.
142123	Electric Traction Passenger Elevators													Bas	Bas	Bas		11/11	Electric passenger elevator systems, with one or multiple cars, including common available options.
142413	Hydraulic Freight Elevators													Bas	Bas	Bas		07/12	Hydraulic freight elevator systems, with one or multiple cars, including common available options.
142423	Hydraulic Passenger Elevators													Bas	Bas	Bas		11/11	Hydraulic passenger elevator systems, with one or multiple cars, including common available options.
143100	Escalators													Bas	Bas	Bas		07/12	Standard packaged escalators, with glass or solid balustrades, including common available options.
144200	Wheelchair Lifts													Bas	Bas	Bas		11/11	Electrically operated vertical platform, wheelchair lifts.

## DIVISION 21 - FIRE SUPPRESSION

210500	Common Work Results for Fire Suppression								Bas	Bas	Bas				Bas	Bas		01/13	Pipe materials, fittings, valves, equipment for wet-pipe sprinkler system, wet or dry standpipe, fire hose cabinet and hose, fire department connections for building fire protection systems, and fire pumps.
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Section No.	Section Title	Water/Wastewater					Civil Eng		Building Engineering					Arch	Multidiscipline			Issue	Description
		WW	WWP	WWE	WWU	IWT	SCW	SC	Eng	ME	Mech	Elec	Str	Arch	Comp	AE	MH	Date	
210513	Common Motor Requirements for Fire-Suppression Equipment								Bas	Bas	Bas	Bas			Bas	Bas		01/13	Electric motors and their accessories normally supplied as part of equipment assemblies.
210516	Expansion Fittings and Loops for Fire-Suppression Piping								Bas	Bas	Bas				Bas	Bas		01/13	Fittings and practices used to compensate for thermal expansion and other movements in fire suppression piping systems.
210548	Vibration and Seismic Controls for Fire-Suppression Piping and Equipment								Bas	Bas	Bas				Bas	Bas		01/13	Inertia bases and vibration isolation equipment used for vibration and seismic control of fire suppression equipment.
211200	Fire-Suppression Standpipes								Bas	Bas	Bas				Bas	Bas		01/13	Standpipe, fire department connections, piping and other components including fire hose connections and cabinets.
211313	Wet-Pipe Sprinkler Systems								Bas	Bas	Bas				Bas	Bas		01/13	Automatic wet pipe fire-protection sprinkler system.
211316	Dry-Pipe Sprinkler Systems								Bas	Bas	Bas				Bas	Bas		01/13	Automatic dry pipe fire-protection sprinkler system.
211326	Deluge Fire-Suppression Sprinkler Systems								Bas	Bas	Bas				Bas	Bas		01/13	Automatic deluge fire-protection sprinkler system.
213000	Fire Pumps								Bas	Bas	Bas				Bas	Bas		10/13	Listed fire pumps and drivers, either electric motors or diesel engines, as well as an electrically driven jockey pump and related controls; systems assembled from individual components or factory packaged.

## DIVISION 22 - PLUMBING

220513	Common Motor Requirements for Plumbing Equipment								Bas	Bas	Bas	Bas			Bas	Bas		01/13	Electric motors and their accessories normally supplied as part of equipment assemblies.
220516	Expansion Fittings and Loops for Plumbing Piping								Bas	Bas	Bas				Bas	Bas		01/13	Fittings and practices used to compensate for thermal expansion and other movements in plumbing piping systems.
220523	General-Duty Valves for Plumbing Piping								Bas	Bas	Bas				Bas	Bas		01/13	Ball, butterfly, check, gate, and globe valves used in plumbing piping systems.
220529	Hangers and Supports for Plumbing Piping and Equipment								Bas	Bas	Bas				Bas	Bas		01/13	Supports, hangers, anchors, sleeves and sealing of work to adjacent construction for plumbing systems
220548	Vibration and Seismic Controls for Plumbing Piping and Equipment								Bas	Bas	Bas				Bas	Bas		01/13	Inertia bases and vibration isolation equipment used for vibration and seismic control of plumbing equipment.
220553	Identification for Plumbing Piping and Equipment	Bas	Bas	Bas	Bas		Bas		Bas	Bas	Bas				Bas	Bas		01/13	Nameplates, labeling, and identification methods for plumbing equipment and components.
220700	Plumbing Insulation	Bas	Bas	Bas	Bas		Bas		Bas	Bas	Bas				Bas	Bas		11/11	Insulation applied to plumbing equipment and piping systems.
221100	Facility Water Distribution								Bas	Bas	Bas				Bas	Bas		01/13	Domestic water piping systems with pipe, valves, piping specialties, pumps and other components.
221200	Facility Potable-Water Storage Tanks								Bas	Bas	Bas				Bas	Bas		01/13	Potable water storage tanks for hot, cold domestic water.

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221300	Facility Sanitary Sewerage								Bas	Bas	Bas				Bas	Bas		01/13	Pipe materials, fittings, equipment and pumps for sanitary piping systems.
221400	Facility Storm Drainage								Bas	Bas	Bas				Bas	Bas		01/13	Pipe, pipe fittings, connections, equipment and pumps for storm water piping systems.
221429	Sump Pumps						Bas	Bas	Bas	Bas	Bas				Bas	Bas		01/13	Sump pumps for installation in sumps to pump effluent or drain water from structures and facilities.
221429.16	Submersible Sump Pumps	Bas	Bas	Bas	Bas		Bas								Bas			01/15	Submersible and non-submersible sump pumps used to lift and transport wastewater from plant sumps.
221513	General Service Compressed-Air Piping								Bas	Bas	Bas				Bas	Bas		07/15	Piping for compressed-air systems in plant applications, including pipe, fittings, and accessories.
221516	General Service Compressed-Air Valves								Bas	Bas	Bas				Bas	Bas		07/15	Valves and accessories for compressed air systems in plant or process applications.
221519	General Service Packaged Air Compressors and Receivers								Bas	Bas	Bas				Bas	Bas		07/15	Components for compressed air systems in plant or process applications, including air compressors, after coolers, air dryers, and air receivers.
223100	Domestic Water Softeners								Bas	Bas	Bas				Bas	Bas		01/13	Water softeners.
223300	Electric Domestic Water Heaters								Bas	Bas	Bas				Bas	Bas		01/13	Electric water heaters for domestic water systems.
223400	Fuel-Fired Domestic Water Heaters								Bas	Bas	Bas				Bas	Bas		01/13	Fuel fired water heaters for domestic water systems.
223500	Domestic Water Heat Exchangers								Bas	Bas	Bas				Bas	Bas		01/13	Heat exchangers for domestic water systems.
224000	Plumbing Fixtures								Bas	Bas	Bas				Bas	Bas		11/11	Plumbing fixtures and trim.
225100	Swimming Pool Plumbing Systems								Bas	Bas	Bas				Bas	Bas		01/13	Piping and equipment for swimming pools.
226000	Gas and Vacuum Systems for Laboratory and Healthcare Facilities								Bas	Bas	Bas				Bas	Bas		01/15	Common systems including pipe and pipe fittings, specialties, outlets, and equipment.
<b>DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)</b>																			
230503	Pipes and Tubes for HVAC Piping and Equipment								Bas	Bas	Bas				Bas	Bas		01/13	Pipe materials and fittings normally encountered in HVAC piping systems and common to more than one section in this Division.
230513	Common Motor Requirements for HVAC Equipment								Bas	Bas	Bas	Bas			Bas	Bas		01/13	Electric motors and their accessories normally supplied as part of equipment assemblies.
230516	Expansion Fittings and Loops for HVAC Piping								Bas	Bas	Bas				Bas	Bas		01/13	Fittings and practices used to compensate for thermal expansion and other movements in piping systems for HVAC piping systems such as hot water, chilled water, steam, and refrigerant systems.
230523	General-Duty Valves for HVAC Piping								Bas	Bas	Bas				Bas	Bas		01/13	Ball, butterfly, check, gate, and globe valves used in HVAC piping systems.
230529	Hangers and Supports for HVAC Piping and Equipment								Bas	Bas	Bas				Bas	Bas		07/15	Supports, hangers, anchors, sleeves and sealing of Work to adjacent construction, applicable to HVAC systems.

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230548	Vibration and Seismic Controls for HVAC								Bas	Bas	Bas					Bas	Bas	10/14	Inertia bases and vibration isolation equipment used for attenuation of air-borne sound of HVAC equipment including duct silencers, cross-talk silencers, acoustic housings, ductwork lagging, acoustical louvers.
230553	Identification for HVAC Piping and Equipment								Bas	Bas	Bas					Bas	Bas	01/13	Nameplates, labeling, and identification methods for HVAC equipment and components.
230593	Testing, Adjusting, and Balancing for HVAC								Bas	Bas	Bas					Bas	Bas	11/11	Testing, adjusting, and balancing of heating, ventilating, and air conditioning systems.
230700	HVAC Insulation								Bas	Bas	Bas					Bas	Bas	11/11	Insulation applied to HVAC ductwork, equipment and piping systems.
230800	Commissioning of HVAC								Bas	Bas	Bas					Bas	Bas	11/11	Responsibilities and tasks for HVAC system commissioning.
230900	Instrumentation and Control for HVAC								Bas	Bas	Bas					Bas	Bas	10/13	Components and input and output devices for pneumatic, digital, and electric control systems, software description for digital control systems, and sequence of operation for mechanical systems.
230923	Direct-Digital Control System for HVAC								Bas	Bas	Bas					Bas	Bas	07/12	Components and software for a direct digital control system.
230953	Pneumatic and Electric Control System for HVAC								Bas	Bas	Bas					Bas	Bas	01/13	Equipment and devices for a pneumatic control system.
230993	Sequence of Operations for HVAC Controls								Bas	Bas	Bas					Bas	Bas	01/13	Sequence of operation for mechanical systems and system components.
231113	Facility Fuel-Oil Piping								Bas	Bas	Bas					Bas	Bas	01/13	Pipe materials, fittings, valves, and piping specialties normally encountered in fuel oil piping systems.
231116	Facility Gasoline Piping								Bas	Bas	Bas					Bas	Bas	01/14	Pipe materials, fittings, valves, and piping specialties normally encountered in gasoline piping systems.
231123	Facility Natural-Gas Piping								Bas	Bas	Bas					Bas	Bas	01/13	Pipe materials, fittings, valves, and piping specialties normally encountered in natural gas piping systems.
231126	Facility Liquefied-Petroleum Gas Piping								Bas	Bas	Bas					Bas	Bas	01/13	Pipe materials, fittings, valves, and piping specialties normally encountered in liquid petroleum gas piping systems.
231213	Facility Fuel-Oil Pumps								Bas	Bas	Bas					Bas	Bas	01/13	Pumps normally encountered in fuel oil piping systems.
231216	Facility Gasoline Dispensing Pumps								Bas	Bas	Bas					Bas	Bas	01/14	Gasoline dispensers, including pumps and accessories, for transfer of gasoline (or other vehicle fuels) from storage tank to vehicle or portable container.
231300	Facility Fuel-Storage Tanks								Bas	Bas	Bas					Bas	Bas	01/13	Underground tanks, aboveground tanks, and leak detection system normally encountered in fuel oil systems.

