Copyright 2013 by The American Institute of Architects (AIA)

Exclusively published and distributed by Architectural Computer Services, Inc. (ARCOM) for the AIA

This Product MasterSpec Section is licensed by ARCOM to Willoughby Industries ("Licensee").

**This Product MasterSpec Section modifies the original MasterSpec text, and does not include the full content of the original MasterSpec Section.**

Revisions made to the original MasterSpec text are made solely by the Licensee and are not endorsed by, or representative of the opinions of, ARCOM or The American Institute of Architects (AIA). Neither AIA nor ARCOM are liable in any way for such revisions or for the use of this Product MasterSpec Section by any end user. A qualified design professional should review and edit the document to suit project requirements.

For more information, contact Willoughby Industries, 5105 W 78th Street, Indianapolis, IN 46268; Phone: (800) 428-4065; Fax: (317) 875-0837; Website: www.willoughby-ind.com; Email: willoughby@willoughby-ind.com.

For information about MasterSpec contact ARCOM at (800) 424-5080 or visit www.MasterSpec.com.

SECTION 224233 - WASH FOUNTAINS

**TIPS:**

To view non-printing **Editor's Notes** that provide guidance for editing, click on Masterworks/Single‑File Formatting/Toggle/Editor's Notes.

To read **detailed research, technical information about products and materials, and coordination checklists**, click on Masterworks/Supporting Information.

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
   * + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
      1. SUMMARY
         1. Section Includes:

Circular wash fountains.

Semicircular wash fountains.

Corner wash fountains.

Linear wash fountains.

Traditional solid surface wash fountains.

* + - * 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 224216.13 "Commercial Lavatories."

Section 224216.16 "Commercial Sinks."

* + - 1. ACTION SUBMITTALS
         1. Product Data: For each type of product.

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

Include rated capacities, operating characteristics,[**electrical characteristics,**] and furnished specialties and accessories.

* + - * 1. LEED Submittals:

Retain "Product Data for Prerequisite WE 1( and Credit WE 3) (, Credit WE 2, and Credit WE 3)" Subparagraph below for LEED-NC, LEED-CS, and LEED for Schools for fixtures and equipment that consume water.

Product Data for Prerequisite WE 1[**and Credit WE 3**] [**, Credit WE 2, and Credit WE 3**]: Documentation indicating flow and water consumption requirements.

Retain "Product Data for Prerequisite WE 1( and Credit WE 1)" Subparagraph below for LEED-CI for fixtures and equipment that consume water.

Product Data for Prerequisite WE 1[**and Credit WE 1**]: Documentation indicating flow and water consumption requirements.

Retain "Product Data for Prerequisite WE 1( and Credit WE 2)" Subparagraph below for LEED-EB for fixtures and equipment that consume water.

Product Data for Prerequisite WE 1[**and Credit WE 2**]: Documentation indicating flow and water consumption requirements.

Retain "Shop Drawings" Paragraph below if fixtures or equipment includes wiring.

* + - * 1. Shop Drawings: For each type of wash fountain.

Include plans, elevations, sections, and [**mounting**] [**attachment**] details.

Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.

Include diagrams for power, signal, and control wiring.

* + - 1. CLOSEOUT SUBMITTALS
         1. Operation and Maintenance Data: For wash fountains and components to include in operation and maintenance manuals.
      2. MAINTENANCE MATERIAL SUBMITTALS
         1. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

Faucet Washers and O-Rings: Equal to [**10**] <**Insert number**> percent of quantity of each type and size installed.

Faucet Cartridges and O-Rings: Equal to [**5**] <**Insert number**> percent of quantity of each type and size installed.

* + - 1. WARRANTY
         1. Manufacturer's Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components wash fountains that fail in materials or workmanship within specified warranty period.

Failures include, but are not limited to, the following:

Faulty operation of controls.

Deterioration of metals, metal finishes, and other materials beyond normal use.

Warranty Periods: 1 year from date of Substantial Completion.

1. PRODUCTS

See Editing Instruction No. 1 in the Evaluations for cautions about named manufacturers and products. For an explanation of options and Contractor's product selection procedures, see Section 016000 "Product Requirements."

Do not use the same plumbing fixture designation as is used for a plumbing fixture in another plumbing Section.

