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SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

1. GENERAL
	* + 1. SUMMARY
				1. Section Includes:

Public-use washroom accessories.

* + - * 1. Related Requirements:

Retain subparagraphs below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.

Section 088300 "Mirrors" for frameless mirrors.

Section 093013 "Ceramic Tiling" for ceramic toilet and bath accessories.

Section 102813.63 "Detention Toilet Accessories" for accessories designed for installation in detention facilities.

* + - 1. ALLOWANCES

Retain this article if products and Work included in this Section are covered by lump-sum, unit-cost, quantity, or testing and inspection allowances.

* + - * 1. See Section 012100 "Allowances" for description of allowances affecting items specified in this Section.
			1. UNIT PRICES

Retain this article if products and Work specified in this Section are measured and paid for under the provisions of unit prices.

* + - * 1. See Section 012200 "Unit Prices" for description of unit prices affecting items specified in this Section.
			1. ALTERNATES

Retain this article if products and Work specified in this Section are proposed to be added to or deducted from the base bid amount under the provisions of alternates.

* + - * 1. See Section 012300 "Alternates" for description of alternates affecting items specified in this Section.
			1. COORDINATION
				1. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.
				2. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.
			2. ACTION SUBMITTALS

Action submittals are submittals requiring responsive action and return of reviewed documents to Contractor.

* + - * 1. Product Data: For each product.

Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

Include anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.

Retain subparagraph below if units are required that connect to building electrical system.

Include electrical characteristics.

If retaining "Samples" Paragraph below, consider revising to limit Sample requirements to specific items.

* + - * 1. Samples: For each exposed product and for each finish specified, full size.

Retain subparagraph below if applicable.

Approved full-size Samples will be returned and may be used in the Work.

* + - * 1. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required.

Identify locations using room designations indicated.

Retain subparagraph below if product designations are inserted in the Section Text.

Identify accessories using designations indicated.

Retain "Delegated Design Submittals" Paragraph below if design services have been delegated to Contractor. The IBC requires grab bars and shower seats to be able to resist concentrated load of 250 lbf (1112 N) applied in any direction and at any point. Authorities having jurisdiction might require calculations for these accessories, especially if they are mounted on panels of toilet and shower compartments.

* + - * 1. Delegated Design Submittals: For [**grab bars**] [**and**] [**shower seats**].

Include structural design calculations indicating compliance with specified structural-performance requirements.

* + - 1. INFORMATIONAL SUBMITTALS

Informational submittals are submittals that require review by Architect, but they do not require Architect's responsive action and return of reviewed documents to Contractor, provided submittals comply with requirements. If rejected, submittals with responsive action must be returned to Contractor.

Retain "Sample Warranty" Paragraph below with mirror, hand dryer, or toilet-compartment occupancy-indicator warranty requirements in "Warranty" Article.

* + - * 1. Sample Warranty: For manufacturer's special warranties.
			1. CLOSEOUT SUBMITTALS
				1. Maintenance Data: For accessories to include in maintenance manuals.
			2. WARRANTY

When warranties are required and available, verify with Owner's counsel that special warranties stated in this article are not less than remedies available to Owner under prevailing local laws.

* + - * 1. Manufacturer's Special Warranty for Mirrors: Manufacturer agrees to repair or replace mirrors that fail in materials or workmanship within specified warranty period.

Failures include, but are not limited to, visible silver spoilage defects.

Not all manufacturers offer a special mirror warranty. Verify available warranties and warranty periods.

Warranty Period: [**10**] [**15**] <**Insert number**> years from date of Substantial Completion.

* + - * 1. Manufacturer's Special Warranty for Toilet-Compartment Occupancy-Indicator Systems: Manufacturer agrees to repair or replace toilet-compartment occupancy-indicator systems that fail in materials or workmanship within specified warranty period.

Verify available warranties and warranty periods.

Warranty Period: [**Five**] <**Insert number**> years from date of Substantial Completion.

* + - * 1. Manufacturer's Special Warranty for Hand Dryers: Manufacturer agrees to repair or replace hand dryers that fail in materials or workmanship within specified warranty period.

Verify available warranties and warranty periods.

Warranty Period: [**Two**] [**Five**] [**10**] <**Insert number**> years from date of Substantial Completion.

1. PRODUCTS
	* + 1. OWNER-FURNISHED MATERIALS

For large commercial projects, campus-type projects with multiple buildings, or similar situations, Owner might have separate service contracts for furnishing various accessories and corresponding supplies, such as towel dispensers and paper towels. In some cases, suppliers install these accessories; this requires coordination with Drawings and accessibility requirements. If Owner will furnish accessories to Contractor for installation, retain this article and insert requirements in "Owner-Furnished Materials" Paragraph below.

