**SECTION 22 43 00 – HEALTHCARE PLUMBING FIXTURES**

**ZURN, ELKAY, JUST MANUFACTURING GUIDE SPECIFICATION**

The following specification **Section 22 43 00 – Healthcare Plumbing Fixtures** has been prepared by Zurn to assist design professionals in the preparation of a specification for healthcare plumbing fixtures.

The following should be noted in using this document:

Optional text requiring a selection by the user is enclosed within brackets and as [Red.] text.

Items requiring user input are enclosed within brackets and as red text, e.g.: "[2] [\_\_] years."

A Plumbing Fixture and Fitting Schedule should be included on the drawings and should specify selected fixture and fitting model numbers with all required prefixes and suffixes to identify options and accessories, in which case delete model numbers, prefixes and suffixes from fixture and fitting descriptions in Section 22 43 00.

For plug-in water chilling equipment, coordinate with the electrical designer to ensure that the receptacle provided is a ground fault interrupter type.

For all fixtures and fittings selected to be hard wired, coordinate with the electrical designer to ensure that the circuit breaker(s) to which the fixtures and fittings are fed from is a ground fault interrupter type.

For assistance on the use of the products in this Section, contact Zurn by calling 1-855-663-9876 or visit their website [www.zurn.com](http://www.zurn.com/)

section 22 43 00 – HEALTHCARE PLUMBING FIXTURES

PART 1 - General

1.1 SUBMITTALS

* + 1. Action Submittals:
			1. Product Data Sheets: Submit product data sheets (fixture cuts) for water closets and accessories.
		2. Informational Submittals:
			1. Color Charts: Submit color charts for all fixtures where a color selection is required.
			2. Operation and Maintenance Data: Submit manufacturer’s operating and maintenance data for fixtures and fittings.

1.2 QUALITY ASSURANCE

Edit the following paragraphs to suit the fixtures and fittings to be specified.

* + 1. Healthcare plumbing fixtures and fittings are to be in accordance with requirements of:
			1. ASME A112.19.2/CSA B45.1, Ceramic Plumbing Fixtures
			2. ASME A112.6.1M, Supports for Off-The-Floor Plumbing Fixtures for Public Use
			3. ASSE1037/asme A112.1037/CSA B125.37, Performance Requirements for Pressurized Flushing Devices for Plumbing Fixtures
			4. ASME A112.18.2/CSA B125.2, Plumbing Waste Fittings
			5. ASME A112.18.1/CSA B125.1, Plumbing Supply Fittings
			6. ASME A112.19.3/CSAB 45.4, Stainless Steel Sinks
			7. ANSI A117.1, Accessible and Usable Buildings and Facilities
			8. ANSI Z358.1, Emergency Eyewash & Shower Standard
		2. All fixtures and fittings which deliver water for human consumption are to be NSF/ANSI/CAN 61 and 372 lead free certified.

PART 2 - PRoducts

2.1 MANUFACTURERS

* + 1. Contract Documents are based on Zurn. www.zurn.com
		2. Substitutions: [Refer to Division 01.] [Not permitted.]
	1. **GENERAL RE: PLUMBING FIXTURES AND TRIM**
		1. Plumbing fixtures and fittings are to be in accordance with the drawing schedule.
		2. Unless otherwise specified, all vitreous china fixtures are to be white.
	2. **WALL HUNG WATER CLOSETS**
		1. Zurn Model Z5615-BWL elongated, siphon jet flushing action, high-efficiency 1.1 gallon per flush, 1½” top spud, wall hung, vitreous china water closets, each complete with:
			1. a Zurn Model [**ZER6000AV-HYD**](https://www.zurn.com/products/finish-plumbing/sensor-flush-valves/gear-driven-hydropowered/zer6000av-hyd) **– sensor**

[ZER EZ sensor activated motor gear-driven diaphragm type chrome plated and polished flush valve with ceramic disc cartridge and manual override button]

[**Z6000AV**](https://www.zurn.com/products/finish-plumbing/manual-flush-valves/diaphragm/z6000av)**- manual**

* + - 1. a Zurn Model Z5955SS-EL white elongated open front toilet seat with stainless steel check hinges, less cover
			2. a Zurn Model Z5977-NEO “NeoSeal” wall gasket set
			3. a Zurn Model ZPWC1 Series fixture carrier suitable in all respects for the fixture supported and the construction in which it is located
			4. a Zurn Model Z5610-NUT-XT-KIT washer and chrome plated nut kit for fixture carrier bolts
	1. **BARRIER FREE WALL HUNG WATER CLOSETS**
		1. Zurn Model Z5615-BWL elongated, siphon jet flushing action, high-efficiency 1.1 gallon per flush, 1½” top spud, wall hung, vitreous china water closets, each complete with:

a Zurn Model [a Zurn Model [**ZER6000AV-HYD**](https://www.zurn.com/products/finish-plumbing/sensor-flush-valves/gear-driven-hydropowered/zer6000av-hyd) **– sensor**

[ZER EZ sensor activated motor gear-driven diaphragm type chrome plated and polished flush valve with ceramic disc cartridge and manual override button] and with toilet seat bumper