* + - 1. SOLID-SURFACE, CIRCULAR WASH FOUNTAINS

Caution: These fixtures require a trap with waste and vent connections for installation in the base and vertical vent piping through top of unit, or they may be installed with trap and vent under the floor below the fixture.

Copy "Wash Fountains" Paragraph below and re-edit for each type of circular wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each solid-surface, circular wash fountain.

* + - * 1. Wash Fountains <**Insert drawing designation**>: Solid-surface, circular receptor.

Basis-of-Design Product: Subject to compliance with requirements, provide Willoughby Industries; [**WAF-3606**] [**WAF-5406**] [**WAF-5408**] or a comparable product by one of the following:

Bradley Corporation.

Intersan Manufacturing Company.

<**Insert manufacturer's name**>.

Standard: CSA B45.5/IAPMO Z124.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: CSA B45.5/IAPMO Z124.

Willoughby Industries' 36 inch (914 mm) unit accommodates 6 users, and the 54 inch (1370 mm) unit is available in either 6 or 8 user configurations.

Nominal Diameter: [**36 inches (914 mm)**] [**54 inches (1370 mm)**].

Retain first option in "Height to Rim" subparagraph below for adult height receptors. Retain the second option for child height receptors.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Refer to manufacturer's website at http://www.willoughby-ind.com/Portals/0/Marketing/Aquasurf-Color-Chart.pdf for color options.

Color or Finish: <**Insert color from manufacturer's full selection**>.

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Spray Head:

Material: Stainless steel base with insert.

Retain option in "Number of user Stations" subparagraph below to correspond with unit specified in "Basis-of-Design Product" Subparagraph above. Willoughby Industries' 36 inch (914 mm) unit accommodates 6 users, and the 54 inch (1370 mm) unit is available in either 6 or 8 user configurations.

Number of User Stations: [**Six**] [**Eight**].

Spray Nozzles: Complying with NSF 61, NSF/ANSI 372, and ASME A112.18.1/CSA B125.1.

Verify option retained in "Control" Subparagraph below is available from listed manufacturers and for type of wash fountain required.

Control: [**Individual foot-pedal**] [**Individual pneumatic push-button**] [**Individual electronic pushbutton**] [**Individual piezo-electric pushbutton**] [**Individual hardwired sensor**] [**Individual, battery-powered sensor**] actuation with thermostatic mixing valve complying with ASSE 1016 and ASSE 1070. Water supply check stops supplied by contractor.

Liquid-Soap Dispensers: [**Manual**] [**Not required**].

Pedestal: Stainless steel with access panel.

Supply Fittings:

Piping: 1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From [**bottom**] [**top**].

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Trap and drain fittings are supplied by contractor.

Trap and Drain Piping: 1-1/2 inch tailpiece and P-trap. .

Vent Piping: [**Not required**] [**NPS 1-1/2 (DN 40) to ceiling**].

Retain "Supply and Vent Shroud" Subparagraph below if required to conceal vertical supply and vent piping.

Supply and Vent Shroud: [**Not required**] [**Stainless steel of size to cover supply and vent piping**].

Mounting hardware to be supplied by contractor.

Mounting: Floor mounting flange on wash fountain base interior.

* + - 1. STAINLESS-STEEL, CIRCULAR WASH FOUNTAINS

Caution: These fixtures require a trap with waste and vent connections for installation in the base and vertical vent piping through top of unit, or they may be installed with trap and vent under the floor below the fixture.

Copy "Wash Fountains" Paragraph below and re-edit for each type of circular wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each stainless-steel, circular wash fountain.

* + - * 1. Wash Fountains **<Insert drawing designation>**: Stainless-steel, circular receptor.

Basis-of-Design Product: Subject to compliance with requirements, provide Willoughby Industries; [**WWF-3606**] [**WWF-4206**] [**WWF-5406**] [**WWF-5408**]or a comparable product by one of the following:

Bradley Corporation.

Intersan Manufacturing Company.

<**Insert manufacturer's name**>.

Standard: ASME A112.19.3/CSA B45.4.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: ASME A112.19.3/CSA B45.4.

Willoughby Industries' 36 inch (914 mm) and 42 inch 1067 mm) units accommodate 6 users, and the 54 inch (1370 mm) unit is available in either 6 or 8 user configurations.