* + - * 1. Owner-Furnished Materials: <**Insert products**>.
			1. PERFORMANCE REQUIREMENTS

Retain this article if accessories that connect to building electrical systems, such as hand dryers, adjustable-height adult changing stations, and toilet-compartment occupancy-indicator systems, are required.

* + - * 1. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
				2. Structural Performance: Design accessories and fasteners to comply with the following requirements:

Retain "Grab Bars" and "Shower Seats" subparagraphs below if required. The IBC requires grab bars and shower seats to be able to resist concentrated load of 250 lbf (1112 N) applied in any direction and at any point. Shower seats often resist greater loads.

Grab Bars: Installed units are able to resist 250 lbf concentrated load applied in any direction and at any point.

Shower Seats: Installed units are able to resist [**250 lbf**] [**360 lbf**] <**Insert load**> concentrated load applied in any direction and at any point.

* + - 1. PUBLIC-USE WASHROOM ACCESSORIES

Retain one of two options in "Source Limitations" Paragraph below or revise to suit Project. Retain first option if manufacturers can provide all public-use washroom accessories required for Project.

* + - * 1. Source Limitations: Obtain [**public-use washroom accessories**] [**each type of public-use washroom accessory**] from single source from single manufacturer.
				2. Multiple-Airflow Hand Dryer :

Retain "Basis-of-Design Product" Subparagraph and list of manufacturers below to identify a specific product or a comparable product from manufacturers listed.

Basis-of-Design Product: Subject to compliance with requirements, provide **World Dryer Corporation (Zurn Industries, LLC); VERDEdri®** or comparable product by one of the following:

<**Insert manufacturer's name**>

Description: Multiple-airflow hand dryer, using two or more airstreams for rapid hand drying[ **with heating unit on-off control**].

Revise "Mounting" Subparagraph below if required. The DOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1 limit protrusion of objects with leading edges between 27 and 80 inches (686 and 2032 mm) above the finished floor to 4 inches (102 mm). Verify requirements of authorities having jurisdiction.

Mounting: **[Surface mounted]**.

Operation: Electronic-sensor activated with timed power cutoff switch.

Average Dry Time: **[12]** seconds.

Automatic Shutoff: At **[60]** seconds.

Maximum Sound Level: [**56**] [**75**] <**Insert number**> dB.

Water Collection: Removable reservoir.

Filter: HEPA, replaceable.

Cover Material and Finish: **[Stainless steel, ASTM A480/A480M No. 4 finish (satin)]**.

Electrical Requirements: [**115 V, 13 A, 1500 W**] [**115 V, 15 A, 1725 W**] [**115 V, 20 A, 2300 W**] [**208 to 240 V, 9 to 10 A, 1900 to 2300 W**] <**Insert requirements**>.

* + - 1. MATERIALS

Retain this article if not naming manufacturers' products or if material descriptions are used in part to determine product selection.

* + - * 1. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304, 0.031-inch- minimum nominal thickness unless otherwise indicated.
				2. Brass: ASTM B19, flat products; ASTM B16/B16M, rods, shapes, forgings, and flat products with finished edges; or ASTM B30, castings.
				3. Steel Sheet: ASTM A1008/A1008M, Designation CS (cold rolled, commercial steel), 0.036-inch- minimum nominal thickness.
				4. Galvanized-Steel Sheet: ASTM A653/A653M, with G60 hot-dip zinc coating.
				5. Galvanized-Steel Mounting Devices: ASTM A153/A153M, hot-dip galvanized after fabrication.
				6. Fasteners: Screws, bolts, and other devices of same material as accessory unit, unless otherwise recommended by manufacturer or specified in this Section, and tamper and theft resistant where exposed, and of stainless or galvanized steel where concealed.

Retain "Chrome Plating" Paragraph below for chrome finish. Brass, steel, and cast zinc alloy (zamac) are available with chrome finish.

* + - * 1. Chrome Plating: ASTM B456, Service Condition Number SC 2 (moderate service).

Revise "Mirrors" Paragraph below if tempered or safety glass is required; ASTM C1503 does not cover tempered or safety glass mirrors. Note that reflected images with tempered or safety glass may be distorted.

* + - * 1. Mirrors: ASTM C1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.
			1. FABRICATION
				1. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.
				2. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of [**six**] <**Insert number**> keys to Owner's representative.
1. EXECUTION
	* + 1. INSTALLATION OF TOILET, BATH, AND LAUNDRY ACCESSORIES
				1. Install accessories in accordance with manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.

Remove temporary labels and protective coatings.

* + - * 1. Grab Bars: Install to comply with specified structural-performance requirements.
				2. Shower Seats: Install to comply with specified structural-performance requirements.
			1. ADJUSTING AND CLEANING
				1. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.
				2. Clean and polish exposed surfaces in accordance with manufacturer's written instructions.

END OF SECTION 102800