* + - 1. [**Z6000AV**](https://www.zurn.com/products/finish-plumbing/manual-flush-valves/diaphragm/z6000av)**- manual**
			2. a Zurn Model Z5957SS-RD white elongated open front toilet seat with stainless steel check hinges and cover
			3. a Zurn Model Z5977-NEO “NeoSeal” wall gasket set
			4. a Zurn Model ZPWC1 Series ADA compliant fixture carrier suitable in all respects for the fixture supported and the construction in which it is located
			5. a Zurn Model Z5610-NUT-XT-KIT washer and chrome plated nut kit for fixture carrier bolts
	1. **EXISTING WATER CLOSET MANUAL FLUSH VALVE GEAR-DRIVEN RETROFIT KIT**

 [**ZERK-C-TM**](https://www.zurn.com/products/finish-plumbing/sensor-flush-valves/retrofit-kits/zerk-c-tm) **– top mount toilet/water closet gear**

[**ZERK-U-TM**](https://www.zurn.com/products/finish-plumbing/sensor-flush-valves/retrofit-kits/zerk-u-tm) **– top mount urinal gear**

* + 1. Zurn Model ZERK-C-[ONE 1.1] [HET 1.28] [WS1 1.6] [DF 1.6/1.1] gallons per flush gear-driven, sensor activated retrofit kits for top spud manually operated flush valves . The kits are ADA compliant, require no hard wiring or batteries and are complete with:
			1. a polished chrome plated finish
			2. a gear-driven ceramic cartridge
			3. a Chloramine resistant TPE diaphragm, clog-resistant bypass and internal seals
			4. automatic touchless sensor flush activation
			5. a mechanical override button for on-demand flushing
			6. a universal mounting kit for Zurn and alternative manufacturer flush valves
			7. operating pressures of a 25 psi (running) and 80 psi (static
	1. **EXISTING WATER CLOSET/URINAL MANUAL FLUSH VALVE ELECTRONIC RETROFIT KIT**
		1. Zurn Model ZERK-SM electronic, battery operated, sensor activated retrofit kits for top spud manually operated flush valves. The kits are ADA compliant and are complete with:
			1. a polished chrome plated metal cover
			2. a 6 VDC motor actuator with four “C” size batteries (included) and low battery indicator light
			3. an infrared sensor and user in view LED for automatic, touchless, 3 second delay flush activation
			4. an optional 24 hour auto-flush setting
			5. a mechanical override button for on-demand flushing
			6. an installation wrench and a battery compartment wrench
	2. **URINALS**
		1. Zurn Model Z5755U “Omni-Flow EcoVantage” 0.125 to 1.0 gallons per flush, vitreous china, washdown action, ¾” top spud wall hung urinals each complete with a 2” outlet with integral trap and vandal-resistant outlet strainer, and:
			1. a Zurn Model Z Series urinal carrier with bearing plate suitable in all respects for the fixture supported and the construction in which it is located

[**ZER6003AV-HYD**](https://www.zurn.com/products/finish-plumbing/sensor-flush-valves/gear-driven-hydropowered/zer6003av-hyd) **– sensor/gear**

* + - 1. [a Zurn Model ZER6003AV-HYD “Hydro-X” sensor activated motor gear-driven diaphragm type [chrome plated and polished] [matte black] flush valve, [12”] [16”] [24”] [27”] high with ceramic disc cartridge and manual override button, [“ULF” 0.125] [“EWS” 0.5] [‘WS1” 1.0] gallons per flush], and [split ring] [solid ring] pipe support

[**Z6003AV**](https://www.zurn.com/products/finish-plumbing/manual-flush-valves/diaphragm/z6003av) **– manual urinal**

[a Zurn Model ZTR6203 chrome plated and polished sensor activated urinal flush valve with [“ULF-LL” 0.125] [“QRT-LL” 0.25}] [“WS1-LL” 1.0] gallons per flush