Nominal Diameter: [**36 inches (914 mm)**] [**42 inches (1067 mm)**] [**54 inches (1372 mm)**].

Retain first option in "Height to Rim" subparagraph below for adult height receptors. Retain the second option for child height receptors.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Color or Finish: #4 satin finish.

Drain: Grid with [**NPS 1-1/2 (DN 40)**].

Spray Head:

Material: Stainless steel base with insert.

Willoughby Industries' 36 inch (914 mm) and 42 inch 1067 mm) units accommodate 6 users, and the 54 inch (1370 mm) unit is available in either 6 or 8 user configurations.

Number of User Stations: [**Six**] [**Eight**].

Spray Nozzles: Complying with NSF 61, NSF/ANSI 372, and ASME A112.18.1/CSA B125.1.

Verify option retained in "Control" Subparagraph below is available from listed manufacturers and for type of wash fountain required.

Control: [**Individual foot-pedal**] [**Individual pneumatic push-button**] [**Individual electronic pushbutton**] [**Individual piezo-electric pushbutton**] [**Individual, hardwired sensor**] [**Individual, battery-powered sensor**] actuation with **thermostatic** mixing valve complying with ASSE 1016 and ASSE 1070. Water supply check stops supplied by contractor.

Liquid-Soap Dispensers: [**Manual**] [**Not required**].

Pedestal: Stainless steel with access panel.

Supply Fittings:

Piping: 1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From [**bottom**] [**top**].

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Trap and drain fittings are supplied by contractor.

Trap and Drain Piping: 1-1/2 inch tailpiece and P-trap.

Vent Piping: [**Not required**] [**NPS 1-1/2 (DN 40) to ceiling**].

Retain "Shroud" Subparagraph below if required to conceal vertical supply and vent piping.

Shroud: [**Not required**] [**Stainless steel of size to cover supply and vent piping**].

Mounting hardware to be supplied by contractor.

Mounting: Floor mounting flange on wash fountain base interior.

* + - 1. SOLID-SURFACE, SEMICIRCULAR WASH FOUNTAINS

Copy "Wash Fountains" Paragraph below and re-edit for each type of semicircular wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each solid-surface, semicircular wash fountain.

* + - * 1. Wash Fountains **<Insert drawing designation>**: [**Off**] [**On**]-floor, solid-surface, semicircular receptor.

Basis-of-Design Product: Subject to compliance with requirements, provide Willoughby Industries; [**WAF-3603**] [**WAF-5403**] [**WAF-5404**] or a comparable product by one of the following:

Bradley Corporation.

Intersan Manufacturing Company.

<**Insert manufacturer's name**>.

Standard: CSA B45.5/IAPMO Z124.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: CSA B45.5/IAPMO Z124.

Willoughby Industries' 36 inch (914 mm) unit accommodates 3 users, and the 54 inch (1370 mm) unit is available in either 3 or 4 user configurations.

Nominal Diameter: [**36 inches (914 mm)**] [**54 inches (1372 mm)**].

Retain first option in "Height to Rim" subparagraph below for on-floor receptors. Retain the second option for off-floor receptors for children and elderly/handicapped persons.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Refer to manufacturer's website at http://www.willoughby-ind.com/Portals/0/Marketing/Aquasurf-Color-Chart.pdf for color options.

Color or Finish: **<Insert color from manufacturer's full selection>**.

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Spray Head:

Material: Stainless steel base with insert.

Willoughby Industries' 36 inch (914 mm) unit accommodates 3 users, and the 54 inch (1370 mm) unit is available in either 3 or 4 user configurations.

Number of User Stations: [**Three**] [**Four**].

Spray Nozzles: Complying with NSF 61, NSF/ANSI 372, and ASME A112.18.1/CSA B125.1.

Verify option retained in "Control" Subparagraph below is available from listed manufacturers and for type of wash fountain required.

Control: [**Individual foot-pedal**] [**Individual pneumatic push-button**] [**Individual electronic pushbutton**] [**Individual piezo-electric pushbutton**] [**Individual, hardwired sensor**] [**Individual, battery-powered sensor**] actuation with thermostatic mixing valve complying with ASSE 1016 and ASSE 1070. Water supply check stops supplied by contractor.