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232113	Hydronic Piping								Bas	Bas	Bas					Bas	Bas	01/13	Pipe materials, fittings, and valves normally encountered in HVAC hydronic piping systems used for heating, cooling, glycol, chilled water, and condenser water within buildings.
232116	Hydronic Piping Specialties								Bas	Bas	Bas					Bas	Bas	01/13	Piping specialties associated with hydronic piping systems.
232123	Hydronic Pumps								Bas	Bas	Bas					Bas	Bas	01/13	Centrifugal pumps and related accessories normally used in hydronic systems.
232213	Steam and Condensate Heating Piping								Bas	Bas	Bas					Bas	Bas	01/13	Pipe materials, fittings, and valves normally encountered in steam and steam condensate piping systems used within buildings.
232216	Steam and Condensate Piping Specialties								Bas	Bas	Bas					Bas	Bas	01/13	Piping specialties associated with steam and steam condensate piping systems.
232223	Steam Condensate Pumps								Bas	Bas	Bas					Bas	Bas	01/13	Condensate and boiler feed pumps normally used in steam and steam condensate return systems.
232300	Refrigerant Piping								Bas	Bas	Bas					Bas	Bas	01/13	Pipe materials, fittings, valves, and piping specialties normally encountered in refrigerant piping systems used for air conditioning systems within buildings.
232416	Internal-Combustion Engine Exhaust Piping								Bas	Bas	Bas					Bas	Bas	01/13	Pipe materials, fittings, and valves normally encountered in engine exhaust piping systems.
232500	HVAC Water Treatment								Bas	Bas	Bas					Bas	Bas	01/13	Equipment and materials for cleaning and treating HVAC, hydronic and steam systems.
233100	HVAC Ducts and Casings								Bas	Bas	Bas					Bas	Bas	10/14	Ductwork materials, construction, supports, and cleaning.
233300	Air Duct Accessories								Bas	Bas	Bas					Bas	Bas	01/13	Ductwork accessory items.
233400	HVAC Fans								Bas	Bas	Bas					Bas	Bas	01/13	Fans, roof ventilators, and energy recovery ventilators.
233600	Air Terminal Units								Bas	Bas	Bas					Bas	Bas	01/13	Constant and variable-air volume terminal units for duct systems.
233700	Air Outlets and Inlets								Bas	Bas	Bas					Bas	Bas	01/13	Roof, wall, and floor diffusers, registers, and grilles, and louvers, louvered penthouses, and roof hoods.
234000	HVAC Air Cleaning Devices								Bas	Bas	Bas					Bas	Bas	01/13	Air filters and air cleaning devices.
235100	Breechings, Chimneys, and Stacks								Bas	Bas	Bas					Bas	Bas	01/13	Breeching, chimneys, and stacks for venting flue gases from fuel fired appliances.
235213	Electric Boilers								Bas	Bas	Bas					Bas	Bas	01/13	Packaged heating boilers with controls and accessories for steam or hot water systems.
235223	Cast-Iron Boilers								Bas	Bas	Bas					Bas	Bas	01/13	Cast-iron boilers with burners, controls and accessories for steam or hot water systems.
235233.13	Finned Water-Tube Boilers								Bas	Bas	Bas					Bas	Bas	01/13	Packaged finned water-tube boilers with burners, controls and accessories for hot water systems.

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235233.16	Steel Water-Tube Boilers								Bas	Bas	Bas					Bas	Bas	01/13	Steel water-tube boilers with burners, controls and accessories, suitable for steam or hot water systems, and fired by natural gas, propane, or fuel oil.
235239	Fire-Tube Boilers								Bas	Bas	Bas					Bas	Bas	01/13	Packaged fire-tube boilers with burners, controls and accessories for steam or hot water systems.
235300	Heating Boiler Feedwater Equipment								Bas	Bas	Bas					Bas	Bas	01/13	Boiler feedwater pumps, deaerators and packaged deaerator and feedwater equipment.
235400	Furnaces								Bas	Bas	Bas					Bas	Bas	04/12	Gas, oil, or electric forced air furnaces and accessories, including air conditioning, humidification, and air cleaning
235500	Fuel-Fired Heaters								Bas	Bas	Bas					Bas	Bas	04/12	Indirect fired, gas or oil fired unit heaters, industrial heaters, duct furnaces, gas fired infrared heaters, and fuel fired packaged air units.
235613	Heating Solar Collectors								Bas	Bas	Bas					Bas	Bas	01/13	Flat plate solar collectors, controls, pipe materials, fittings, valves, tanks, pumps.
235700	Heat Exchangers for HVAC								Bas	Bas	Bas					Bas	Bas	11/11	Shell and tube, and plate type heat exchangers and accessories.
236100	Refrigerant Compressors								Bas	Bas	Bas					Bas	Bas	11/11	Refrigeration compressors for refrigeration systems, with controls and motor starters.
236313	Air-Cooled Refrigerant Condensers								Bas	Bas	Bas					Bas	Bas	11/11	Indoor or outdoor, air-cooled refrigerant condensers including air coils, condenser fans, controls, and accessories.
236333	Evaporative Refrigerant Condensers								Bas	Bas	Bas					Bas	Bas	11/11	Packaged liquid coolers with forced air circulation, for evaporative cooling, including a circulating pump, and accessories.
236413	Absorption Water Chillers								Bas	Bas	Bas					Bas	Bas	01/13	Absorption water chillers using lithium bromide or ammonia, with water, steam, natural gas or fuel oil heat sources.
236416	Centrifugal Water Chillers								Bas	Bas	Bas					Bas	Bas	10/14	Packaged water chillers using centrifugal compressors and water-cooled condensers.
236419	Reciprocating Water Chillers								Bas	Bas	Bas					Bas	Bas	10/14	Packaged water chillers using reciprocating compressors. Chillers include either water- or air-cooled condensers.
236423	Scroll Water Chillers								Bas	Bas	Bas					Bas	Bas	10/14	Packaged water chillers using scroll compressors. Chillers include either water- or air-cooled condensers.
236426	Rotary-Screw Water Chillers								Bas	Bas	Bas					Bas	Bas	10/14	Packaged water chillers using rotary-screw compressors. Chillers include either water- or air-cooled condensers.
236500	Cooling Towers								Bas	Bas	Bas					Bas	Bas	11/11	Factory packaged forced draft and induced draft, cooling towers, accessories, and controls.
236523	Field-Erected Cooling Towers								Bas	Bas	Bas					Bas	Bas	01/13	Field erected induced draft, cooling towers, accessories and controls.

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237300	Indoor Central-Station Air-Handling Units								Bas	Bas	Bas					Bas	Bas	11/11	Air-handling units with coils, mixing boxes, filters, dampers, dehumidifier, and humidifier.
237413	Packaged, Outdoor, Central-Station Air-Handling Units								Bas	Bas	Bas					Bas	Bas	04/12	Air handling units packaged by manufacturer in modular form for use in exterior roof mounted applications.
238113	Packaged Terminal Air-Conditioners								Bas	Bas	Bas					Bas	Bas	01/13	Packaged terminal air conditioning and heat pump units with electric, hot water, steam, or gas heating; accessories; and controls
238119	Self-Contained Air-Conditioners								Bas	Bas	Bas					Bas	Bas	01/13	Self contained air conditioning units with refrigerant compressors, controls, and accessories for indoor installation, with water-cooled condensing units or connections for externally mounted air-cooled condensers
238123	Computer Room Air-Conditioners								Bas	Bas	Bas					Bas	Bas	11/11	Floor mounted air conditioning units and ceiling mounted unitary air conditioning units for computer rooms.
238126	Split-System Air-Conditioners								Bas	Bas	Bas					Bas	Bas	11/11	Units consisting of air handling unit and condensing unit with electric cooling; electric heating, hot water heating or steam heating; and controls.
238143	Air-Source Unitary Heat Pumps								Bas	Bas	Bas					Bas	Bas	11/11	Roof-mounted self-contained heat pumps, packaged free standing or through-the-wall terminal heat pump units, and packaged heat pump units with remote condenser/evaporators.
238146	Water-Source Unitary Heat Pumps								Bas	Bas	Bas					Bas	Bas	11/11	Heat pumps of the following types: horizontal, vertical, rooftop, console, and vertically stacked with water cooled condensers for use in water source or geothermal heat pump systems.
238200	Convection Heating and Cooling Units								Bas	Bas	Bas					Bas	Bas	11/11	Heat transfer coils utilizing piped heat transfer media, electric resistance heating coils, room terminal units used in hydronic and steam heating systems, and electric heaters.
238300	Radiant Heating Units								Bas	Bas	Bas					Bas	Bas	01/13	Electric heating cables, as units and assembled into mats. This section combines information previously included in sections 15750 and 16855.
238400	Humidity Control Equipment								Bas	Bas	Bas					Bas	Bas	11/11	Wetted media humidifiers or evaporative coolers for air handling units or equipment and packaged sprayed coil dehumidifiers for central air handling units. Humidifiers using seam or electricity for heat source.
<b>DIVISION 25 - INTEGRATED AUTOMATION</b>																			
253100	Integrated Automation Instrumentation and Terminal Devices for Facility Equipment								Bas	Bas	Bas					Bas	Bas	10/13	Electric control switches, pushbuttons, relays, time-delay relays, timers, counters, control power transformers, and control panels.



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253613	Integrated Automation Power Meters								Bas	Bas		Bas				Bas	Bas	10/13	Instrument transformers, switches, relays, transducers, and meters for sensing and measuring electrical energy in buildings, facilities, and processes.
253619	Integrated Automation Current Sensors								Bas	Bas		Bas				Bas	Bas	10/13	Packaged peak load controllers to sense electric power demand and to initiate alarms or automatic load shedding.
253626	Integrated Automation Lighting Relays								Bas	Bas		Bas				Bas	Bas	11/11	Hard wired, low voltage relay lighting control system.
255000	Integrated Automation Facility Controls								Bas	Bas		Bas				Bas	Bas	07/12	Central building management system to supervise temperature control, energy management, fire and smoke alarm system, and other building systems.

## DIVISION 26 - ELECTRICAL

260505	Selective Demolition for Electrical								Bas	Bas		Bas				Bas	Bas	01/15	Basic methods for demolition and repair of disrupted existing electrical work.
260513	Medium-Voltage Cables								Bas	Bas		Bas				Bas	Bas	01/13	Medium voltage cable and accessories, for systems rated above 600 volts to 35,000 volts.
260519	Low-Voltage Electrical Power Conductors and Cables								Bas	Bas		Bas				Bas	Bas	11/11	Building wire and cable, raceway, boxes, and wiring devices.
260519.13	Undercarpet Electrical Power Cables								Bas	Bas		Bas				Bas	Bas	01/15	Flat conductor cable and fittings for power, communications, and data circuits, for installation on concrete slab under carpet tile.
260519.23	Manufactured Wiring Assemblies								Bas	Bas		Bas				Bas	Bas	01/15	Prefabricated flexible wiring assemblies for branch circuit distribution to convenience outlets and luminaires.
260526	Grounding and Bonding for Electrical Systems	Bas	Bas	Bas	Bas		Bas		Bas	Bas		Bas				Bas	Bas	07/12	Grounding grids, loops, and other related grounding components for grounding systems associated with buildings.
260529	Hangers and Supports for Electrical Systems								Bas	Bas		Bas				Bas	Bas	01/13	Basic materials and methods for fastening and supporting electrical products and equipment.
260533	Raceway and Boxes for Electrical Systems								Bas	Bas		Bas				Bas	Bas	01/13	Raceway and boxes for electrical power and control wiring.
260533.16	Boxes for Electrical Systems								Bas	Bas		Bas				Bas	Bas	01/15	Floor boxes, access floor boxes, poke-through fittings, and service fittings.
260536	Cable Trays for Electrical Systems								Bas	Bas		Bas				Bas	Bas	01/13	Metal and fiber glass cable trays.
260539	Underfloor Raceways for Electrical Systems								Bas	Bas		Bas				Bas	Bas	01/13	Underfloor raceway for power and communications circuits, including fittings, accessories, and installation of wire and cable.
260548	Vibration and Seismic Controls for Electrical Systems								Bas	Bas		Bas				Bas	Bas	01/16	Inertia bases and vibration isolation equipment used for vibration isolation and seismic control, for equipment specified for electrical facilities.

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260553	Identification for Electrical Systems	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas		Bas			Bas	Bas		01/13	Identification methods for electrical equipment and components.
260573	Overcurrent Protective Device Coordination Study								Bas	Bas		Bas			Bas	Bas		11/11	Requirements for short circuit and protective device coordination study.
260919	Enclosed Contactors								Bas	Bas		Bas			Bas	Bas		01/15	Enclosed contactors for controlling feeders and branch circuits for lighting, heating, and general purpose loads.
260923	Lighting Control Devices								Bas	Bas		Bas			Bas	Bas		11/11	Remote control switching of 120 and 277 volt lighting and general purpose branch circuits using low voltage control power.
260943	Network Lighting Controls								Bas	Bas		Bas			Bas	Bas		11/11	Lighting control system using network wiring.
261116	Secondary Unit Substations								Bas	Bas		Bas			Bas	Bas		07/12	Secondary unit substations with medium voltage primaries and low voltage secondaries.
261200	Medium-Voltage Transformers								Bas	Bas		Bas			Bas	Bas		01/13	Liquid-filled and dry-type pad-mounted distribution transformers.
261313	Medium-Voltage Circuit Breaker Switchgear								Bas	Bas		Bas			Bas	Bas		01/13	Medium-voltage switchgear with air-magnetic or vacuum interrupter circuit breakers.
261316	Medium-Voltage Fusible Interrupter Switchgear								Bas	Bas		Bas			Bas	Bas		01/13	Air-break interrupter switches for medium Voltage applications.
261839	Medium-Voltage Motor Controllers								Bas	Bas		Bas			Bas	Bas		01/13	Medium-voltage motor controllers with fuses to interrupt currents in excess of operating overloads.
262200	Low-Voltage Transformers								Bas	Bas		Bas			Bas	Bas		07/12	Enclosed dry type transformers for lighting and power loads.
262413	Switchboards								Bas	Bas		Bas			Bas	Bas		07/12	Enclosed dead-front enclosed switchboards.
262416	Panelboards								Bas	Bas		Bas			Bas	Bas		01/13	Enclosed fusible switch and circuit breaker panelboards for feeders, and circuit breaker type lighting and appliance branch circuit panelboards.
262419	Motor-Control Centers								Bas	Bas		Bas			Bas	Bas		07/12	Motor control centers.
262500	Enclosed Bus Assemblies								Bas	Bas		Bas			Bas	Bas		01/13	Feeder and plug-in busway.
262716	Electrical Cabinets and Enclosures								Bas	Bas		Bas			Bas	Bas		01/13	Metal cabinets and enclosures for enclosing terminal blocks and electrical devices.
262723	Indoor Service Poles								Bas	Bas		Bas			Bas	Bas		01/13	Freestanding indoor utility columns providing power receptacle, telephone, and data communication outlets at locations away from walls.
262726	Wiring Devices								Bas	Bas		Bas			Bas	Bas		07/12	Wiring devices including receptacles, wall switches, and unit dimmers
262813	Fuses								Bas	Bas		Bas			Bas	Bas		01/13	Fuses for use in low voltage power distribution circuits.
262816.13	Enclosed Circuit Breakers								Bas	Bas		Bas			Bas	Bas		01/15	Enclosed circuit breakers of the molded case and insulated case types.
262816.16	Enclosed Switches								Bas	Bas		Bas			Bas	Bas		01/15	Enclosed switches for disconnects in service and distribution systems rated 600 volts and less.

