

CITY OF CREST HILL
CITY CENTER

Change Order

Date: 12/16/2022
Project: Crest Hill City Center

Contractor: Omega Plumbing

Change Order #:

Description:

Eye Wash Stations
* Furnish and Install (2) Combination Drench Shower & Eye Wash Station including (2) New
Thermostatic Mixing Valves in the Existing Locations.

Note: See Attached RCO / Proposals

Original Contract:	\$ 410,500.00
Previous Change Orders:	<u>\$ 51,106.00</u>
Contract Total Prior to this CO:	\$ 461,606.00
New Change Order Amount:	<u>\$ 8,025.00</u>
New Contract Amount:	<u><u>\$ 469,631.00</u></u>

Approved:

Administrator Date

Shawn Thompson - Project Manager Date

Sub-Contractor Date

Dan Skiera - Superintendent Date



521 Oak Leaf Cr, Unit A
Joliet, IL 60436
815-773-0808
FAX: 815-773-0812
LIC. 058-138280

TO: Shawn Thompson at Harbour Construction

RE: Crest Hill City Center Change Order – Eyewash/Emergency Shower Units

Below is the cost to change out the existing emergency showers for units that have already been installed. The existing thermostatic mixing valve has to be changed out as well. Please see the attached cut sheets for the proposed model.



□ **G1902P** Safety Station with Eyewash, Plastic Bowl

Application: Combination eyewash and shower safety station. Eyewash features a plastic bowl with two GS-Plus™ spray-type outlet heads that deliver a flood of water for rinsing eyes.

Shower Head: 10" diameter orange ABS plastic with 20 GPM flow control.

Shower Valve: 1" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals. Furnished with stainless steel actuating arm and 29" stainless steel pull rod.

Spray Head Assembly: Two GS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from water flow.

Eyewash Bowl: 11-3/4" diameter orange ABS plastic.

Eyewash Valve: 1/2" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals.

Pipe and Fittings: Schedule 40 galvanized steel. Furnished with orange polyethylene pipe covers for high visibility and corrosion resistance.

Supply: 1-1/4" NPT female top or side inlet.

Waste: 1-1/4" NPT female outlet. Outlet can be positioned at either 9-1/4" or 19-5/8" above finished floor by reversing lower pipe nipples.

Sign: ANSI-compliant identification sign.

Quality Assurance: Valve and spray head assemblies are factory assembled and water tested prior to shipment.