* 1. **VITREOUS CHINA WALL HUNG LAVATORIES**
		1. Zurn Z5340 Series 20” x 18” x 5¾” deep vitreous china wall hung lavatories with a wall hanger and holes for use with a concealed arm carrier, front overflow, single or 4” and 8” center supply fitting openings, and:
			1. a Zurn Model Z Series lavatory carrier suitable in all respects for the fixture supported and the construction in which it is located
			2. one or two (as required) Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			3. a Zurn Model [ ] sensor activated faucet
			4. a Zurn Model Z8743-PC cast brass, solid-top, open grid drain with P.O. plug and #17 gauge tailpiece
			5. a Zurn Model Z8700-PC 1¼” diameter chrome plated cast brass P-trap with cleanout plug
			6. [an extra lavatory drilling for a lavatory mounted soap dispenser, and a Zurn Z6950-SD sensor activated soap dispenser with AC power adapter, soap container and [BN brushed nickel] [PN polished nickel] [PB polished brass] finish]
	2. **BARRIER Free VITREOUS CHINA WALL HUNG LAVATORIES**
		1. Zurn Z5340 Series 20” x 18” x 5¾” deep vitreous china wall hung lavatories with a wall hanger and holes for use with a concealed arm carrier, front overflow, [single] [4”] [ 8”] center supply fitting openings, and:
			1. a Zurn Model Z Series ADA compliant lavatory carrier suitable in all respects for the fixture supported and the construction in which it is located
			2. one or two (as required) Zurn Model Z8800 Series short pattern, chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			3. a Zurn Model [ ] sensor activated faucet
			4. a Zurn Model Z8746-PC ADA compliant offset, cast brass, solid-top, open grid drain with P.O. plug and #17 gauge tailpiece
			5. a Zurn Model Z8800 Series ADA compliant 1¼” diameter chrome plated cast brass P-trap with cleanout plug
			6. an extra lavatory drilling for a lavatory mounted soap dispenser, and a Zurn Z6950-SD sensor activated soap dispenser with AC power adapter, soap container and [BN brushed nickel] [PN polished nickel] [PB polished brass] finish]
	3. **BARRIER FREE WALL HUNG DOUBLE BASIN LAVATORY SYSTEM**
		1. Zurn Model Z5001.02 “Sundara Reef", ADA compliant, wall hung, double basin lavatory system complete with:
			1. counter and integral non-splash basins constructed of “Sundara” solid surface resin with aluminum trihydrate and other additives which conform to CSA B45.5/Z124 and IGC 156 standards and a color selected from the manufacturer’s standard color chart
			2. an accessible #18 gauge type 304 satin finished stainless steel shroud enclosure with vandal-resistant hardware
			3. a mounting bracket and wall bracket with Zurn Model Z1240-EZR carrier
			4. Zurn Model ADA compliant offset, cast brass, solid-top, open grid drains with P.O. plug and #17 gauge tailpiece
			5. Zurn Model Z8701-9LC-P ADA compliant 1¼” diameter chrome plated cast brass P-traps with cleanout plugs
			6. Zurn Model Z8800-XL-LR-8860-16-PC chrome plated cast brass angle supplies with compression stops and 16” flexible risers
			7. [Zurn Model [ ] AC operated sensor activated 0.5 gpm faucets with HW6 hardwired power converters]
			8. [Zurn Model [ ] battery operated, sensor activated 0.5 gpm faucets with LL 10year long life batteries
			9. [Zurn Model [ ] [left] [right] AC operated sensor activated soap dispensers]
			10. [Zurn Model [ ] [left] [right] AC manual soap dispensers]
	4. **STAINLESS STEEL UNDERMOUNT LEFT DRAIN SINGLE BOWL SINK**
		1. Elkay Model ELUH2317L “Lustertone” 25½” x 19” x 8” deep, type 304 #18 gauge lustrous satin finish undermount sink equipped with a cutout template and:
			1. a 3½” diameter left rear drain opening
			2. undermount brackets
			3. sound deadening side and bottom pads
			4. a Zurn/Elkay Model LK99 3½” chrome plated type 304 stainless steel drain assembly with stainless steel basket strainer, rubber seal, and 1½” diameter tailpiece
			5. a Zurn Model Z8702 1½” diameter chrome plated cast brass P-trap with cleanout plug
			6. one or two (as required) Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			7. [a Zurn Model [ ] AC operated sensor activated 0.5 GPM faucet with HW6 hardwired power converters]
			8. [a Zurn Model [ ] battery operated,3 sensor activated 0.5 GPM faucet with LL 10year long life batteries
			9. [a Zurn/Elkay Model LKWOBG2317LSS polished stainless steel sink bottom grid
	5. **STAINLESS STEEL WALL MOUNT SPLASH GUARD HAND WASH SINK**
		1. Just Manufacturing Model A544912-2E-J 16¾” x 15½” x 13” deep buffed satin finish type 304 #20 gauge wall mount sink equipped with:
			1. a wall hanger and stainless steel support brackets suitable in all respects for the fixture supported and the construction in which it is located
			2. a 7” high type 304 stainless steel back splash
			3. a 2” diameter drain opening
			4. a Zurn Model [ ] faucet
			5. Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			6. a Zurn Model Z8743-PC cast brass, solid-top, open grid drain with P.O. plug and #17 gauge 1½” diameter tailpiece
			7. a Zurn Model Z8700-PC 1½” diameter chrome plated cast brass P-trap with cleanout plug
			8. [an extra drilling for a lavatory mounted soap dispenser, and a Zurn Z6950-SD sensor activated soap dispenser with AC power adapter, soap container and [BN brushed nickel] [PN polished nickel] [PB polished brass] finish]
	6. **PACKAGE TYPE STAINLESS STEEL WALL HUNG HAND WASH SINK**
		1. Just Manufacturing Model A544912S-J package type 16¾” x 15½” x 13” deep buffed satin finish type 304 #20 gauge wall mount sink equipped with:
			1. a wall hanger and stainless steel support brackets suitable in all respects for the fixture supported and the construction in which it is located
			2. a 7” high type 304 stainless steel back splash
			3. a 2” diameter drain opening
			4. a Zurn/Elkay Model LK723 thermostatic mixing valve
			5. a Zurn/Elkay Model LKB722C backsplash mount gooseneck sensor activated scrub/handwash [AC] [battery] powered, chrome plated solid brass, 1.23 GPM faucet
			6. Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			7. a Just Manufacturing Model J-IS-SF chrome plated cast brass, solid-top, open grid drain with P.O. plug and 1½” diameter tailpiece
			8. a Just Manufacturing JT150 1½” diameter chrome plated cast brass P-trap with cleanout plug
	7. **PACKAGE TYPE STAINLESS STEEL WALL HUNG ADA SINK WITH EYE WASH**
		1. Just Manufacturing Model JPHADA2224-CT-J package type 24” x 22” x 13” deep buffed satin finish type 304 #14 gauge wall mount sink equipped with:
			1. a wall hanger and stainless steel support brackets suitable in all respects for the fixture supported and the construction in which it is located
			2. a 7” high type 304 stainless steel back splash with [1 center] [two 8” centered] [three 2” centered} faucet holes
			3. a 3½” diameter drain opening
			4. a Zurn/Elkay Model LK723 thermostatic mixing valve
			5. a Zurn/Elkay Model LKB722C backsplash mount gooseneck sensor activated scrub/handwash [AC] [battery] powered, chrome plated solid brass, 1.23 gpm faucet
			6. Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			7. a Just Manufacturing J35SSF stainless steel, solid-top, open grid drain with P.O. plug and stainless steel 1½” diameter tailpiece
			8. a Just Manufacturing JT150 1½” diameter chrome plated cast brass P-trap with cleanout plug
			9. a Just Manufacturing JG-1800 backsplash mount, polished chrome plated brass, “Auto-Flow” eye wash assembly with stainless steel housing, operated by pulling down the swivel, dual polypropylene “GS Plus” spray eye wash heads with integral “flip-top” covers, and equipped with an in-line strainer and an ANSI identification sign
	8. **STAINLESS STEEL FLOOR MOUNT DOUBLE SCULLERY SINK C/W DRAINBOARDS**
		1. Just Manufacturing Model NSFB230-24RL-J 78” x 27½” x 44” buffed satin finish type 304 #14 gauge floor mount sink with two 15” x 24” x 14” bowls equipped with:
			1. stainless steel legs
			2. an 8” high type 304 stainless steel back splash
			3. 24” left and right drainboards
			4. 3½” diameter drain openings
			5. a Zurn/Elkay Model [ ] chrome plated solid brass, [ ] GPM faucet
			6. Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			7. Just Manufacturing Model J-IS-SF chrome plated cast brass, solid-top, open grid drains with P.O. plug and 1½” diameter tailpiece
			8. Just Manufacturing JT150 1½” diameter chrome plated cast brass P-traps with cleanout plug
	9. **STAINLESS STEEL, WALL HUNG, SINGLE STATION SURGEON SCRUB SINK**
		1. Just Manufacturing Model JKS7701-NP-J 30” x 23” x 26” buffed satin finish type 304 #16 gauge wall hung surgeon scrub sink kit with a 26” x 16¼” x 11” bowl and equipped with a wall mount clip and:
			1. a full length backsplash
			2. full spray sides and bottom sound deadening
			3. a 3½” rear center drain opening with Model LK18 3½” chrome plated brass body drain with strainer and 4” long 1½” diameter tailpiece
			4. a latched removable front panel
			5. a Model LK723L2 thermostatic mixing valve with check stops
			6. a Model LK394A 10¾” chrome plated brass gooseneck deck mount spout with 1.5 GPM laminar flow
			7. a water supply switch connected to a front knee operated push panel for automatic on-off tempered water supply
			8. a deck mounted chrome plated soap dispenser with storage container and pump connected to a front panel knee operated push panel for automatic on-off soap supply
			9. Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			10. Just Manufacturing JT150 1½” diameter chrome plated cast brass P-traps with cleanout plug
	10. **STAINLESS STEEL, WALL HUNG, DOUBLE STATION SURGEON SCRUB SINK**
		1. Just Manufacturing Model JKS7702 NP-J 60” x 23” x 26” buffed satin finish type 304 #16 gauge wall hung surgeon scrub sink kit with two 26” x 16¼” x 11” bowls and equipped with a wall mount clip and:
			1. a full length backsplash
			2. full spray sides and bottom sound deadening
			3. 3½” rear center drain openings with Model LK18 3½” chrome plated brass body drains with strainer and 4” long 1½” diameter tailpiece
			4. latched removable front panels
			5. a Model LK723L2 thermostatic mixing valve with check stops
			6. Model LK394A 10¾” chrome plated brass gooseneck deck mount spouts with 1.5 GPM laminar flow
			7. water supply switches connected to front knee operated push panels for automatic on-off tempered water supply
			8. deck mounted chrome plated soap dispensers with storage containers and pumps connected to front knee operated push panel for automatic on-off soap supply
			9. Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			10. Just Manufacturing JT150 1½” diameter chrome plated cast brass P-traps with cleanout plug
	11. **STAINLESS STEEL, WALL HUNG, TRIPLE STATION SURGEON SCRUB SINK**
		1. Just Manufacturing Model JKS7703 NP-J 90” x 23” x 26” buffed satin finish type 304 #16 gauge wall hung surgeon scrub sink kit with three 26” x 16¼” x 11” bowls and equipped with a wall mount clip and:
			1. a full length backsplash
			2. full spray sides and bottom sound deadening