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262913	Enclosed Controllers								Bas	Bas		Bas				Bas	Bas		01/13	Enclosed manual and automatic controllers for AC induction motors.
262923	Variable-Frequency Motor Controllers	Bas	Bas	Bas	Bas	Bas	Bas		Bas	Bas	Bas	Bas				Bas	Bas		01/13	Three-phase variable frequency motor controllers of the pulse-width-modulated design, for fan and pump motors.
263213	Engine Generators								Bas	Bas		Bas				Bas	Bas		07/12	Packaged engine generator set for emergency and standby power.
263229	Rotary Converters								Bas	Bas		Bas				Bas	Bas		07/12	Rotary converters for converting from AC to DC, changing frequency on an AC system, or for obtaining three phase output from a single phase source.
263233	Rotary Uninterruptible Power Units								Bas	Bas		Bas				Bas	Bas		07/12	Rotary converters with energy storage for uninterruptible power supply for data processing and similar applications.
263300	Battery Equipment								Bas	Bas		Bas				Bas	Bas		07/12	Small emergency power supplies with integral battery and inverter, to power lighting, small motors, unit equipment, and control systems.
263353	Static Uninterruptible Power Supply								Bas	Bas		Bas				Bas	Bas		07/12	Static uninterruptible power supply equipment.
263513	Capacitors								Bas	Bas		Bas				Bas	Bas		01/13	Unit capacitors for power factor correction.
263533	Power Factor Correction Equipment								Bas	Bas		Bas				Bas	Bas		01/13	Automatic power factor controllers.
263553	Voltage Regulators								Bas	Bas		Bas				Bas	Bas		01/13	Transient voltage surge suppressors
263613	Enclosed Transfer Switches								Bas	Bas		Bas				Bas	Bas		01/15	Automatic and manual transfer switches and bypass/isolation switches for systems rated 600 volts and less.
264100	Facility Lightning Protection								Bas	Bas		Bas				Bas			07/12	Lightning protection systems for buildings and facilities, including air terminals, down conductors, grounding, and bonding.
265100	Interior Lighting								Bas	Bas		Bas				Bas	Bas		01/13	Interior luminaires, ballasts, lamps, and accessories.
265200	Emergency Lighting								Bas	Bas		Bas				Bas	Bas		01/13	Emergency lighting units and exit signs.
265536	Obstruction Lighting								Bas	Bas		Bas				Bas	Bas		01/13	Obstruction lighting for marking buildings for airline flight safety and landing lights for helicopter pads.
265561	Theatrical Lighting								Bas	Bas		Bas				Bas	Bas		01/13	Theatrical lighting, dimming, and control equipment and accessories.
265600	Exterior Lighting						Bas	Bas	Bas	Bas		Bas				Bas	Bas		01/13	Exterior luminaries, poles, and accessories.
<b>DIVISION 27 - COMMUNICATIONS</b>																				
270513.43	Cable Services								Bas	Bas		Bas				Bas	Bas		01/15	Master antenna (MATV), satellite master antenna (SMATV), television service entrance, and premises wiring for cable television or community antenna television (CATV).
270526	Grounding and Bonding for Communications Systems								Bas	Bas		Bas				Bas	Bas		01/13	Wire, connections, and other related grounding components for grounding associated with communication systems.

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270529	Hangers and Supports for Communications Systems								Bas	Bas		Bas			Bas	Bas		01/13	Basic materials and methods for fastening and supporting communications products and equipment.
270533	Conduits and Backboxes for Communications Systems								Bas	Bas		Bas			Bas	Bas		01/13	Conduit and backboxes for communication wiring.
270536	Cable Trays for Communications Systems								Bas	Bas		Bas			Bas	Bas		01/13	Metal cable trays of types and sizes included in NEMA VE 1, and fiberglass cable trays of types and sizes included in NEMA FG 1.
270553	Identification for Communications Systems								Bas	Bas		Bas			Bas	Bas		01/13	Identification methods for communications equipment and components.
271343	Communications Services Cabling								Bas	Bas		Bas			Bas	Bas		07/12	Telecommunications services, pathways, equipment facilities, and cabling for voice and data communications.
271343.43	Cable Services Cabling								Bas	Bas		Bas			Bas	Bas		01/15	Cables and accessories for sound and video signal circuits.
275116	Public Address Systems								Bas	Bas		Bas			Bas	Bas		10/14	Public address system components, including microphone and music system equipment.
275123	Intercommunications and Program Systems								Bas	Bas		Bas			Bas	Bas		07/12	Intercom equipment for interoffice private conversations.
275223	Nurse Call/Code Blue Systems								Bas	Bas		Bas			Bas	Bas		07/12	Annunciator and intercom equipment for nurse call systems.
275313	Clock Systems								Bas	Bas		Bas			Bas	Bas		07/12	Clock and program equipment for systems that announce and record time intervals, or that use time-based signals for control purposes.
<b>DIVISION 28 - ELECTRONIC SAFETY AND SECURITY</b>																			
280528.29	Hangers and Supports for Electronic Safety and Security								Bas	Bas	Bas	Bas			Bas	Bas		04/14	Basic materials and methods for fastening and supporting safety and security products and equipment.
280528.33	Conduits and Backboxes for Electronic Safety and Security								Bas	Bas	Bas	Bas			Bas	Bas		04/14	Conduit and backboxes for electronic safety and security wiring.
280528.36	Cable Trays for Electronic Safety and Security								Bas	Bas	Bas	Bas			Bas	Bas		04/14	Metal cable trays of types and sizes included in NEMA VE 1, and fiberglass cable trays of types and sizes included in NEMA FG 1.
280553	Identification for Electronic Safety and Security								Bas	Bas	Bas	Bas			Bas	Bas		04/14	Identification methods for safety and security equipment and components.
283900	Mass Notification Systems								Bas	Bas	Bas				Bas	Bas		10/14	Emergency public address system components, to be used in the event of emergency or alarm situations.
<b>DIVISION 31 - EARTHWORK</b>																			
310513	Soils for Earthwork	Bas	Bas		Bas		Bas	Bas	Bas				Bas		Bas	Bas		07/12	Soil and subsoil materials referenced by other sections for fill and grading purposes.
310516	Aggregates for Earthwork	Bas	Bas		Bas		Bas	Bas	Bas				Bas		Bas	Bas		07/12	Aggregate materials referenced by other earthwork sections for fill and grading purposes.

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310519.13	Geotextiles for Earthwork	Bas	Bas	Bas			Bas	Bas							Bas			01/16	Turf reinforcement mats (woven geotextiles) and nonwoven geotextiles materials.
310813	Pile Load Testing						Bas	Bas	Bas				Bas		Bas	Bas		01/15	Pile load testing requirements intended to supplement a section specifying the piling method.
311000	Site Clearing						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Removal of paving and curbs, debris, grass, and plant life and rough grading of soil, in preparation for site or building excavation work.
312113	Radon Mitigation	Bas	Bas	Bas			Bas	Bas	Bas					Bas	Bas	Bas		04/16	Passive system to collect radon gas under basements and slabs-on-grade, and vent through roof to atmosphere.
312213	Rough Grading						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Removal of topsoil, rough grading, filling, and compacting to contour the site in preparation for building excavation and other site work.
312316	Excavation	Bas	Bas	Bas			Bas	Bas	Bas			Bas			Bas	Bas		01/13	Excavating for building foundations, site structures, slabs-on-grade, pavement, and utilities within the building.
312316.13	Trenching	Bas	Bas	Bas			Bas	Bas	Bas	Bas					Bas	Bas		01/15	Trenching and backfilling for utilities outside of buildings, usually extending to utility service connections.
312316.26	Rock Removal	Bas	Bas	Bas			Bas	Bas	Bas			Bas			Bas	Bas		01/15	Removal of subsurface rock during excavation by mechanical or explosive methods.
312319	Dewatering	Bas	Bas	Bas			Bas	Bas	Bas	Bas	Bas				Bas	Bas		04/12	Temporary dewatering and surface water control systems for open excavations, trenches, tunnels, and drilled shafts.
312323	Fill	Bas	Bas	Bas			Bas	Bas	Bas	Bas	Bas				Bas	Bas		01/13	Backfilling for building foundations, site structures, slabs-on-grade, pavement, and utilities within the building.
312323.33	Flowable Fill	Bas	Bas	Bas			Bas	Bas	Bas	Bas	Bas				Bas	Bas		01/15	Lean concrete mix for backfill, bedding and subgrade site work.
312500	Erosion and Sedimentation Controls	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		01/13	Erosion and sedimentation control devices
313116	Termite Control						Bas	Bas	Bas					Bas	Bas	Bas		11/11	Chemical soil treatment to control subterranean termites and other insects.
313213.16	Cement Soil Stabilization						Bas	Bas	Bas						Bas	Bas		01/15	Treating existing site subsoil with cement, aggregate, and other additives for physical stability to support subsequent construction.
313213.19	Lime Soil Stabilization						Bas	Bas	Bas						Bas	Bas		01/15	Treating existing site subsoil with lime, aggregate, and other additives for physical stability to support subsequent construction.
313600	Gabions	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		07/16	Wire-mesh, stone-filled gabions and mattresses for earth retention or channel lining, including filters.
313716.13	Rubble-Stone Riprap	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		07/16	Riprap and rock lining placed loose for soil stabilization and slope protection.

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313716.19	Sacked Sand-Cement Riprap	Bas	Bas		Bas		Bas	Bas	Bas						Bas	Bas		07/16	Riprap and rock lining used for soil stabilization and slope protection, placed in closed-jute or geotextile-fabric sacks for concealed or exposed-to-view locations.
314116	Sheet Piling	Bas	Bas	Bas	Bas		Bas	Bas	Bas				Bas		Bas	Bas		07/16	Sheet piling for retaining walls, weirs, caissons, cofferdams, and bulkheads.
316213.23	Prestressed Concrete Piles	Bas	Bas		Bas		Bas	Bas	Bas				Bas		Bas	Bas		07/16	Driven prestressed precast concrete piles, with or without steel points.
316216	Steel Piles						Bas	Bas	Bas				Bas		Bas	Bas		11/11	Driven H-section steel piles, with protective coating.
316219	Timber Piles						Bas	Bas	Bas				Bas		Bas	Bas		11/11	Driven timber piles, with or without preservative treatment.
316223	Composite Piles						Bas	Bas	Bas				Bas		Bas	Bas		11/11	Cast-in-place concrete filled steel pipe piles, end bearing type.
316300	Bored Piles						Bas	Bas	Bas				Bas		Bas	Bas		01/13	Cast-in-place concrete footings, compacted to form an expanded bulbular base, with or without shaft liner, end bearing type.
316316	Auger Cast Grout Piles						Bas	Bas	Bas				Bas		Bas	Bas		01/13	Hollow auger bored shaft with cast-in-place concrete grout pressure injected, end bearing type.
316329	Drilled Concrete Piers and Shafts						Bas	Bas	Bas				Bas		Bas	Bas		11/11	Cast-in-place concrete piers in bored shafts, with or without shaft liner, bells, rock socket, shear ring, or reinforcing steel; end bearing and friction type. Sometimes referred to as caissons or drilled piers.
316616	Special Foundation Walls						Bas	Bas	Bas				Bas		Bas	Bas		01/13	Mechanically stabilized earth walls for earth retaining structures

## DIVISION 32 - EXTERIOR IMPROVEMENTS

320116	Flexible Paving Rehabilitation						Bas	Bas	Bas					Bas	Bas	Bas		07/12	Milling, or heating and removing, reciting, and replacing existing asphaltic concrete, with or without a top seal coat.
320126	Rigid Paving Rehabilitation						Bas	Bas	Bas					Bas	Bas	Bas		07/12	Preparation of existing concrete pavement surfaces for subsequent asphalt or concrete pavements.
320513	Soils for Exterior Improvements						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Soil and subsoil materials referenced by other sections for fill and grading purposes.
320516	Aggregates for Exterior Improvements						Bas	Bas	Bas					Bas	Bas	Bas		01/13	Aggregate materials referenced by other exterior improvements sections for fill and grading purposes.
321123	Aggregate Base Courses						Bas	Bas	Bas					Bas	Bas	Bas		07/12	Aggregate subbase and base course for placement under asphalt or concrete pavement, or placed and left exposed.
321216	Asphalt Paving						Bas	Bas	Bas					Bas	Bas	Bas		11/11	Conventional (Marshall) and superpave asphalt paving for roads, parking areas, or sidewalks.
321313	Concrete Paving						Bas	Bas	Bas					Bas	Bas	Bas		11/11	Concrete pavement for roads, parking areas, sidewalks, median barriers, integral curbs, gutters.