Liquid-Soap Dispensers: [**Manual**] [**Not required**].

Pedestal: Stainless steel with access panel.

Supply Fittings:

Piping: 1-1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From wall.

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Trap and drain fittings are supplied by contractor.

Trap and Drain Piping: 1-1/2 tailpiece and P-trap.

Vent Piping: [**Not required**] [**NPS 1-1/2 (DN 40) to ceiling**].

Retain "Shroud" Subparagraph below if required to conceal vertical supply and vent piping.

Shroud: [**Not required**] [**Stainless steel of size to cover supply and vent piping**].

Retain "Off-Floor Mounting" Subparagraph below for wall-mounted wash fountains.

Off-Floor Mounting: Wall bracket.

Supplies: NPS 1/2 (DN 15).

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

Retain "On-Floor Mounting" Subparagraph below for floor-mounted wash fountains.

On-Floor Mounting: Wall bracket attached to [**reinforcement in wall**] [**concrete or block wall**].

Supplies: NPS 1/2 (DN 15).

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

* + - 1. STAINLESS-STEEL, SEMICIRCULAR WASH FOUNTAINS

Copy "Wash Fountains" Paragraph below and re-edit for each type of semicircular wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each stainless-steel, semicircular wash fountain.

* + - * 1. Wash Fountains **<Insert drawing designation>**: [**Off**] [**On**]-floor, stainless-steel, semicircular receptor.

Basis-of-Design Product: Subject to compliance with requirements, provide Willoughby Industries; [**WWF-3603**] [**WWF-4203**] [**WWF-4204**] [**WWF-5403**] [**WWF-5404**] or a comparable product by one of the following:

Bradley Corporation.

Intersan Manufacturing Company.

<**Insert manufacturer's name**>.

Standard: ASME A112.19.3/CSA B45.4.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: ASME A112.19.3/CSA B45.4 for stainless-steel receptor.

Willoughby Industries' 36 inch (914 mm) unit accommodates 3 users, and the 42 inch (1067 mm) and 54 inch (1370 mm) units are available in either 3 or 4 user configurations.

Nominal Diameter: [**36 inches (914 mm)**] [**42 inches (1067 mm)**] [**54 inches (1372 mm)**].

Retain first option in "Height to Rim" Subparagraph below for on-floor receptors, or second option for off-floor receptors for children and elderly/handicapped persons.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Color or Finish: #4 satin finish.

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Spray Head:

Material: Stainless steel base with insert.

Willoughby Industries' 36 inch (914 mm) unit accommodates 3 users, and the 42 inch (1067 mm) and 54 inch (1370 mm) units are available in either 3 or 4 user configurations.

Number of User Stations: [**Three**] [**Four**].

Spray Nozzles: Complying with NSF 61, NSF/ANSI 372, and ASME A112.18.1/CSA B125.1.

Verify option retained in "Control" Subparagraph below is available from listed manufacturers and for type of wash fountain required.

Control: [**Individual foot-pedal**] [**Individual pneumatic push-button**] [**Individual electronic push-button**] [**Individual piezo-electric push-button**] [**Individual, hardwired sensor**] [**Individual, battery-powered sensor**] actuation with thermostatic mixing valve complying with ASSE 1016 and ASSE 1070. Water supply check stops supplied by contractor.

Liquid-Soap Dispensers: [**Manual**] [**Not required**].

Pedestal: Stainless steel with access panel.

Supply Fittings:

Piping: 1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From wall.

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Trap and drain fittings are supplied by contractor.

Trap and Drain Piping: **NPS 1-1/2 (DN 40)**.

Retain "Shroud" Subparagraph below if required to conceal vertical supply and vent piping.

Shroud: [**Not required**] [**Stainless steel of size to cover supply and vent piping**].

Retain "Off-Floor Mounting" Subparagraph below for wall-mounted wash fountains.

Off-Floor Mounting: Wall bracket.

Retain "On-Floor Mounting" Subparagraph below for floor-mounted wash fountains.

On-Floor Mounting: Floor bracket and wall bracket attached to [**reinforcement in wall**] [**concrete or block wall**].

Supplies: NPS 1/2 (DN 15).

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

* + - 1. SOLID-SURFACE, CORNER WASH FOUNTAINS

Copy "Wash Fountains" Paragraph below and re-edit for each type of corner wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each solid-surface, corner wash fountain.