			3. 3½” rear center drain openings with Model LK18 3½” chrome plated brass body drains with strainer and 4” long 1½” diameter tailpiece
			4. latched removable front panels
			5. a Model LK723L2 thermostatic mixing valve with check stops
			6. Model LK394A 10¾” chrome plated brass gooseneck deck mount spouts with 1.5 GPM laminar flow
			7. water supply switches connected to front knee operated push panels for automatic on-off tempered water supply
			8. deck mounted chrome plated soap dispensers with storage containers and pumps connected to front knee operated push panel for automatic on-off soap supply
			9. Zurn Model Z8804-XL-LR-PC chrome plated cast brass angle supplies with [wheel handle] [loose key] compression stops and flexible risers
			10. Just Manufacturing JT150 1½” diameter chrome plated cast brass P-traps with cleanout plug
	12. **WALL HUNG REFRIGERATED WATER BOTTLE FILLING STATION/BUBBLER**
		1. Elkay Model LZS8WSSP “Enhanced ezH20” package type, ADA compliant, stainless steel, wall mounting, refrigerated, factory pre-wired domestic water single bottle filling station and drinking fountain assembly, cULus listed, with drain and tailpiece, LED light fixture, and additional features as follows:
			1. a Model MLP100 in-wall carrier and a Model 1000004833 stainless steel back panel
			2. an accessible 115 volt, 5 FLA , 370 watt plug-in type refrigeration system with R-134a refrigerant and power cord and plug in accordance with requirements of CAN/CSA C22.2 No. 120, Refrigeration equipment, with an energy-savings mode and a chilling capacity of 8.0 gph of 50° F water based on 80° F inlet water and a 90° F ambient temperature
			3. a Model 51600C “WaterSentry” quick change 6,000 gallon filter equipped with a LED filter status monitor to initiate a visual alert for the need for a filter change and to recognize a new filter and change the LED back to green
			4. hands free, electronic sensor activated 1.1 GPM laminar flow bottle filler
			5. a “Flexi-Guard” safety bubbler with electronic front and side bubbler pushbar
			6. a 1¼” diameter PVC P-trap with cleanout plug
			7. a di-electric coupling and a ½” bronze full port ball type water shut-off valve
	13. **WALL HUNG BI-LEVEL REFRIGERATED WATER BOTTLE FILLING STATION/BUBBLER**
		1. Elkay Model LZSTL8WSSP “Enhanced ezH20” package type, ADA compliant, stainless steel, wall mounting, refrigerated, factory pre-wired bi-level domestic water single bottle filling station and drinking fountain assembly, cULus listed, with drain and tailpiece, LED light fixture, and additional features as follows:
			1. a Model MLP Series in-wall carrier and a Model 1000004920 stainless steel back panel
			2. an accessible 115 volt, j5 FLA , 370 watt plug-in type refrigeration system with R-134a refrigerant and power cord and plug in accordance with requirements of CAN/CSA C22.2 No. 120, Refrigeration equipment, with an energy-savings mode and a chilling capacity of 8.0 gph of 50° F water based on 80° F inlet water and a 90° F ambient temperature
			3. a Model 51600C “WaterSentry” quick change 6,000 gallon filter tested and certified to NSF/ANSI 42 and 53 and equipped with a LED filter status monitor to initiate a visual alert for the need for a filter change and to recognize a new filter and change the LED back to green
			4. hands free, electronic sensor activated 1.1 GPM laminar flow bottle filler
			5. a “Flexi-Guard” safety bubbler with electronic front and side bubbler pushbar
			6. an additional higher level assembly with Flexi-Guard” safety bubbler with electronic side bubbler pushbar
			7. a 1½” diameter PVC P-trap with cleanout plug
			8. a di-electric coupling and a ½” bronze full port ball type water shut-off valve
	14. **ADJUSTABLE HEIGHT SHOWER ASSEMBLY**
		1. Zurn Model Z7300-SS-MT-HW-H9 “TEMP-GUARD III*”* ADA compliant, wall mount shower assembly complete with:
			1. a single handle pressure balancing mixing valve in accordance with requirements of ASSE 1016, Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations, equipped with a ceramic control cartridge with stainless steel balancing piston, built-in reverse connection capability, 2 service/check stops, and an adjustable limit stop
			2. a wall mount elbow tempered water supply elbow with flange
			3. a 1.6 GPM hand/wall shower head connected with 60” of flexible metal hose to the water supply elbow
			4. a 24” wall mount bar and adjustable height shower head mount
			5. ½” copper female thread or female sweat connections as required
			6. [a wall mounting flange for fiberglass or panel wall installation]
	15. **SELF-SUSTAINING, BATTERY POWERED SENSOR FAUCETS**
1. Zurn Model Z6953-XL “HYDRO-X Power self-sustaining hydropower [chrome plated brass] [BN brushed nickel] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, and:
	* + 1. battery backup with 4 “AA” batteries
			2. adjustable line purge mode
			3. adjustable metering mode
			4. adjustable 30 second time-out feature
			5. an in-line filter
			6. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-F 0.5 GPM spay] [-J 1.5 GPM laminar flow] [-K 1.0 GPM laminar] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 GPM laminar] outlet]
			7. [optional model suffix options -ADM above deck mixer] [-CP4 4” center coverplate] [-CP8 8” center coverplate] [-H4 wrist blade handle for ADM] [-MV temperature mixing valve] [-SH supply hoses for mixing valve] [-TMV-1 thermostatic mixing valve for single faucets]
		1. Zurn Model Z6951-XL “HYDRO-X Power”, “Aqua-FIT” Fulmer Series self-sustaining