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321413	Precast Concrete Unit Paving						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Precast concrete paver units of interlocking or butt edge design, laid dry on sand bed.
321416	Brick Unit Paving						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Clay brick pavers set into sand, bituminous or mortar bed, on an aggregate or paved base.
321423	Asphalt Unit Paving						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Manufactured fibered asphalt block or plank pavers, on a paved base.
321440	Stone Paving						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Marble, granite, or slate stone pavers, laid dry on sand or placed on mortar bed.
321623	Sidewalks	Bas	Bas		Bas		Bas	Bas								Bas		01/16	Concrete paving for sidewalks.
321713	Parking Bumpers						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Precast concrete or timber parking bumpers
321723	Pavement Markings	Bas	Bas		Bas		Bas	Bas	Bas						Bas	Bas	Bas	04/16	Painted pavement markings, lines, and legends for bituminous concrete and portland cement concrete roads and parking areas.
321726	Tactile Warning Surfacing						Bas	Bas	Bas						Bas	Bas	Bas	01/15	ADA-compliant tactile warning surfacing, suitable for surface or cast-in-place installation in concrete and asphalt.
323113	Chain Link Fences and Gates						Bas	Bas	Bas						Bas	Bas	Bas	07/12	Chain link fences of zinc coated steel, aluminum coated steel, and vinyl coated steel.
323223	Segmental Retaining Walls						Bas	Bas	Bas				Bas		Bas	Bas	Bas	01/13	Manufactured modular wall for landscaping, erosion control, and other transportation, site or waterfront applications.
323243	Soldier-Beam Retaining Walls						Bas	Bas	Bas				Bas		Bas	Bas	Bas	01/13	Soldier beam walls for earth retention
323313	Site Bicycle Racks	Bas	Bas		Bas		Bas	Bas							Bas	Bas	Bas	01/16	Bicycle racks and simple shelters.
323314	Bicycle Lockers	Bas	Bas		Bas		Bas	Bas							Bas	Bas	Bas	01/16	Secure bicycle shelters for storage of bicycles.
328400	Planting Irrigation						Bas	Bas	Bas						Bas	Bas	Bas	11/11	Piped underground irrigation systems with piping, sprinkler heads, valves, and controls.
329113	Soil Preparation						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Preparation of subsoil and topsoil placement.
329119	Landscape Grading						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Placing, leveling, and compacting topsoil materials prior to final landscaping
329219	Seeding						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Seeding of grassed areas. Also includes subsoil and topsoil preparation
329223	Sodding	Bas	Bas		Bas		Bas	Bas	Bas						Bas	Bas	Bas	04/16	Installation of sod and maintenance until acceptance, including preparation of subsoil and topsoil placement.
329300	Plants						Bas	Bas	Bas						Bas	Bas	Bas	01/13	Interior and exterior landscaping including trees, plants, and ground cover. Also includes subsoil and topsoil preparation.
<b>DIVISION 33 - UTILITIES</b>																			
N 330110.58	Disinfection of Water Utility Piping Systems	Bas	Bas		Bas		Bas	Bas								Bas		10/16	Disinfection of domestic water services associated with site services and utility supply systems.
N 330110.59	Disinfection of Water Utility Storage Tanks	Bas	Bas		Bas		Bas	Bas								Bas		10/16	Methods of disinfecting water storage tanks for potable water.

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N 330130.11	Television Inspection of Sewers	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Television inspection of pipeline and associated preparatory Work.
330130.61	Packer Injection Grouting	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Grout sealing of sewer pipe joints and cleaning, plugging, and grout sealing of defective manholes.
330130.72	Cured-in-Place Pipe Lining	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Relining of sanitary sewer piping and associated preparatory work.
N 330130.79	Fold-and-Form Pipe Lining	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Relining of sanitary sewer piping and associated preparatory work.
N 330130.86	Manhole Rim Adjustment	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Manhole cover grade adjustment and cover replacement.
N 330150.56	Cleaning of Hydrocarbon Storage Tanks	Bas	Bas	Bas			Bas	Bas	Bas						Bas			10/16	Methods of cleaning fuel-storage tanks to remove residual fuels, sludge, and scale.
N 330505.31	Hydrostatic Testing	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Hydrostatic testing of pressurized piping and connected appurtenances such as valves.
N 330505.33	Infiltration and Exfiltration Testing	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Infiltration and exfiltration testing of gravity sewer piping and manholes.
N 330505.36	Vacuum Testing	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Vacuum testing of gravity sewer manholes.
N 330505.41	Air Testing	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Low-pressure air testing of gravity sewer piping.
N 330505.43	Mandrel Testing	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Mandrel testing of plastic gravity sewer piping.
N 330507	Trenchless Installation of Utility Piping	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Pipe jacking and tunnel excavation, casing pipes and tunnel liners, secondary inverts, carrier pipes, and ducts for installation of distribution facilities.
N 330507.13	Utility Directional Drilling	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Horizontal directional drilling for installation of distribution facilities.
N 330507.36	Microtunneling	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Provisions for microtunnel systems to install casing or product pipe immediately behind controlled, steerable, articulated Microtunnel Boring Machine (MTBM).
N 330509.33	Thrust Restraint for Utility Piping	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Tied joint restraint systems used to anchor and resist forces developed in underground closed pipeline systems.
330548	Vibration and Seismic Controls for Utilities Piping and Equipment	Bas	Bas	Bas			Bas								Bas			01/13	Vibration isolation and seismic control equipment for utilities piping, valves, and pumps.
330553	Identification for Utilities Piping and Equipment	Bas	Bas	Bas			Bas								Bas			07/13	Nameplates, labeling, and identification methods for site utilities piping, valves, equipment, and accessories.
N 330561	Concrete Manholes	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Cast-in-place precast concrete and masonry manholes to access subsurface drainage and sewerage piping.
N 330563	Concrete Vaults and Chambers	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Precast concrete utility vaults and chambers, with frames and covers, used for subsurface drainage collection, sewage collection, and water distribution systems.



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N 330573	Polyethylene Manholes	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	PE manholes, rims, and covers used in gravity piping systems used to transport corrosive wastewater or chemicals.
N 330576	Fiberglass Manholes	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Fiberglass manholes, rims, and covers used in gravity piping systems to transport corrosive wastewater or chemicals.
N 330577	Fiberglass Metering Manholes	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Packaged fiberglass metering manholes used for installation of flumes.
N 330597	Identification and Signage for Utilities						Bas	Bas							Bas			10/16	Pipeline marker posts, metal and plastic utility markers, marking flags, plastic ribbon tape, and trace wire.
N 331100	Groundwater Sources	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Drilling of public supply water wells, including casing and grouting, pump, and accessories.
N 331113	Potable Water Supply Wells	Bas	Bas	Bas			Bas	Bas							Bas	Bas		10/16	Water well drilling, casing and grouting, pump, and accessories used for small residential or commercial domestic water wells.
N 331413	Public Water Utility Distribution Piping	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Pipe materials, fittings, valves, and meters normally encountered with public water distribution systems, including potable water and fire water systems within public rights-of-way.
N 331416	Site Water Utility Distribution Piping	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Pipe materials, fittings, and valves for domestic water, and fire water systems from the building to the utility source.
N 331417	Site Water Service Utility Laterals	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Pipe materials, fittings, valves, meters, and backflow preventers used for water-service connections to small commercial and light industrial buildings and residential homes.
N 331419	Valves and Hydrants for Water Utility Service	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Fire hydrants and valves used for installation in water mains.
N 331616	Multi-Column Elevated Steel Water Storage Tanks	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Design, fabrication, and erection of welded steel elevated water tank.
N 331636	Ground-Level Reinforced Concrete Water Storage Tanks	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Design, fabrication, and erection of site precast, prestressed concrete water storage tanks.
N 331900	Water Utility Metering Equipment	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Meters and appurtenances commonly used in water distribution systems, including positive displacement meters, propeller flow meters, magnetic flow meters, ultrasonic flow meters, venturi flow meters, transmitters, indicators, recorders, and integrators.
332313	Geothermal Energy Exchange Wells						Bas	Bas	Bas	Bas	Bas				Bas	Bas		10/14	Drilling, grouting, excavation, backfill, piping, valves, and accessories for wells used in geothermal heat pump systems.
333100	Sanitary Sewerage Piping	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Pipe materials and accessories used for gravity sanitary building piping from outside building to connection with municipal sewers or other discharge method.

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N 333111	Public Sanitary Sewerage Gravity Piping	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Pipe materials, manholes, and accessories for public gravity sanitary sewers.
N 333123	Sanitary Sewerage Force Main Piping	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Pipe materials and accessories used for municipal sanitary sewerage force mains.
N 333126	Sanitary Pressure Sewer Piping	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Pipe materials and accessories used for low-pressure sanitary sewage collection systems where on-lot grinder pumps are used to convey domestic sewage.
N 333211	Field-Erected Wastewater Pumping Stations	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Excavation, submersible pump basin, pumps, control panel, and accessories for small public sewage pumping stations for residential, commercial, industrial, or institutional use.
U 333213	Packaged Wastewater Pumping Stations	Bas	Bas	Bas			Bas	Bas	Bas						Bas	Bas		10/16	Excavation, submersible pump basin, pumps, control panel, and accessories for packaged sewage pumping stations for residential, commercial, industrial, or institutional use.
N 333216	Packaged Wastewater Grinder Pump Assemblies	Bas	Bas	Bas			Bas	Bas							Bas			10/16	On-lot, submersible, centrifugal and progressing-cavity sewage grinder pumping units.
N 333219	Septic Tank Effluent Pumps	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Septic tank effluent pump units for low-pressure septic tank effluent pumping (STEP) systems.
N 333413.13	Concrete Septic Tanks	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Materials and installation requirements for concrete septic tanks.
N 333413.23	Fiberglass Septic Tanks	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Materials and installation requirements for fiberglass (FRP) septic tanks.
N 333413.33	Polyethylene Septic Tanks	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Materials and installation requirements for high-density polyethylene (HDPE) septic tanks.
N 333451	Drainage Field System	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Materials and installation requirements for drainage fields (leach fields) used to further treat effluent from septic tanks.
N 333453	Distribution Chambers	Bas	Bas	Bas			Bas	Bas							Bas			10/16	Materials and installation requirements for distribution chambers used to divert septic tank effluent to drainage fields.
N 334113	Foundation Drainage						Bas	Bas	Bas						Bas	Bas		10/16	Weep tile drainage system including piping, aggregate and filter fabric for building perimeter.
N 334119	Underslab Drainage						Bas	Bas	Bas						Bas	Bas		10/16	Weep tile drainage system including piping, aggregate and filter fabric for under slabs-on-grade.
N 334200	Stormwater Conveyance						Bas	Bas	Bas						Bas	Bas		10/16	Gravity storm drain piping from building to municipal utility or other discharge system, and gravity storm drainage of paved and landscaped Site areas.
334213	Stormwater Culverts						Bas	Bas	Bas						Bas	Bas		10/16	Corrugated-steel, aluminum, concrete, PE, PVC pipe culverts, and concrete box sections.