* + - * 1. Wash Fountains **<Insert drawing designation>**: Solid-surface, corner receptor.

Basis-of-Design Product: Subject to compliance with requirements, provide Willoughby Industries; WAF-2200 or a comparable product by one of the following:

Bradley Corporation.

<**Insert manufacturer's name**>.

Standard: CSA B45.5/IAPMO Z124.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: CSA B45.5/IAPMO Z124.

Nominal Side Width: 27 inches (686 mm).

Retain first option in "Height to Rim" Subparagraph below for on-floor receptors, or second option for off-floor receptors for children.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Refer to manufacturer's website at http://www.willoughby-ind.com/Portals/0/Marketing/Aquasurf-Color-Chart.pdf for color options.

Color or Finish: <**Insert color from manufacturer's full selection**>.

Drain: Grid with NPS 1-1/2 (DN 40) tailpiece.

Spray Head:

Material: Stainless steel base with insert.

Number of User Stations: Two.

Spray Nozzles: Complying with NSF 61, NSF/ANSI 372, and ASME A112.18.1/CSA B125.1.

Verify option retained in "Control" Subparagraph below is available from listed manufacturers and for type of wash fountain required.

Control: [**Individual pneumatic push-button**] [**Individual electronic push-button**] [**Individual piezo-electric push-button**] [**Individual, hardwired sensor**] [**Individual, battery-powered sensor**] actuation with thermostatic mixing valve complying with ASSE 1016 and ASS 1070. Water supply check stops supplied by contractor.

Liquid-Soap Dispensers: [**Manual**] [**Not required**].

Pedestal: Stainless steel with access panel.

Supply Fittings:

Piping: 1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From wall.

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Trap and Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

Off-Floor Mounting: Wall bracket.

* + - 1. SOLID-SURFACE, LINEAR WASH FOUNTAINS WITH INTEGRAL SPRAY HEADS.

Copy "Wash Fountains" Paragraph below and re-edit for each type of linear wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each solid-surface, linear (side-by-side) wash fountain.

* + - * 1. Wash Fountains **<Insert drawing designation>**: Solid-surface, linear (side-by-side) receptor.

Basis-of-Design Product: Subject to compliance with requirements provide Willoughby Industries; [**WAW-2311**] [**WAW-2322**] [**WAW-2333**] or a comparable product by one of the following:

Bradley Corporation.

Intersan Manufacturing Company.

<**Insert manufacturer's name**>.

Standard: CSA B45.5/IAPMO Z124.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: CSA B45.5/IAPMO Z124.

Retain first option in "Height to Rim" Subparagraph below for on-floor receptors, or second option for off-floor receptors for children and elderly/handicapped persons.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Refer to manufacturer's website at http://www.willoughby-ind.com/Portals/0/Marketing/Aquasurf-Color-Chart.pdf for color options.

Color or Finish: <**Insert color from manufacturer's full selection**>.

Single, double, or triple station units available.

Number of Stations: [**One**] [**Two**] [**Three**].

Single station units have one drain. Two and three station units have two drains.

Drain(s): Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Quantity: [**One**] [**Two**].

Spray Head:

Material: Stainless steel base with insert.

Number of User Stations: [**One**] [**Two**] [**Three**].

Spray Nozzles: Complying with NSF 61, NSF/ANSI 372, and ASME A112.18.1/CSA B125.1.

Verify option retained in "Control" Subparagraph below is available from listed manufacturers and for type of wash fountain required.

Control: [**Individual pneumatic pushbutton**] [**Individual electronic pushbutton**] [**Individual piezo-electric pushbutton**] [**Individual hardwired, sensor**] [**Individual battery-powered, sensor**] actuation with thermostatic mixing valve complying with ASSE 1016 and ASSE 1070. Water supply check stops supplied by contractor.

Liquid-Soap Dispensers: [**Manual**] [**Not required**].

Pedestal: Stainless steel with access panel.

Supply Fittings:

Piping: 1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From wall.

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Trap and drain fittings are supplied by contractor.

Trap and Drain Piping: NPS 1-1/2 (DN 40), tailpiece and P-trap for each drain.

Retain "Off-Floor Mounting" Subparagraph below for wall-mounted wash fountains.