hydropower [polished chrome plated brass] [BN brushed nickel] [-PN polished nickel] [-PB polished brass] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, and:

* + - 1. battery backup with 4 “AA” batteries
			2. adjustable line purge mode
			3. adjustable metering mode
			4. adjustable 30 second time-out feature
			5. an in-line filter
			6. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-F 0.5 GPM spay] [-J 1.5 GPM laminar flow] [-K 1.0 GPM laminar] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 GPM laminar] outlet]
			7. [optional model suffix options -ADM above deck mixer] [-CP4 4” center coverplate] [-CP8 8” center coverplate] [-H4 wrist blade handle for ADM] [-MV temperature mixing valve] [-SH supply hoses for mixing valve] [-SSH single supply hose] [-TMV-1 thermostatic mixing valve for single faucets]
		1. Zurn Model Z6955-XL-S “HYDRO-X Power”, “Aqua-FIT” Fulmer Series self-sustaining hydropower [polished chrome plated brass] [BN brushed nickel] [-PN polished nickel] [-PB polished brass] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, and:
			1. battery backup with 4 “AA” batteries
			2. adjustable line purge mode
			3. adjustable metering mode
			4. adjustable 30 second time-out feature
			5. an in-line filter
			6. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-F 0.5 GPM spay] [-J 1.5 GPM laminar flow] [-K 1.0 GPM laminar] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 GPM laminar] outlet]
			7. [optional model suffix options -ADM above deck mixer] [-H4 wrist blade handle for ADM] [-MV temperature mixing valve] [-SH supply hoses for mixing valve] [-TMV-1 thermostatic mixing valve for single faucets]
		2. Zurn Model Z6956-XL “HYDRO-X Power self-sustaining hydropower [polished chrome plated brass] [BN brushed nickel] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, and:
			1. battery backup with 4 “AA” batteries
			2. adjustable line purge mode
			3. adjustable metering mode
			4. adjustable 30 second time-out feature
			5. an in-line filter
			6. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-F 0.5 GPM spay] [-J 1.5 GPM laminar flow] [-K 1.0 GPM laminar] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 GPM laminar] outlet]
			7. [optional model suffix options -ADM above deck mixer] [-CP4 4” center coverplate] [-CP8 8” center coverplate] [-H4 wrist blade handle for ADM] [-MV temperature mixing valve] [-SH supply hoses for mixing valve] [-TMV-1 thermostatic mixing valve for single faucets]
		3. Zurn Model Z6920-XL-HYD “HYDRO-X Power self-sustaining hydropower [polished chrome plated brass] [BN brushed nickel] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, and:
			1. battery backup with 4 “AA” batteries
			2. adjustable 30 second time-out feature
			3. an in-line filter
			4. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-F 0.5 GPM spay] [-J 1.5 GPM laminar flow] [-K 1.0 GPM laminar] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 GPM laminar] outlet]
			5. [optional model suffix options -ADM above deck mixer] [-ADM-1 above deck mixer with 4” coverplate] [-ADM-2 above deck mixer with 8” center coverplate] [-CP4 4” center coverplate] [-CP\* 8” center coverplate] [-FC flow control in base of spout] [-GA 3½” gooseneck spout] [-GC 8” gooseneck spout] [-H4 wrist blade handle for ADM] [-IA3 ⅜” compression inlet adapter] [-MV temperature mixing valve] [-SH supply hoses for mixing valve] [-TMV-1 thermostatic mixing valve for single faucets]
	1. **GEAR-DRIVEN SENSOR FAUCETS**
		1. Zurn Model ZG6950 “HYDRO-X Serio” hydropower motor gear-driven, ceramic cartridge [polished chrome plated brass] [-BN brushed nickel] [-MB matte black] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, Bluetooth-enabled for point-of-use adjustability for time-out with 30 second default, on-demand or programmed hygienic line flushing, on-demand or metering sensing modes, sensor range adjustment, and battery status, and:
			1. [optional -W2 “plumbSMART” for remote monitoring and real-time usage
			2. [battery backup with 6 “AA” batteries] [-ACA plug-in power converter with battery back-up] [-CWB connecting wire for 7’ hardwire with battery back-up]
			3. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-J 1.5 GPM laminar flow] [-K 1.0 GPM laminar] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 GPM laminar] outlet]
			4. [optional model suffix options -ADM above deck mixer] [-CP4 4” center coverplate] [-CP8 8” center coverplate] [-MV temperature mixing valve] [-SSH single supply hose] [-SH three supply hoses for mixing valve] [-TMV-1 thermostatic mixing valve for single faucets]