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334213.13	Public Pipe Culverts	Bas	Bas	Bas			Bas								Bas			07/14	Corrugated steel, aluminum, polyethylene, and concrete pipe culverts, including accessories, excavating, bedding, and backfilling.
N 334236	Stormwater Trench Drains						Bas	Bas	Bas						Bas	Bas		10/16	Trench drains and accessories.
334713	Pond and Reservoir Liners	Bas	Bas	Bas			Bas								Bas			07/14	Impermeable geomembrane liners for ponds and reservoirs.
N 335213	Liquid Hydrocarbon Piping						Bas	Bas	Bas						Bas	Bas		10/16	Factory-insulated piping for use with oil distribution systems in below-ground applications.
N 335216	Gas Hydrocarbon Piping								Bas						Bas	Bas		10/16	Pipe materials, fittings, and valves used for Site-piped natural gas or propane gas distribution systems, from outside building to utility source or on-Site source.
336100	Hydronic Energy Distribution						Bas	Bas	Bas						Bas	Bas		10/14	Factory-insulated piping for use with hydronic distribution systems in below-ground applications.
336300	Steam Energy Distribution						Bas	Bas	Bas						Bas	Bas		10/14	Factory-insulated piping for use with steam distribution systems in below-ground applications.
337116	Electrical Poles								Bas	Bas	Bas	Bas			Bas	Bas		10/16	Wood poles and accessories for overhead electrical and communications circuits on Site.
337119	Electrical Underground Ducts, Ductbanks, and Manholes								Bas	Bas	Bas	Bas			Bas	Bas		10/16	Concrete-encased conduit and duct, and concrete manholes and handholes.
337126	Transmission and Distribution Equipment								Bas	Bas	Bas	Bas			Bas	Bas		07/14	Line conductors and accessories for overhead Site power distribution.
337173	Electrical Utility Services								Bas	Bas	Bas	Bas			Bas	Bas		07/14	Arrangements for electric utility service to building and related metering equipment.
337900	Site Grounding								Bas	Bas	Bas	Bas			Bas	Bas		07/14	Grounding grids, loops, and other Site components for grounding of buildings and facilities.
<b>DIVISION 34 - TRANSPORTATION</b>																			
347113	Vehicle Barriers						Bas	Bas	Bas						Bas			07/12	Formed steel guard rail on steel or timber posts for vehicular traffic control.
<b>DIVISION 40 - PROCESS INTERCONNECTIONS</b>																			
400506	Couplings, Adapters, and Specials for Process Piping	Bas	Bas	Bas	Bas	Bas	Bas								Bas			04/15	Pipe penetrations, restrained joints, flexible connections, expansion joints and loops, and sleeve-type couplings.
400507	Hangers and Supports for Process Piping	Bas	Bas	Bas		Bas									Bas			01/15	Hangers, supports, anchors, guides, and equipment bases applicable to plant process piping systems.
400512	Brass Process Pipe	Bas	Bas	Bas	Bas	Bas	Bas								Bas			04/16	Brass piping and tubing normally encountered in plant process piping systems, including common fittings.

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400517	Copper Process Pipe and Tubing	Bas	Bas	Bas	Bas	Bas		Bas							Bas			04/16	Copper piping and tubing normally encountered in plant process piping systems, including common fittings.
400519	Ductile Iron Process Pipe	Bas	Bas	Bas		Bas									Bas			04/16	Ductile-iron piping normally encountered in plant process piping systems, including ductile-iron, malleable-iron, and cast-iron fittings and joints.
400523	Stainless Steel Process Pipe and Tubing	Bas	Bas	Bas		Bas									Bas			04/16	Stainless steel piping normally encountered in plant process piping systems, including common fittings and joints.
U 400524	Steel Process Pipe	Bas	Bas	Bas	Bas	Bas		Bas							Bas			10/16	Steel pipe materials used for plant process piping systems, including common fittings and joints; cement-mortar-lined steel pipe and fittings; plastic-lined steel pipe and fittings; glass-lined steel pipe and fittings; and rubber-lined steel pipe.
400531	Thermoplastic Process Pipe	Bas	Bas	Bas	Bas	Bas		Bas							Bas			04/16	Plastic piping normally encountered in plant process piping systems, including common fittings and joints.
400536	Fiberglass-Reinforced Plastic Process Pipe	Bas	Bas	Bas	Bas	Bas		Bas							Bas			04/16	Fiberglass reinforced plastic (FRP) pipe materialFiberglass-reinforced plastic (FRP) piping normally encountered in plant process piping systems, including common fittings and joints.
400551	Common Requirements for Process Valves	Bas	Bas	Bas		Bas									Bas			01/15	Basic materials and methods related to valves commonly used for process systems, including operators, actuators, handwheels, chainwheels, extension stems, floor stands, end connections, and other accessories.
400553	Identification for Process Piping	Bas	Bas	Bas											Bas			01/13	Labeling and identification methods for water and wastewater process equipment and accessories, including nameplates, tags, stencils, labels, and lockout devices.
400557	Actuators for Process Valves and Gates	Bas	Bas	Bas	Bas	Bas		Bas							Bas			04/15	Manual, pneumatic, and electric motor actuators.
400559.21	Aluminum Slide Gates	Bas	Bas	Bas	Bas	Bas		Bas							Bas			01/14	Self-contained and non-self-contained aluminum slide gates for water and wastewater treatment facilities.
400559.23	Stainless Steel Slide Gates	Bas	Bas	Bas	Bas	Bas		Bas							Bas			01/14	Self-contained and non-self-contained stainless steel slide gates for water and wastewater treatment facilities.
400559.26	Fiberglass-Reinforced Plastic Slide Gates	Bas	Bas	Bas	Bas	Bas		Bas							Bas			01/14	Self-contained and non-self-contained fiberglass-reinforced plastic (FRP) slide gates for water and wastewater treatment facilities.
400559.33	Cast Iron Slide Gates	Bas	Bas	Bas	Bas	Bas		Bas							Bas			01/14	Self-contained and non-self-contained cast-iron slide gates for water and wastewater treatment facilities.
400561	Gate Valves	Bas	Bas	Bas	Bas	Bas		Bas							Bas			01/16	Resilient-seated, solid-wedge, general-duty, and plastic gate valves for use in water- and wastewater-treatment plants.

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		WW	WWP	WWE	WWU	IWT	SCW	SC	Eng	ME	Mech	Elec	Str	Arch	Comp	AE	MH	Date	
400561.43	Knife Gate Valves	Bas	Bas	Bas											Bas			10/15	Knife gate valves for use in water and wastewater treatment plants.
400562	Plug Valves	Bas	Bas	Bas	Bas	Bas	Bas								Bas			01/16	Eccentric plug valves for use in water- and wastewater-treatment plants.
400563	Ball Valves	Bas	Bas	Bas	Bas	Bas	Bas								Bas			01/16	Rubber-seated and plastic ball valves for use in water- and wastewater-treatment plants.
400564	Butterfly Valves	Bas	Bas	Bas	Bas	Bas	Bas								Bas			01/16	Rubber-seated and plastic butterfly valves for use in water- and wastewater-treatment plants.
400565.11	Angle Valves	Bas	Bas	Bas											Bas			10/15	Angle valves for use in water and wastewater treatment plants.
400565.16	Globe Valves	Bas	Bas	Bas	Bas	Bas	Bas								Bas			01/16	Globe valves for use in water and wastewater treatment plants.
400565.23	Swing Check Valves	Bas	Bas	Bas	Bas	Bas	Bas								Bas			07/16	Swing check valves 3 inches (76 mm) and larger, for use in water and wastewater treatment plants.
400565.26	Tilting Disc Check Valves	Bas	Bas	Bas		Bas									Bas			07/16	Tilting (or slanting) disc check valves 2 inches (50 mm) through 60 inches (1 500 mm), for use in water and wastewater treatment plants.
400565.29	Double-Disk Check Valves	Bas	Bas	Bas		Bas									Bas			07/16	Double-disc swing check valves 2 inches (50 mm) through 52 inches (1 300 mm), for use in water and wastewater treatment plants.
U 400567	Specialized Pressure and Flow-Control Valves	Bas	Bas	Bas	Bas	Bas	Bas								Bas			10/16	Pressure-reducing valves (PRV) and pressure-sustaining valves for use in water and wastewater treatment plants.
400567.13	Reduced-Pressure Zone Backflow Preventers for Process Service	Bas	Bas	Bas		Bas									Bas			04/15	Reduced-pressure zone backflow preventers and accessories.
400567.16	Double Check Valve Assembly Backflow Preventers for Process Service	Bas	Bas	Bas		Bas									Bas			04/15	Double check valve assembly backflow preventers and accessories.
400567.23	Pressure Vacuum Breaker Backflow Preventers	Bas	Bas	Bas		Bas									Bas			04/15	Pressure vacuum breaker backflow preventers.
400567.26	Atmospheric Vacuum Breaker Backflow Preventers	Bas	Bas	Bas		Bas									Bas			04/15	Atmospheric vacuum breaker backflow preventers.
400567.29	Hose Connection Vacuum Breaker Backflow Preventers	Bas	Bas	Bas	Bas	Bas	Bas								Bas			04/15	Hose connection vacuum breaker backflow preventers and accessories.
400567.36	Pressure-Regulating Valves	Bas	Bas	Bas		Bas									Bas			04/15	Pressure-reducing and pressure-sustaining valves and accessories.
400567.39	Pressure-Relief Valves	Bas	Bas	Bas		Bas									Bas			04/15	Hydrostatic pressure-relief valves in pressurized and gravity tanks for water and wastewater treatment facilities.
400571.16	Flap Gates	Bas	Bas	Bas	Bas		Bas								Bas			07/15	Flexible and heavy-duty flap gates for use in wastewater treatment plants.
400571.23	Mud Valves	Bas	Bas	Bas		Bas									Bas			07/16	Mud valves for use in water and wastewater treatment plants.
400571.33	Telescoping Valves	Bas	Bas	Bas		Bas									Bas			07/16	Telescoping valves for use in water and wastewater treatment plants.

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400574.13	Diaphragm Valves	Bas	Bas	Bas		Bas									Bas			07/16	Metallic and plastic diaphragm valves for use in water and wastewater treatment plants.
400574.23	Pinch Valves	Bas	Bas	Bas		Bas									Bas			07/16	Pinch valves for use in water and wastewater treatment plants.
400578.11	Air Release Valves for Water Service	Bas	Bas	Bas	Bas		Bas								Bas			04/15	Air release valves for process water service.
400578.13	Air/Vacuum Valves for Water Service	Bas	Bas	Bas	Bas		Bas								Bas			07/15	Air release/vacuum breaker valves for use in piping systems in water treatment facilities.
400578.19	Combination Air Valves for Water Service	Bas	Bas	Bas	Bas		Bas								Bas			07/15	Combination air valves for use in piping systems in water treatment facilities.
400578.21	Air Release Valves for Wastewater Service	Bas	Bas	Bas	Bas	Bas	Bas								Bas			04/15	Air release valves for process wastewater service.
400578.23	Air/Vacuum Valves for Wastewater Service	Bas	Bas		Bas		Bas								Bas			07/15	Air release/vacuum breaker valves for use in piping systems in wastewater treatment facilities.
400578.29	Combination Air Valves for Wastewater Service	Bas	Bas	Bas	Bas	Bas	Bas								Bas			07/15	Combination air valves for use in piping systems in wastewater treatment facilities.
U 400582	Solenoid Valves for Process Service	Bas	Bas	Bas		Bas									Bas			10/16	Solenoid valves for use in water and wastewater treatment plants for non-instrumentation applications.
400589.13	Basket Strainers for Process Service	Bas	Bas	Bas		Bas									Bas			04/15	Basket-type strainers and accessories.
U 400593	Common Motor Requirements for Process Equipment	Bas	Bas	Bas		Bas									Bas			10/16	Electric motors and accessories normally supplied as part of equipment assemblies.
400596	Vibration and Seismic Controls for Process Equipment	Bas	Bas	Bas		Bas									Bas			01/16	Inertia bases and vibration isolation equipment used for vibration isolation and seismic control, for equipment specified for water- and wastewater treatment plants.
401649	Sulfur Dioxide Gas Piping	Bas	Bas	Bas											Bas			07/15	Aboveground process piping systems for dry sulfur dioxide applications in a water or wastewater treatment plant.
401813	Low-Vacuum Systems Process Piping	Bas	Bas	Bas		Bas									Bas			10/14	Aboveground process piping systems for low-vacuum applications in a water or wastewater treatment plant.
402319	Non-Potable Plant Water Process Piping	Bas	Bas	Bas		Bas									Bas			01/15	Requirements for plant process piping systems transporting plant (non-potable) water in a water- or wastewater-treatment plant.
402323	Potable Water Process Piping	Bas	Bas	Bas											Bas			01/13	Requirements for plant process piping systems transporting potable water in a water-treatment plant.
U 402329	Recirculated Water Process Piping	Bas	Bas	Bas		Bas									Bas			10/16	Requirements for plant process piping systems transporting recirculated water in a water- or wastewater-treatment plant, including pipes, tubes, and valves.
402340	Sanitary Wastewater Process Piping	Bas	Bas	Bas		Bas									Bas			01/15	Plant process piping systems transporting wastewater in a wastewater treatment plant.