Off-floor Mounting: Wall Bracket.

Supplies: NPS 1/2 (DN 15).

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

* + - 1. SOLID-SURFACE, LINEAR WASH FOUNTAINS WITH DECK MOUNTED FAUCETS.

Copy "Wash Fountains" Paragraph below and re-edit for each type of linear wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each solid-surface, linear (side-by-side) wash fountain.

* + - * 1. Wash Fountains **<Insert drawing designation>**: Solid-surface, linear (side-by-side) receptor.

Basis-of-Design Product: Subject to compliance with requirements provide Willoughby Industries; [**WAW-2311-DMF**] [**WAW-2322-DMF**] [**WAW-2333-DMF**] or a comparable product by one of the following:

Bradley Corporation.

Intersan Manufacturing Company.

<**Insert manufacturer's name**>.

Standard: CSA B45.5/IAPMO Z124.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: CSA B45.5/IAPMO Z124.

Retain first option in "Height to Rim" Subparagraph below for on-floor receptors, or second option for off-floor receptors for children and elderly/handicapped persons.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Refer to manufacturer's website at http://www.willoughby-ind.com/Portals/0/Marketing/Aquasurf-Color-Chart.pdf for color options.

Color or Finish: **<Insert color from manufacturer's full selection>**.

Single, double, or triple station units available.

Number of Stations: [**One**] [**Two**] [**Three**].

Single station units have one drain. Two and three station units have two drains.

Drain(s): Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Quantity: [**One**] [**Two**].

Faucets: Deck mounted.

Pedestal: Stainless steel with access panel.

Supply fittings:

Piping: 1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From wall.

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Tap and Drain Piping: NPS 1-1/2 (DN 40) tailpiece and P-trap, for each drain.

Retain "Off-Floor Mounting" Subparagraph below for wall-mounted wash fountains.

Off-floor Mounting: Wall Bracket.

Supplies: NPS 1/2 (DN 15).

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

* + - 1. SOLID-SURFACE, TRADITIONAL WASH FOUNTAINS

Copy "Wash Fountains" Paragraph below and re-edit for each type of linear wash fountain required.

Insert letter and number combination to complete drawing designation. Use these designations on Drawings to identify each solid-surface, linear (side-by-side) wash fountain.

* + - * 1. Wash Fountains **<Insert drawing designation>**: Solid-surface, linear (side-by-side) receptor.

Basis-of-Design Product: Subject to compliance with requirements provide Willoughby Industries; [**WAF-3300**] [**WAF-3301**] [**WAF-4400**] [**WAF-4401**] or a comparable product by one of the following:

Bradley Corporation.

Intersan Manufacturing Company.

<**Insert manufacturer's name**>.

Standard: CSA B45.5/IAPMO Z124.

Electrical Components: Power transformer listed and labeled by a qualified testing agency, and marked for intended location and application.

Receptor:

Standard: CSA B45.5/IAPMO Z124.

Willoughby Industries' 3300/3301 series 36 inch (914 mm) units accommodate 3 users. The 4400/4401 series 46 inch (1168 mm) units accommodate 4 users.

Normal Width: [**36 inches (914 mm)**] [**46 inches (1168 mm)**].

Retain first option in "Height to Rim" Subparagraph below for on-floor receptors, or second option for off-floor receptors for children and elderly/handicapped persons.

Height to Rim: [**34 inches (864 mm)**] [**31 inches (787 mm)**] above floor.

Refer to manufacturer's website at http://www.willoughby-ind.com/Portals/0/Marketing/Aquasurf-Color-Chart.pdf for color options.

Color or Finish: **<Insert color from manufacturer's full selection>**.

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Spray Head:

Material: Stainless steel base with insert.

Willoughby Industries' 3300/3301 series 36 inch (914 mm) units accommodate 3 users. The 4400/4401 series 46 inch (1168 mm) units accommodate 4 users.

Number of User Stations: [**Three**] [**Four**].

Spray Nozzles: Complying with NSF 61, NSF/ANSI 372, and ASME A112.18.1/CSA B125.1.

Verify option retained in "Control" Subparagraph below is available from listed manufacturers and for type of wash fountain required.