		2. Zurn Model ZG6913 “HYDRO-X AQUASENSE” hydropower motor gear-driven, ceramic cartridge [polished chrome plated brass] [-BN brushed nickel] [-MB matte black] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, Bluetooth-enabled for point-of-use adjustability for time-out with 30 second default, on-demand or programmed hygienic line flushing, on-demand or metering sensing modes, sensor range adjustment, and battery status, and:
			1. [optional -W2 “plumbSMART” for remote monitoring and real-time usage
			2. [battery backup with 6 “AA” batteries] [-ACA plug-in power converter with battery back-up] [-CWB connecting wire for 7’ hardwire with battery back-up]
			3. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-J 1.5 GPM laminar flow] [-K 1.0 GPM laminar] [-L 1.0 GPM aerator] [-M 0.35 GPM spray]
			4. [optional model suffix options -ADM above deck mixer] [-CP4 4” center coverplate] [-CP8 8” center coverplate] [-MV temperature mixing valve] [-SH three supply hoses for mixing valve] [-SSH single supply hose] [-TMV-1 thermostatic mixing valve for single faucets]
		3. Zurn Model ZG6915 “HYDRO-X AQUASENSE” hydropower motor gear-driven, ceramic cartridge [polished chrome plated brass] [-BN brushed nickel] [-MB matte black] finish sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, Bluetooth-enabled for point-of-use adjustability for time-out with 30 second default, on-demand or programmed hygienic line flushing, on-demand or metering sensing modes, sensor range adjustment, and battery status, and:
			1. [optional -W2 “plumbSMART” for remote monitoring and real-time usage
			2. [battery backup with 6 “AA” batteries] [-ACA plug-in power converter with battery back-up] [-CWB connecting wire for 7’ hardwire with battery back-up]
			3. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-J 1.5 GPM laminar flow] [-L 1.0 GPM aerator] [-M 0.35 GPM spray]
			4. [optional model suffix options -ADM above deck mixer] [-CP4 4” center coverplate] [-CP8 8” center coverplate] [-MV temperature mixing valve] [-SH three supply hoses for mixing valve] [-SSH single supply hose] [-TMV-1 thermostatic mixing valve for single faucets]
		4. Zurn Model ZG6922 “HYDRO-X AQUASENSE” hydropower motor gear-driven, ceramic cartridge [polished chrome plated brass] [-BN brushed nickel] [-MB matte black] finish back mounted gooseneck sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, Bluetooth-enabled for point-of-use adjustability for time-out with 30 second default, on-demand or programmed hygienic line flushing, on-demand or metering sensing modes, sensor range adjustment, and battery status, and:
			1. [optional -W2 “plumbSMART” for remote monitoring and real-time usage
			2. [battery backup with 6 “AA” batteries] [-ACA plug-in power converter with battery back-up] [-CWB connecting wire for 7’ hardwire with battery back-up]
			3. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-J 1.5 GPM laminar flow] [-K 1.0 GPM] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 laminar flow]
			4. [optional model suffix options] [-MV temperature mixing valve] [-SH three supply hoses for mixing valve] [-SSH single supply hose] [-TMV-1 thermostatic mixing valve for single faucets]
		5. Zurn Model ZG6920 “HYDRO-X AQUASENSE” hydropower motor gear-driven, ceramic cartridge [polished chrome plated brass] [-BN brushed nickel] [-MB matte black] finish deck mounted gooseneck sensor faucet, ADA compliant, and equipped with an infrared convergence type proximity sensor, standard 0.5 GPM flow control, mounting brackets, Bluetooth-enabled for point-of-use adjustability for time-out with 30 second default, on-demand or programmed hygienic line flushing, on-demand or metering sensing modes, sensor range adjustment, and battery status, and:
			1. [optional -W2 “plumbSMART” for remote monitoring and real-time usage
			2. [battery backup with 6 “AA” batteries] [-ACA plug-in power converter with battery back-up] [-CWB connecting wire for 7’ hardwire with battery back-up]
			3. [optional vandal-resistant aerators [-E 1.5 GPM aerator] [-J 1.5 GPM laminar flow] [-K 1.0 GPM] [-L 1.0 GPM aerator] [-M 0.35 GPM spray] [-N 0.5 laminar flow]
			4. [optional model suffix options] [-ADM above deck mixer] [-CP4 4” center coverplate] [-CP8 8” center coverplate] [-MV temperature mixing valve] [-SH three supply hoses for mixing valve] [-SSH single supply hose] [-TMV-1 thermostatic mixing valve for single faucets]