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402341	Grit Process Piping	Bas	Bas	Bas											Bas				10/15	Requirements for plant process piping systems transporting grit in a wastewater treatment plant, including ductile-iron pipe and fittings, plastic-lined steel pipe and fittings, valves, and pipe hangers and supports.
402343	Scum and Floatables Process Piping	Bas	Bas	Bas											Bas				10/15	Requirements for plant process piping systems transporting scum, floatables, or froth spray in a wastewater treatment plant, including PVC pipe and fittings, glass-lined steel pipe and fittings, valves, and pipe hangers and supports.
402344	Primary Sludge Process Piping	Bas	Bas	Bas											Bas				10/15	Requirements for plant process piping systems transporting primary (raw) sludge in a wastewater treatment plant, including ductile-iron pipe and fittings, glass-lined steel pipe and fittings, valves, and pipe hangers and supports.
402346	Waste Sludge Process Piping	Bas	Bas	Bas											Bas				10/15	Requirements for plant process piping systems transporting waste sludge in a wastewater treatment plant, including ductile-iron pipe and fittings, valves, and pipe hangers and supports.
402419	Slurries Process Piping	Bas	Bas	Bas	Bas										Bas				04/14	Plant process piping systems transporting slurries in a water or wastewater treatment plant.
402423	Thixotropic Liquid Piping	Bas	Bas	Bas	Bas										Bas				10/13	Requirements for process piping systems transporting sludge (or other thixotropic substances) in a water-treatment plant or a wastewater-treatment plant.
402510	Liquid Acids Piping	Bas	Bas	Bas	Bas										Bas				01/15	Plant process piping systems transporting acids and acidic solutions in a water or wastewater treatment plant.
402550	Liquid Bases Piping	Bas	Bas	Bas	Bas										Bas				01/15	Plant process piping systems transporting bases and basic solutions in a water or wastewater treatment plant.
402600	Liquid Polymer Piping	Bas	Bas	Bas	Bas										Bas				01/13	Requirements for plant process piping systems transporting polymer in a water- or wastewater-treatment plant.
403250	Nonabrasive Materials Piping and Chutes	Bas													Bas	Bas			07/16	Conveyance of nonabrasive bulk material solids from storage bins or silos via pipes, chutes, or hoses.
403326	Diverter Bulk Materials Valves	Bas													Bas	Bas			07/16	Diverter valve assemblies for regulating flow of bulk material solids from storage bins or silos, including orifice gates, roller gates, wye lines, flex tubes, iris valves, and slide gates.
U 404113.13	Process Piping Electrical Resistance Heat Tracing	Bas	Bas	Bas	Bas										Bas				10/16	Electric heat-tracing systems for freeze protection of process piping, fittings, valves, and accessories, including self-regulating cables and heat-tracing controls.

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404113.26	Process Piping Thermal Fluids Heat Tracing	Bas	Bas	Bas		Bas									Bas				07/13	Ethylene or propylene glycol heat-tracing systems for freeze protection of process piping, fittings, and valves.
404123.26	Process Equipment Thermal Fluids Heat Tracing	Bas	Bas	Bas		Bas									Bas				07/14	Glycol heat-tracing systems for freeze protection of process equipment.
404213	Process Piping Insulation	Bas	Bas	Bas		Bas									Bas				07/13	Insulation applied to process piping systems.
404223	Process Equipment Insulation	Bas	Bas	Bas		Bas									Bas				10/13	Insulation applied to process equipment, including equipment insulation, jacketing, and accessories.
404642	Cathodic Process Corrosion Protection	Bas	Bas	Bas	Bas	Bas	Bas								Bas				04/15	Passive cathodic protection for buried metallic process piping, buried metal structures, and buried metal tanks using sacrificial galvanic anodes.
406343	Programmable Logic Controllers	Bas	Bas	Bas		Bas									Bas				01/15	Programmable controllers for either stand-alone or networked applications.
406700	Control System Equipment Panels and Racks	Bas	Bas	Bas		Bas									Bas				01/15	Pump control panel and accessories for a duplex wastewater lift station.
407113	Magnetic Flow Meters	Bas	Bas	Bas		Bas									Bas				01/15	Magnetic flow meters, including transmitters, indicators, recorders, and integrators.
407123.13	Venturi Flow Meters	Bas	Bas	Bas		Bas									Bas				01/15	Venturi flow meters, including transmitters, indicators, recorders, and integrators.
407123.23	Orifice Plate Flow Meters	Bas	Bas	Bas		Bas									Bas				04/15	Orifice plate flow meters, including transmitters, indicators, recorders, and integrators.
407123.36	Pitot Tube and Averaging Pitot Tube Flow Meters	Bas	Bas	Bas											Bas				04/15	Pitot tube flow meters, including transmitters, indicators, recorders, and integrators.
407133	Propeller Flow Meters	Bas	Bas	Bas		Bas									Bas				01/15	Propeller flow meters, including transmitters, indicators, recorders, and integrators.
407143	Variable Area Flow Meters	Bas	Bas	Bas		Bas									Bas				01/15	Rotameters.
407166	Transit Time Flow Meters	Bas	Bas	Bas		Bas									Bas				01/15	Ultrasonic flow meters, including transmitters, indicators, recorders, and integrators.
407169	Open Channel Flow Meters	Bas	Bas	Bas		Bas									Bas				01/15	Weirs and Parshall flumes, including transmitters, indicators, recorders, and integrators.
407179	Flow Switches	Bas	Bas	Bas		Bas									Bas				01/15	Primary process flow switches.
407213	Ultrasonic Level Meters (Continuous and Point Type)	Bas	Bas	Bas		Bas									Bas				01/15	Ultrasonic level measurement devices and transmitters for use in water and wastewater treatment facilities.
407223	Radar Level Meters	Bas	Bas	Bas		Bas									Bas				01/15	Radar level measurement devices and transmitters for use in water and wastewater treatment facilities.
407233	Capacitance Type Level Meters (Continuous and Point Type)	Bas	Bas	Bas		Bas									Bas				01/15	Capacitance-type level measurement devices and transmitters for use in water and wastewater treatment facilities.



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407243	Pressure and Differential Pressure Type Level Meters	Bas	Bas	Bas		Bas									Bas				01/15	Hydrostatic level measurement devices and transmitters for use in water and wastewater treatment facilities.
407276	Level Switches	Bas	Bas	Bas		Bas									Bas				01/15	Primary process level switches of the displacement and mercury types.
407313	Pressure and Differential Pressure Gauges	Bas	Bas	Bas		Bas									Bas				01/15	Process pressure gages of the differential, compound, and digital types.
407326	Gauge-Pressure Transmitters	Bas	Bas	Bas		Bas									Bas				01/15	Gage-pressure transmitters for use in water and wastewater treatment facilities.
407336	Pressure and Differential Pressure Switches	Bas	Bas	Bas		Bas									Bas				01/15	Primary process pressure and differential pressure switches.
407363	Diaphragm Seals	Bas	Bas	Bas		Bas									Bas				01/15	Diaphragm seals for isolation of pressure gages or other devices.
407413	Resistance Temperature Devices	Bas	Bas	Bas											Bas				10/15	Thin-film resistance temperature detectors (RTDs) and thermowells, transmitters, indicators and recorders.
407416	Thermocouples	Bas	Bas	Bas											Bas				10/15	Thermocouples for use as temperature detectors, and thermowells, transmitters, indicators and recorders.
407513	pH/ORP Analyzers	Bas	Bas	Bas	Bas	Bas	Bas								Bas				10/14	pH/ORP sensors, analyzers, transmitters, and displays for use in a water or wastewater treatment plant. Testers and field, laboratory, and portable analyzers are included.
407556	Suspended Solids/Sludge Density Analyzers	Bas	Bas	Bas		Bas									Bas				10/14	Continuous and portable devices for measurement of suspended solids and sludge density in a wastewater treatment plant.
407636	Sulfur Dioxide Analyzers	Bas	Bas	Bas											Bas				07/15	Sulfur dioxide analyzing and monitoring equipment.
<b>DIVISION 41 - MATERIAL PROCESSING AND HANDLING EQUIPMENT</b>																				
411213.19	Belt Bulk Material Conveyors	Bas													Bas	Bas			07/16	Conveyance of bulk material solids using belt-type conveyors.
411213.29	Hopper Bulk Material Conveyors	Bas													Bas	Bas			07/16	Conveyance of bulk material solids to hoppers using belt-type and screw-type conveyors.
411213.36	Screw Bulk Material Conveyors	Bas													Bas	Bas			07/16	Conveyance of bulk material solids using screw-type conveyors.
411216	Bucket Elevators	Bas													Bas	Bas			07/16	Conveyance of bulk material solids to hoppers using bucket-type conveyors.
411323	Feeders	Bas													Bas	Bas			07/16	Bulk material feeding equipment, including volumetric bulk material feeders, bulk bag fillers, and bag dump stations.
412213.13	Bridge Cranes	Bas													Bas	Bas			07/16	Top- or under-running, single- or double-girder crane systems, including rails, bridge, trolley, hoist, power and control circuits, safety and control mechanisms, and accessories.

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412213.16	Gantry Cranes	Bas													Bas	Bas		07/16	Single- or multiple-girder gantry-type crane systems, including rails, bridge, trolley, hoist, power and control circuits, safety and control mechanisms, and accessories.
412213.19	Jib Cranes	Bas							Bas						Bas	Bas		07/16	Free-standing, base plate-mounted jib crane, equipped with motorized boom, trolley, and chain hoist.
412223.13	Fixed Hoists	Bas													Bas	Bas		07/16	Non-trolley fixed hoists for mounting in locations as required by Project, including motors and controls for electrically operated hoists, and components.
412223.16	Portable Hoists	Bas													Bas	Bas		07/16	Non-trolley portable hoists for mounting in locations as required by Project, including motors and controls for electrically operated hoists, and components.
412223.19	Monorail Hoists	Bas													Bas	Bas		07/16	Monorail hoisting equipment, including track, trolley, hoists motor, and controls; trolley and hoist manually or motor operated.
415213	Bins and Hoppers	Bas													Bas	Bas		07/16	Bulk storage systems for powders and dry granular materials to be used in process industries; accessories include agitators and level detectors.
415323	Storage Racks	Bas													Bas	Bas		07/16	Racks and shelving for storage of materials used in operation and maintenance of water and wastewater treatment facilities, including bulk storage racks, pipe racks, gas cylinder racks, pallet racks, bin shelving, free-standing shelving, and wall-mounted shelving

## DIVISION 43 - PROCESS GAS AND LIQUID HANDLING, PURIFICATION AND STORAGE EQUIPMENT

430510	Common Work Results for Gas Handling Equipment	Bas	Bas	Bas	Bas										Bas			07/14	Basic materials and methods for fans, blowers, and compressors.
430520	Common Work Results for Liquid Handling Equipment	Bas	Bas	Bas	Bas										Bas			07/14	Basic materials and methods for process pumps.
430540	Common Work Results for Gas and Liquid Storage	Bas	Bas	Bas	Bas										Bas			07/14	Common materials and construction requirements for gas and liquid storage tanks.
430548	Vibration and Seismic Controls for Process Gas and Liquid Handling Equipment	Bas	Bas	Bas											Bas			01/13	Vibration isolation and seismic control equipment for pumps, fans, blowers, compressors, and other gas- and liquid-handling equipment.
430553	Identification for Process Gas and Liquid Handling Equipment	Bas	Bas	Bas											Bas			01/13	Labeling and identification methods for process fans, blowers, compressors, pumps, and accessories, including nameplates, tags, stencils, labels, and lockout devices.
U 431111	Direct Drive Single Stage Centrifugal Blowers	Bas	Bas	Bas	Bas										Bas			10/16	Centrifugal blowers and drives.
U 431119	Centrifugal Fans	Bas	Bas	Bas	Bas										Bas			10/16	Centrifugal fans and drives.
431123	Axial Blowers	Bas	Bas	Bas	Bas										Bas			07/13	Axial blowers, drives, and accessories.
431126	Axial Fans	Bas	Bas	Bas	Bas										Bas			07/13	Axial fans, drives, and accessories.