Control: [**Individual pneumatic push-button**] [**Individual electronic pushbutton**] [**Individual piezo-electric pushbutton**] [**Individual hardwired sensor**] [**Individual battery-powered sensor**] actuation with thermostatic mixing valve complying with ASSE 1016 and ASSE 1070. Water supply check stops supplied by contractor.

Liquid-Soap Dispensers: [**Manual**] [**Not required**].

Pedestal: Stainless steel with access panel.

Supply fittings:

Piping: 1/2 inch (13 mm) FIP.

Valves: Shutoff on valve supply.

Supply Piping: From wall.

Waste Fittings:

Standard: ASME A112.18.2/CSA B125.2.

Trap and drain fittings are supplied by contractor.

Tap and Drain Piping: NPS 1-1/2 (DN 40) tailpiece and P-trap, for each drain.

Retain "Off-Floor Mounting" Subparagraph below for series 3301/4401 wall-mounted wash fountains.

Off-floor Mounting: Wall Bracket.

Supplies: NPS 1/2 (DN 15).

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

Retain "On-Floor Mounting" Subparagraph below for series 3300/4400 floor-mounted wash fountains.

On-floor Mounting: Wall bracket attached to [**reinforcement in wall**] [**concrete or block wall**].

Supplies: NPS 1/2 (DN 15).

Drain: Grid with NPSM 1-1/2 (DN 40), 11-1/2 threads/ inch (2.209 pitch) tailpiece.

Trap and drain fittings are supplied by contractor.

Drain Piping: NPS 1-1/2 (DN 40) P-trap, waste to wall, and wall flange.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine roughing-in of water-supply, sanitary drainage, and vent piping systems to verify actual locations of piping connections before wash-fountain installation.
          2. Examine walls and floors for suitable conditions where wash fountains will be installed.
          3. Proceed with installation only after unsatisfactory conditions have been corrected.
       2. INSTALLATION
          1. Install wash fountains level and plumb according to roughing-in drawings.
          2. Set freestanding wash fountains on floor.
          3. Install off-floor carrier supports, affixed to building substrate, for wall-mounted wash fountains.
          4. Install accessible, wall-mounted wash fountains at mounting height for handicapped/elderly according to ICC A117.1 ADA 2010.
          5. Install water-supply piping with shutoff valve on each supply to each wash fountain to be connected to domestic-water distribution piping. Use ball or gate valve. Install valves in locations where they can be easily reached for operation. Valves are specified in Section 220523.12 "Ball Valves for Plumbing Piping" and Section 220523.15 "Gate Valves for Plumbing Piping."
          6. Install trap and waste piping on each drain outlet of each wash fountain to be connected to sanitary drainage system.
          7. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons if required to conceal protruding fittings. Comply with escutcheon requirements specified in Section 220518 "Escutcheons for Plumbing Piping."
          8. Seal joints between fixtures and walls using sanitary-type, one-part, mildew-resistant, silicone sealant. Match sealant color to fixture color. Comply with sealant requirements specified in Section 079200 "Joint Sealants."
       3. CONNECTIONS

Coordinate piping installations and specialty arrangements with Drawings and with requirements specified in piping systems. If Drawings are explicit enough, these requirements may be reduced or omitted.

* + - * 1. Connect wash fountains with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
        2. Comply with requirements for water piping specified in Section 221116 "Domestic Water Piping."
        3. Comply with requirements for soil and waste drainage piping[**and vent piping**] specified in Section 221316 "Sanitary Waste and Vent Piping."
        4. Install protective-shielding pipe covers and enclosures on exposed supplies and waste piping of accessible wash fountains. Comply with requirements in Section 220719 "Plumbing Piping Insulation."
      1. ADJUSTING
         1. Operate and adjust wash fountains and controls. Replace damaged and malfunctioning wash fountains, fittings, and controls.
         2. Adjust water pressure at faucets to produce proper flow.
         3. Install fresh batteries in battery-powered, electronic-sensor mechanisms.
      2. CLEANING AND PROTECTION
         1. After installing wash fountains, inspect and repair damaged finishes.
         2. Clean wash fountains, faucets, and other fittings with manufacturers' recommended cleaning methods and materials.
         3. Provide protective covering for installed wash fountains and fittings.
         4. Do not allow use of wash fountains for temporary facilities unless approved in writing by Owner.

END OF SECTION 224233