Use the following for Zurn a Model Z-LIGHT-W1 “plumb**SMART”** washroom stall occupancy lights.

2.24 **WASHROOM STALL OCCUPANCY LIGHTS**

* + 1. Zurn Model Z-LIGHT-W1 “plumb**SMART**”, 12 volt DC, 300 mA maximum, self-contained ceiling mount occupancy lights for daisy-chain connection in washroom stalls to visually indicate occupancy by turning red when occupied and green when available, and to wirelessly transmit occupancy data to a Zurn “plumb**SMART**” web portal and mobile app or other partner applications for use in predicting washroom maintenance and cleaning needs and allow live display of available stalls outside of the washroom.
		2. Occupancy light 12 VDC power is to be provided a Zurn Model Z-PWRSUP-W1 Smart Occupancy Light Power Supply with 120 volt AC primary connection, and which is capable of powering up to 40 occupancy lights. Power supply unit features include:
			1. screw terminal blocks for 120 VAC and 12 VDC Class II isolation wiring
			2. short circuit, over-voltage and over-current protection

Use the following optional mounting hardware for other than direct ceiling mount units.

* + 1. [Optional occupancy light mounting hardware is as follows:
			1. [Z-LIGHT-MOUNT-WALL for mounting on a wall or to a single gang electrical box]
			2. [Z-LIGHT-MOUNT 1.5 FT extension pole for ceiling heights above 8’-6”]
			3. [Z-LIGHT-MOUNT 2.5 FT extension pole for ceiling heights above 8’-6”]

Use the following for the lighting system communication gateway.

* + 1. The lighting system communications gateway is to be a Zurn Model [ZGW-WRP-W1-LTE with SIM card, managed SIM subscription, and USB micro powered power supply] [ZGW-WRP-W1-ETH USB-C powered power supply] capable of connecting 50 to 100 smart occupancy lights within a 60’ range.

Use for caulking around plumbing fixtures such as water closets, urinals, wall hung lavatories, etc., but only if such caulking is part of the mechanical work and not part of the caulking work specified in Division 07.

* 1. CAULKING
		1. Non-toxic, mould, mildew, and fungus resistant 1-part silicone rubber sealant with primers as recommended by the sealant manufacturer. Caulking color(s) for fixtures other than white, if any, will be selected by the Consultant from the sealant manufacturer’s standard color range.

part 3 - Execution

* 1. INSTALLATION OF HEALTHCARE PLUMBING FIXTURES AND FITTINGS
		1. Provide all required healthcare plumbing fixtures and fittings.

Use paragraph below only for renovation work where new fixtures are to be connected to existing piping.

* + 1. Where new fixtures and fittings are to be connected to existing piping, include for all required piping revisions.
		2. Connect plumbing fixtures and fittings with piping sized in accordance with the drawing schedule.
		3. Confirm the exact location of all plumbing fixtures and trim prior to roughing-in. Refer to architectural plan and elevation drawings.
		4. Set mixing valve maximum temperature limit stops to 110° F after domestic water systems (hot and cold) are complete.

Use paragraph below only where barrier-free fixtures are specified.

* + 1. Barrier-Free Fixtures:Comply with mounting height and other requirements of the governing Code(s).

Use paragraph below only for counter mounted fixtures and trim.

* + 1. Counter Mounted Fixtures and Trim:Supply templates for all counter mounted fixtures and trim and hand to the trades who will cut the counter. Ensure openings in the counter are properly located.

 Use the 2 paragraphs below for fixtures and fittings which require a line voltage receptacle or hard wiring.

* + 1. Receptacles for plug-in fixtures and 115 VAC hard wiring connections with low voltage secondary transformers for connection of electronic activated fixture and fitting connection components will be provided as part of the electrical work of Division 26. Ensure that receptacles and circuit breakers associated with the connections are ground fault interrupting type. Carefully coordinate line voltage connection termination locations with the electrical trade at the site.
		2. Provide low voltage wiring from transformers to fixtures and fittings as required. All low voltage wiring is to be concealed and in accordance with Division 26 wiring requirements and access to the transformer must be provided for servicing.

Edit the remaining paragraphs to suit fixtures and fittings to be provided.

* + 1. Shower Fittings:Confirm exact mixing valve and shower head locations prior to roughing-in.
		2. Urinals: Prior to rough-in, confirm urinal locations and mounting heights on architectural drawings.
		3. Commission plumbing fixtures and fittings by proving proper operation. Adjust or repair as required.
	1. Installation Of WASHROOM OCCUPANCY LIGHTS
		1. Provide smart occupancy lights centered a maximum of 8’-6” AFFL in washroom stalls where shown.

Ensure that the location of the power supply is indicated on the drawings and that the electrical designer is aware of the requirement for a 120 VAC 15 A dedicated power supply connection to the smart power supply.

* + 1. Provide a power supply unit for each washroom and install in a properly sized and identified junction box.
		2. Do all required 12 volt DC wiring from the power supply unit to the occupancy lights in a daisy chain arrangement using concealed and properly sized copper conductor plenum rated cable in accessible spaces, and properly sized copper conductor cable in conduit in inaccessible spaces, all in accordance with Division 26 wiring requirements.

Ensure that the location of the gateway is shown (as per Zurn recommendations) and that a 120/1/60 duplex receptacle is adjacent to the gateway for plug-in connection.

* + 1. Provide a communications gateway for occupancy lighting where indicated and install in strict accordance with the manufacturer’s instructions.
		2. When installation is complete, test system operation, commission the system and submit signed and dated commissioning results and demonstrate proper operation and maintenance of the system to the Owner’s personnel.
	1. CAULKING AT PLUMBING FIXTURES AND FITTINGS
		1. Caulk around plumbing fixtures and fittings where they contact walls, floors, and any other building surface.
		2. Clean areas/surfaces to be caulked and prime in accordance with the sealant manufacturer’s instructions. Where damage to a building surface may occur, mask the surface to prevent damage and ensure a clean exact edge to the caulking bead.
		3. Apply caulking using a gun with the proper size and shape of nozzle and force the sealant into joints to ensure good surface contact and a smooth and even finished bead of sealant.
		4. If joints have been masked the sealant may be tooled in a continuous stroke to obtain complete void filling. Remove masking tape immediately after tooling and before the sealant begins to skin.

End of Section