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431133	Rotary Lobe Blowers	Bas	Bas	Bas	Bas										Bas			01/14	Rotary lobe blowers and drives.
U 431211	Centrifugal Compressors	Bas	Bas	Bas	Bas										Bas			10/16	Low-pressure centrifugal air compressors and components for compressed-air systems in plant or process applications, including pipe and pipe fittings, valves, piping accessories, aftercoolers, air dryers, air receivers, and pressure-reducing stations.
431216	Axial-Flow Compressors	Bas	Bas	Bas	Bas										Bas			07/13	Axial-flow air compressors and components for compressed-air systems used in plant or process applications, including pipe and pipe fittings, valves, piping accessories, aftercooler, air dryers, air receiver, and pressure-reducing stations.
431233	Single-Acting Reciprocating Compressors	Bas	Bas	Bas	Bas										Bas			07/13	Single-acting centrifugal air compressors for minor-duty compressed-air systems in plant or process applications, including air receiver and accessories.
431234	Double-Acting Reciprocating Compressors	Bas	Bas	Bas	Bas										Bas			07/13	Double-acting centrifugal air compressors for minor-duty compressed-air systems in plant or process applications, including air receiver and accessories.
431251	Rotary-Screw Compressors	Bas	Bas	Bas	Bas										Bas			07/13	Rotary-screw air compressors and components for compressed-air systems used in plant or process applications, including pipe and pipe fittings, valves, piping accessories, aftercooler, air dryers, air receiver, and pressure-reducing stations.
U 432313.27	Overhung Close-Coupled Horizontal Centrifugal Pumps	Bas	Bas	Bas	Bas										Bas			10/16	Horizontal end-suction, non-clog, and recessed-impeller centrifugal pumps for use in water and wastewater treatment plants.
U 432321.13	Between-Bearings Impeller, One- and Two-Stage Axially Split Centrifugal Pumps	Bas	Bas	Bas	Bas										Bas			10/16	Axially split centrifugal pumps for use in water and wastewater treatment plants.
U 432331.23	Overhung Close-Coupled Vertical End Suction Pumps	Bas	Bas	Bas	Bas										Bas			10/16	Vertical non-clog centrifugal pumps for use in water and wastewater treatment plants.
432356	Gear Pumps	Bas	Bas	Bas	Bas										Bas			01/15	Positive-displacement, external gear pumps with electric motors, used to transfer chemicals and other liquids.
432357	Progressing Cavity Pumps	Bas	Bas	Bas	Bas										Bas			01/15	Progressing cavity pumps for transporting thickened solutions such as sludge at water and wastewater treatment plants.
432358	Lobe Pumps	Bas	Bas	Bas											Bas			10/15	Positive-displacement lobe liquid pumps with electric motors, as used to transfer chemicals and other liquids.
432359	Screw Pumps	Bas	Bas	Bas	Bas										Bas			01/15	Screw centrifugal pumps for use in water and wastewater treatment plants.
432376.21	Power Horizontal Single-Acting Plunger Simplex Reciprocating Pumps	Bas	Bas	Bas	Bas										Bas			01/15	Plunger pumps for transporting thickened solutions such as sludge at water and wastewater treatment plants.

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		WW	WWP	WWE	WWU	IWT	SCW	SC	Eng	ME	Mech	Elec	Str	Arch	Comp	AE	MH	Date	
432513.27	Overhung Close-Coupled Submersible Centrifugal Pumps	Bas	Bas	Bas		Bas									Bas			04/15	Submersible sludge pumps and accessories for pumping return-activated sludge and waste-activated sludge from sumps in domestic wastewater-treatment plants.
434111	Bolted Steel Tanks	Bas	Bas	Bas	Bas	Bas									Bas			04/14	Factory-coated bolted-steel tanks for liquid storage.
434113	Welded Steel Tanks	Bas	Bas	Bas		Bas									Bas			01/13	Welded steel tanks for liquid storage.
434145	Fiberglass Reinforced Plastic Tanks	Bas	Bas	Bas		Bas									Bas			01/13	Fiberglass-reinforced plastic tanks for chemical storage.
434221	Welded Steel Pressure Tanks	Bas	Bas	Bas		Bas									Bas			04/14	Welded steel pressure tanks for storage of liquids under low and moderate pressures.
<b>DIVISION 44 - POLLUTION AND WASTE CONTROL EQUIPMENT</b>																			
441116	Fugitive Dust Barrier Systems								Bas	Bas	Bas				Bas	Bas		01/13	Equipment and accessories required for a complete dust collection system.
443121	Odor Control Biofilters	Bas	Bas	Bas		Bas									Bas			01/16	Active and passive biofilters and components for odor control.
443133	Odor Control Bioscrubbing Equipment	Bas	Bas	Bas		Bas									Bas			10/14	Wet scrubbers of the packed tower design for odor control at a wastewater treatment plant.
<b>DIVISION 46 - WATER AND WASTEWATER EQUIPMENT</b>																			
460548	Vibration and Seismic Controls for Water and Wastewater Equipment	Bas	Bas	Bas											Bas			01/13	Vibration isolation and seismic control equipment for water- and wastewater-treatment plant facilities.
460553	Identification for Water and Wastewater Equipment	Bas	Bas	Bas											Bas			01/13	Labeling and identification methods for water and wastewater process equipment and accessories, including nameplates, tags, stencils, labels, and lockout devices.
460713	Packaged Water Treatment Equipment	Bas	Bas	Bas											Bas			01/16	Packaged water treatment plants with capacity range of 100 to 1,500 gpm (378 to 5 680 L/min), with gravity or pressure filters for suspended solids, iron, and manganese removal, and disinfection.
460753	Packaged Wastewater Treatment Equipment	Bas	Bas	Bas		Bas									Bas			01/16	Packaged wastewater treatment equipment based on a plant using the extended aeration process, capacity range 3,000 to 150,000 gal. per day (11 to 568 cu. m per day).
462113	Chain-and-Rake Bar Screens	Bas	Bas	Bas		Bas									Bas			01/13	Channel-mounted, mechanically cleaned, chain-and-rake type bar screens for collection and removal of coarse solids from wastewater.
U 462133	Rotary Drum Screens	Bas	Bas	Bas		Bas									Bas			10/16	Rotary drum screens for use in a wastewater-treatment plant.
462156	Wedge Wire Screens	Bas	Bas	Bas		Bas									Bas			07/13	Wedge-wire screens for liquid/solid separation, straining and filtering, water collection and distribution, and surface water intakes.
462171	Trash Raking Equipment	Bas	Bas	Bas		Bas									Bas			07/13	Grab-style trash raking equipment and accessories.

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		WW	WWP	WWE	WWU	IWT	SCW	SC	Eng	ME	Mech	Elec	Str	Arch	Comp	AE	MH	Date		
462173	Screenings Washing and Compacting Equipment	Bas	Bas	Bas		Bas									Bas				07/13	Wastewater screenings washer/compactors and accessories.
462179	Screenings Storage Containers	Bas	Bas	Bas		Bas									Bas				07/13	Dewatering containers for the collection, storage, dewatering, and transport of wastewater screenings.
462183	Septage Receiving Equipment	Bas	Bas	Bas											Bas				07/14	Self-contained receiving stations for treating wastewater received from septage haulers.
462313	Chain-and-Bucket Grit Removal Equipment	Bas	Bas	Bas		Bas									Bas				10/13	Chain-and-bucket grit removal equipment and accessories.
462316	Chain-and-Flight Grit Removal Equipment	Bas	Bas	Bas		Bas									Bas				07/13	Chain-and-flight ("chain-and-scrapers") grit removal equipment and accessories.
462323	Vortex Grit Removal Equipment	Bas	Bas	Bas		Bas									Bas				07/13	Vortex grit removal equipment and accessories.
462327	Cyclone Degritters	Bas	Bas	Bas		Bas									Bas				04/14	Cyclone degritter (hydrocyclone) equipment and grit slurry feed pump.
462333	Aerated Grit Removal Equipment	Bas	Bas	Bas		Bas									Bas				10/13	Aerated grit removal equipment, including airlift pump and screw conveyor.
462363	Grit Classifying and Washing Equipment	Bas	Bas	Bas		Bas									Bas				10/13	Grit classifiers, washers, and accessories.
462366	Grit Storage Containers	Bas	Bas	Bas		Bas									Bas				07/13	Dewatering containers for the collection, storage, dewatering, and transport of wastewater grit.
462413	Macerators	Bas	Bas	Bas		Bas									Bas				07/14	Macerators for use in a wastewater treatment plant.
U 462416	Comminutors	Bas	Bas	Bas		Bas									Bas				10/16	Comminutors for use in a wastewater-treatment plant, including rotating-drum type, rotating-disc type, conical type, and oscillating type.
U 462423	Inline Grinders	Bas	Bas	Bas		Bas									Bas				10/16	Inline grinders for use in a wastewater-treatment plant.
462433	Open-Channel Grinders	Bas	Bas	Bas		Bas									Bas				01/13	Inline grinders for use in a wastewater-treatment plant.
462436	Modular Grinding, Screening, and Compacting Equipment	Bas	Bas	Bas											Bas				10/15	Modular equipment that combines an open-channel grinder with a conveyor that moves reduced-size solids through screening, washing, and compacting processes.
462513	Coalescing Oil-Water Separators	Bas	Bas	Bas		Bas									Bas				07/13	Underground, coalescing-type, fiberglass oil-water separators of capacity from 600 gal. to 30,000 gal. (2 300 L to 113 500 L).
462516	API Oil-Water Separators	Bas	Bas	Bas		Bas									Bas				07/16	Oil-water separators, designed under API standards, to separate gross amounts of oil and suspended solids from wastewater effluents.
462523	Grease Traps	Bas	Bas	Bas		Bas									Bas				01/13	Grease traps (also referred to as "grease interceptors").
462543	Tipping Trough Scum Skimming and Removal Equipment	Bas	Bas	Bas		Bas									Bas				07/14	Tipping (rotating) trough scum skimmers for use in primary and secondary clarifiers at wastewater treatment plants.

Section No.	Section Title	Water/Wastewater					Civil Eng		Building Engineering					Arch	Multidiscipline			Issue	Description
		WW	WWP	WWE	WWU	IWT	SCW	SC	Eng	ME	Mech	Elec	Str	Arch	Comp	AE	MH	Date	
463111	Chlorine Gas Feed Equipment	Bas	Bas	Bas		Bas									Bas			01/13	Vacuum-regulated; solution or gas feed; automatic or manual switchover; programmable, fully automatic, semi-automatic, or manual chlorination controls.
463113	Sulfur Dioxide Feed Equipment	Bas	Bas	Bas											Bas			07/15	Sulfur dioxide feed equipment for water and wastewater systems using sulfur dioxide gas in high-pressure cylinders.
463116	Ammonia Gas Feed Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Vacuum-regulated feed equipment, using ammonia gas in high-pressure cylinders.
463143	Carbon Dioxide Gas Feed Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Vacuum-regulated feed equipment, using carbon dioxide in high-pressure cylinders.
463153	Ozone Generating and Feed Equipment	Bas	Bas	Bas		Bas									Bas			07/14	Ozone generating and feed equipment for disinfection at a water or wastewater treatment plant.
463156	Liquid Oxygen Storage and Feed Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Liquid oxygen tanks, atmospheric vaporizers, and accessories for field applications.
463159	Cleaning Requirements for Oxygen Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Guidelines for cleaning of liquid oxygen tanks and high-pressure gaseous oxygen containers.
463183	Gas Chemical Feed Accessories and Safety Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Control panels, personal protective equipment, emergency showers and eye and face washers, warning signs, self-contained breathing apparatus, and emergency retrieval equipment.
463313	Sodium Hypochlorite Generating Equipment	Bas	Bas	Bas		Bas									Bas			07/13	Self-contained sodium hypochlorite generators and accessories.
463333	Polymer Blending and Feed Equipment	Bas	Bas	Bas		Bas									Bas			01/15	Self-contained liquid polymer blending units to supply process equipment, including blending unit and feed system; booster and metering pumps; skid-mounted supports; valves and piping; flow meters; and control panel.
463341	Liquid Chemical Feed System Coordination and Integration	Bas	Bas	Bas		Bas									Bas			04/15	Descriptions and integration of control schemes for integration of liquid chemical feed systems as specified in other Sections, including special submittals and data sheets; control panels; and installation requirements.
463342	Diaphragm-type Metering Pumps	Bas	Bas	Bas		Bas									Bas			01/13	Electronically controlled, solenoid-actuated-diaphragm-type chemical feed pumps and accessories.
463344	Peristaltic Metering Pumps	Bas	Bas	Bas		Bas									Bas			10/13	Peristaltic feed pumps for feeding various chemical solutions.
463346	Progressing Cavity Metering Pumps	Bas	Bas	Bas		Bas									Bas			01/13	Progressing-cavity-type chemical feed pumps and accessories.
463348	Lobe Metering Pumps	Bas	Bas	Bas		Bas									Bas			01/13	Lobe-type chemical feed pumps and accessories.

Section No.	Section Title	Water/Wastewater					Civil Eng		Building Engineering					Arch	Multidiscipline			Issue	Description
		WW	WWP	WWE	WWU	IWT	SCW	SC	Eng	ME	Mech	Elec	Str	Arch	Comp	AE	MH	Date	
463353	Drum Pumps	Bas	Bas	Bas		Bas									Bas			01/15	Positive-displacement drum pumps with electric or air motors, used to transfer chemicals and other liquids from drums and barrels.
463373	Liquid Chemical Diffusers	Bas	Bas	Bas		Bas*									Bas			04/15	Diffusers and injectors for discharging liquid chemicals into an open channel or into a pipe.
463383	Liquid Chemical Feed Accessories and Safety Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Basic materials and equipment for liquid chemical feed equipment, including control panels; personal protective equipment; emergency showers; emergency eye and face washers; emergency combination showers with eye and face washers; and equipment supports.
463613	Storage Silos	Bas	Bas	Bas		Bas									Bas			07/14	Bolted or field-welded steel storage silos for the bulk storage of dry chemicals to be used in water and wastewater treatment processes.
463623	Dry Chemical Weighing Equipment	Bas	Bas	Bas		Bas									Bas			07/14	Scales for the weighing of bulk dry chemicals for use in water and wastewater treatment processes.
463633	Volumetric Feed Equipment	Bas	Bas	Bas		Bas									Bas			07/14	Equipment for volumetrically feeding dry chemicals to be used in water and wastewater treatment processes.
463636	Gravimetric Feed Equipment	Bas	Bas	Bas		Bas									Bas			07/14	Equipment for feeding dry chemicals by gravity that will be used in water and wastewater treatment processes.
463643	Lime Slaking Equipment	Bas	Bas	Bas		Bas									Bas			07/14	Lime slaking equipment for conversion of calcium oxide to calcium hydroxide for use in neutralization and pH control at a water or wastewater treatment plant.
463653	Chemical Tablet Feeding Equipment	Bas	Bas	Bas		Bas									Bas			07/14	Chemical tablet feeding equipment for chlorination and dechlorination systems used in water and wastewater treatment plants.
463683	Dry Chemical Feed Accessories and Safety Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Basic materials and equipment for dry chemical feed equipment, including control panels; personal protective equipment; emergency showers; emergency eye and face washers; emergency combination showers with eye and face washers; and equipment supports.
464111	Rapid Mixers	Bas	Bas	Bas		Bas									Bas			01/13	Rapid mixers for mixing chemicals within the flow stream.
464117	Inline Static Mixers	Bas	Bas	Bas		Bas									Bas			01/13	Inline static mixers for mixing chemicals within the flow stream.
464121	Jet Mixer Equipment	Bas	Bas	Bas		Bas									Bas			10/13	Jet mixers for mixing chemicals within a tank.
464123	Submersible Mixers	Bas	Bas	Bas		Bas									Bas			10/13	Propeller-type submersible mixers for mixing tank contents.

Section No.	Section Title	Water/Wastewater					Civil Eng		Building Engineering					Arch	Multidiscipline			Issue	Description	
		WW	WWP	WWE	WWU	IWT	SCW	SC	Eng	ME	Mech	Elec	Str	Arch	Comp	AE	MH	Date		
464126	Floating Mechanical Mixers	Bas	Bas	Bas		Bas									Bas				01/14	Floating-type mechanical mixers and accessories for wastewater treatment facility aeration chambers, ponds, or lagoons.
464127	Paddle Mixers	Bas	Bas	Bas		Bas									Bas				01/13	Paddle mixers for use as dry chemical mixers, sludge neutralization, and conditioning of powders and ash.
464131	Vertical Reel Flocculation Equipment	Bas	Bas	Bas											Bas				07/13	Vertical reel flocculator equipment and accessories for water treatment systems.
464133	Horizontal Reel Flocculation Equipment	Bas	Bas	Bas											Bas				07/13	Horizontal reel flocculator equipment and accessories for water treatment systems.
464134	Vertical Turbine Flocculation Equipment	Bas	Bas	Bas											Bas				04/14	Vertical turbine flocculators for water treatment systems.
464146	Portable Tank Mixers	Bas	Bas	Bas		Bas*									Bas				04/15	Portable mixers and accessories for mixing of liquids in field applications.
464311	Chain-and-Flight Clarifier Equipment	Bas	Bas	Bas		Bas									Bas				10/13	Chain-and-flight ("chain-and-scrapers") clarifier equipment and accessories.
464314	Traveling Bridge Clarifier Equipment	Bas	Bas	Bas		Bas									Bas				10/13	Traveling bridge clarifier equipment and accessories, including clarifier mechanism, sludge collector assembly, effluent trough and weir assembly, weirs and baffles, and scum removal system.
464321	Circular Clarifier Equipment	Bas	Bas	Bas		Bas									Bas				10/13	Peripheral- or center-feed circular clarifier equipment, including access platform, troughs and weirs, weirs and baffles, and influent channel and feedwell.
464363	Dissolved Air Flotation Equipment for Water and Wastewater Treatment	Bas	Bas	Bas		Bas									Bas				01/14	Dissolved air flotation (DAF) equipment and accessories for water treatment facilities.
464373	Tube Settlers	Bas	Bas	Bas		Bas									Bas				01/14	Tube-type settlers and accessories for water or wastewater treatment facilities.
464376	Inclined Plate Settlers	Bas	Bas	Bas		Bas									Bas				01/14	Inclined-plate-type settlers and accessories for water or wastewater treatment facilities.
465111	Fixed Mechanical Aerators	Bas	Bas	Bas											Bas				01/16	Mechanical surface aerators permanently attached within a tank or basin.
465113	Floating Mechanical Aerators	Bas	Bas	Bas											Bas				01/16	Mechanical surface aerators harnessed or moored and floating in a basin or lagoon.
465117	Jet Aeration Equipment	Bas	Bas	Bas											Bas				01/16	Jet aerators for use in a water or wastewater treatment plant to transfer oxygen to a liquid or sludge by injecting process liquid and air through one or more nozzles (venturis).
465121	Coarse Bubble Diffusers	Bas	Bas	Bas											Bas				01/16	Coarse-bubble, ceramic, aeration diffusers for use in water and wastewater treatment plants.
465123	Swing-Type Channel Aeration Equipment	Bas	Bas	Bas											Bas				01/16	Retrievable channel aeration equipment and lifting mechanisms for use in water and wastewater treatment plants.
465131	Flexible Membrane Tube Diffusers	Bas	Bas	Bas											Bas				01/16	Membrane tube diffusers (also called "candle aerators") for use in water and wastewater treatment plants.



Section No.	Section Title	Water/Wastewater					Civil Eng		Building Engineering					Arch	Multidiscipline			Issue	Description
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465133	Flexible Membrane Disc Diffusers	Bas	Bas	Bas											Bas			10/15	Membrane disc diffusers for use in water and wastewater treatment plants.
465136	Ceramic Disc Fine Bubble Diffusers	Bas	Bas	Bas											Bas			07/16	Ceramic disc-type, fine-bubble diffusers for use in water and wastewater treatment plants, including supporting grid.
465146	Membrane Diffusers	Bas	Bas	Bas											Bas			01/16	Membrane aeration diffusers for use in water and wastewater treatment plants.
465323	Trickling Filter Rotary Distributor Equipment	Bas	Bas	Bas		Bas									Bas			01/14	Trickling filter rotary distributor arms and accessories for wastewater treatment facilities. Equipment distributes sewage over the filter bed by rotating only from the reaction thrust of sewage flowing through jets or nozzles in the distributor arms.
465324	Trickling Filter Media	Bas	Bas	Bas		Bas									Bas			01/14	Trickling filter media for wastewater treatment facilities. Both stone and plastic media are included.
465341	Intermittent Sand Filters for Wastewater Treatment	Bas	Bas	Bas		Bas*									Bas			04/15	Intermittent sand filters, including media, piping, and accessories.
465349	Membrane Biological Reactors	Bas	Bas	Bas		Bas									Bas			07/14	Internal membrane biological reactors serving as a solids separation process.
466121	Pressure Filters	Bas	Bas	Bas											Bas			10/13	Pressure filters and accessories for water filtration.
466123	Gravity Filters	Bas	Bas	Bas											Bas			10/13	High-rate (mixed media) gravity filters, continuous backwash (sand) filters, and accessories.
466133	Microfiltration and Ultrafiltration Membrane Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Components for microfiltration and ultrafiltration systems.
466141	Disc Cloth Filters	Bas	Bas	Bas		Bas									Bas			04/14	Disc cloth filters and accessories for use in wastewater treatment facilities.
466143	Rotary Drum Cloth Filters	Bas	Bas	Bas		Bas									Bas			01/14	Cloth filters and accessories for rotary drum vacuum filters used in wastewater treatment facilities.
466146	Automatic Backwash Cloth Filter Equipment	Bas	Bas	Bas		Bas									Bas			01/14	Automatic backwash cloth filters and accessories for water or wastewater filtration. Canister-type filter units are included, as well as larger filters that incorporate a modular set of cloth disks on a rotating assembly.
466153	Cartridge Filters	Bas	Bas	Bas		Bas									Bas			10/13	Cartridge filters and accessories for water or wastewater filtration.
466163	Bag Filters	Bas	Bas	Bas		Bas									Bas			10/13	Bag filters and accessories for water or wastewater filtration.
466173	Automatic Straining Equipment	Bas	Bas	Bas		Bas									Bas			07/14	Automatic self-cleaning straining equipment for continuous debris removal from piping systems that require uninterrupted flow.
466323	Reverse-Osmosis and Nanofiltration Membrane Equipment	Bas	Bas	Bas		Bas*									Bas			04/15	Components for nanofiltration and reverse-osmosis systems.

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466613	Closed-Vessel Low-Pressure/Low-Intensity Ultraviolet Treatment Equipment	Bas	Bas	Bas		Bas									Bas				04/14	Closed-vessel, low-pressure, low-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories.
466616	Closed-Vessel Low-Pressure/High-Intensity Ultraviolet Treatment Equipment	Bas	Bas	Bas		Bas									Bas				04/14	Closed-vessel, low-pressure, high-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories.
466623	Closed-Vessel Medium-Pressure Ultraviolet Treatment Equipment	Bas	Bas	Bas		Bas									Bas				04/14	Closed-vessel, medium-pressure ultraviolet treatment equipment, including lamp assemblies, controls, and accessories.
466653	Open-Channel Low-Pressure/Low-Intensity Ultraviolet Treatment Equipment	Bas	Bas	Bas		Bas									Bas				04/14	Open-channel, low-pressure, low-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories.
466656	Open-Channel Low-Pressure/High-Intensity Ultraviolet Treatment Equipment	Bas	Bas	Bas		Bas									Bas				04/14	Open-channel, low-pressure, high-intensity ultraviolet treatment equipment, including lamp assemblies, controls, and accessories.
466663	Open-Channel Medium-Pressure Ultraviolet Treatment Equipment	Bas	Bas	Bas		Bas									Bas				04/14	Open-channel, medium-pressure ultraviolet treatment equipment, including lamp assemblies, controls, and accessories.
467113	Circular Gravity Thickeners	Bas	Bas	Bas		Bas									Bas				10/13	Circular gravity-thickener equipment and accessories, including thickener drive mechanism, walkway, scraper arms and solids collectors, and influent well.
467116	Gravity Belt Thickeners	Bas	Bas	Bas		Bas									Bas				07/14	Gravity belt thickeners used to reduce the volume of sludge by producing a concentrate for subsequent dewatering, treatment, or transport.
467133	Rotary Drum Thickening Equipment	Bas	Bas	Bas		Bas									Bas				04/14	Rotary drum thickeners used for thickening sludge in wastewater treatment facilities.
467146	Thickening Screw Press	Bas	Bas	Bas											Bas				04/16	Thickening screw presses and components for processing wastewater residuals.
467319	Digester Appurtenances	Bas	Bas	Bas											Bas				07/15	Common work requirements for anaerobic digesters used in wastewater residuals stabilization processes.
467321	Aerobic Digester Aeration Equipment	Bas	Bas	Bas											Bas				07/15	Requirements for aerobic digesters used in wastewater residuals stabilization processes.
467341	Digester Heating Equipment	Bas	Bas	Bas											Bas				07/15	Heating equipment to maintain a desired operating temperature in anaerobic digesters used in wastewater residuals stabilization processes.
467621	Belt Filter Presses	Bas	Bas	Bas											Bas				07/16	Belt filter presses and accessories.

**Legend:**

WW = Water/Wastewater Engineering Library  
WWP = Water/Wastewater Equipment & Utilities Library  
WWE = Water/Wastewater Equipment Library  
WWU = Water/Wastewater Utilities Library  
IWT = Industrial Wastewater Treatment Library  
\* = Industrial Wastewater Treatment Add-On  
  
SCW = Site Civil & Water/Wastewater Utilities Library  
SC = Site Civil Library  
  
Eng = Engineering Library  
ME = Mechanical/Electrical Library  
Mech = Mechanical Library  
Elec = Electrical Library  
Str = Structural Library  
  
Arch = Architecture Library  
  
Comp = Comprehensive Library  
AE = Building A/E Library  
MH = Materials Handling Library  
Bas = Included in the Basic library

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