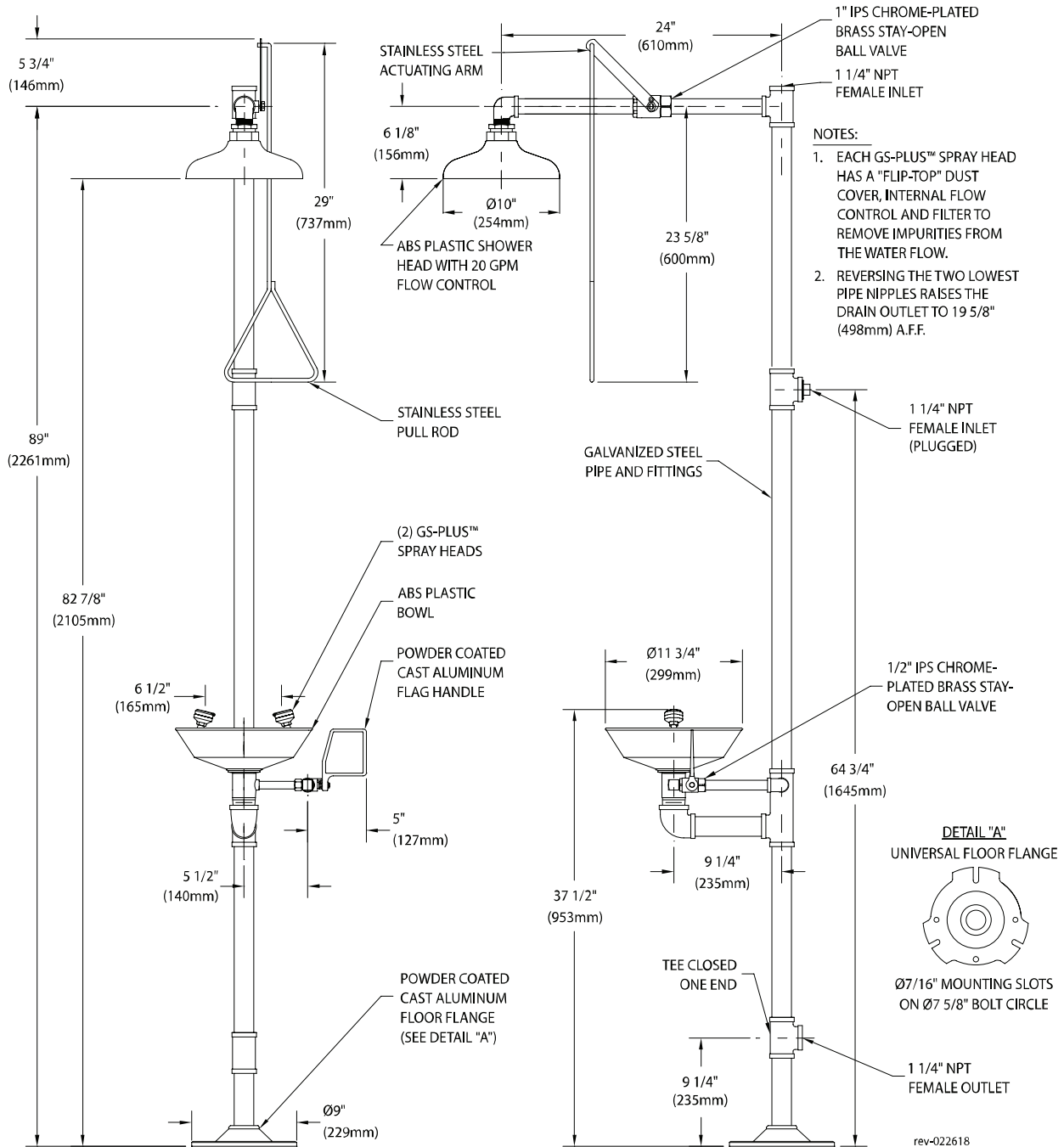
Available Options

- **G6040** Thermostatic mixing valve precisely blends hot and cold water to deliver tepid water as required by ANSI Z358.1-2014. Refer to "Thermostatic Mixing Valves" section for complete technical and product selection information.
- **GC** Powder coated finish on galvanized pipe and fittings. Available colors include orange, yellow, red and green.
- **GRN** Green ABS plastic shower head and bowl.
- **YEL** Yellow ABS plastic shower head and bowl.
- **SSH** Stainless steel shower head.
- **AP275-200** Electric flashing light and alarm horn unit for mounting on wall or vertical pipe. Light illuminates and horn sounds when eyewash or shower is activated. Furnished complete with flow switch and mounting hardware.
- **AP250-015** Modesty curtain for mounting on safety station.





□ G1902P Safety Station with Eyewash, Plastic Bowl



THIS SPACE FOR ARCHITECT/ENGINEER APPROVAL

Sign Included



Due to continuing product improvement, the information contained in this document is subject to change without notice. All dimensions are ± 1/4" (6mm). rev. 121118



G6040 Thermostatic Mixing Valve, 50 Gallon/189 Liter Capacity



Application: Thermostatic mixing valve to blend hot and cold water to deliver tepid water. Valve has flow capacity of 50 gallons (189 liters) per minute at 30 PSI (2.1 bar) pressure drop. Valve can be used to supply emergency shower or combination safety station. Depending on water supply size and pressure, valve can supply multiple units.

Mounting: Valve inlets can be positioned on top, back or bottom of valve. Outlet can be on top or bottom. Valve can be configured in the field for any mounting position. Furnished with heavy duty stainless steel mounting bracket.

Temperature Control: Valve has precision thermal actuator that senses incoming water temperature and automatically blends water to preset temperature. Valve is factory set to deliver 85°F (29°C) water. Temperature of tepid water can be adjusted as required and then locked. Furnished with dial temperature gauge as standard to monitor temperature of tepid water.

Cold Water Bypass: If the supply of hot water is restricted or interrupted, an internal bypass allows the valve to deliver cold water only. In bypass mode, the valve delivers 38 GPM (144 L/min) at 30 PSI (2.1 bar) pressure drop.

Hot Water Shutoff: Valve has internal PTFE valve seat. If the supply of cold water is interrupted, the valve will close completely and *not deliver any water at all*, eliminating any possibility of scalding.

Flow Capacity: Refer to table below for flow capacity of valve at specified pressure drops.

Checkstops/Filters: Each inlet has a lockable shutoff valve for maintenance, internal check valve to prevent backflow and stainless steel basket filter to remove debris from the water flow.

Construction: Valve meets the requirements of the U.S. Safe Drinking Water Act as lead-free.

Inlet/Outlet: 1" NPT female inlets and 1-1/4" NPT female outlet as standard.

Quality Assurance: Valve is ASSE certified under ANSI/ASSE 1071. Valve is fully assembled and factory tested prior to shipment.

Water Pressure/Temperature Requirements

Supply Pressure: Maximum incoming water pressure is 125 PSI (8.6 bar). Pressure of hot and cold water supplies can vary up to 25% and still deliver the flow and temperature required by ANSI/ASSE 1071.

Hot Water Supply Temperature: Incoming hot water temperature range is 120° - 180°F (49° - 82°C). Guardian recommends that the hot water temperature not exceed 140°F (60°C).

Cold Water Supply Temperature: Incoming cold water temperature range is 40° - 70°F (4° - 21°C). Cold water temperature must be at least 10°F (5.6°C) less than the temperature of the delivered tepid water.

Tepid Water Temperature: Temperature of tepid water is adjustable within a range of 65° - 95°F (18° - 35°C) and then locks in position. High temperature limit stop is set at 90°F (32°C) to prevent misadjustment.

G6040 Thermostatic Mixing Valve, 50 Gallon/189 Liter Capacity

Pressure Drop (PSI)	1	5	10	15	20	25	30	35	40
Flow Rate (GPM)	0.5	17	28	34	41	46	50	55	59
Bypass Flow Rate (GPM)	0.5	13	20	25	30	34	38	41	45

Pressure Drop (Bar)	0.1	0.3	0.7	1.0	1.4	1.7	2.1	2.4	2.8
Flow Rate (L/min)	2	64	106	129	155	174	189	208	223
Bypass Flow Rate (L/min)	2	49	76	95	114	129	144	155	170

Ordering Information

Models

<input type="checkbox"/>	G6040	Thermostatic Mixing Valve, 50 Gallon/189 Liter Capacity
<input type="checkbox"/>	G6041-XXX	G6040 valve installed in surface mounted powder coated steel cabinet
<input type="checkbox"/>	G6042-XXX	G6040 valve installed in surface mounted stainless steel cabinet
<input type="checkbox"/>	G6043-XXX	G6040 valve installed in recess mounted powder coated steel cabinet
<input type="checkbox"/>	G6044-XXX	G6040 valve installed in recess mounted stainless steel cabinet

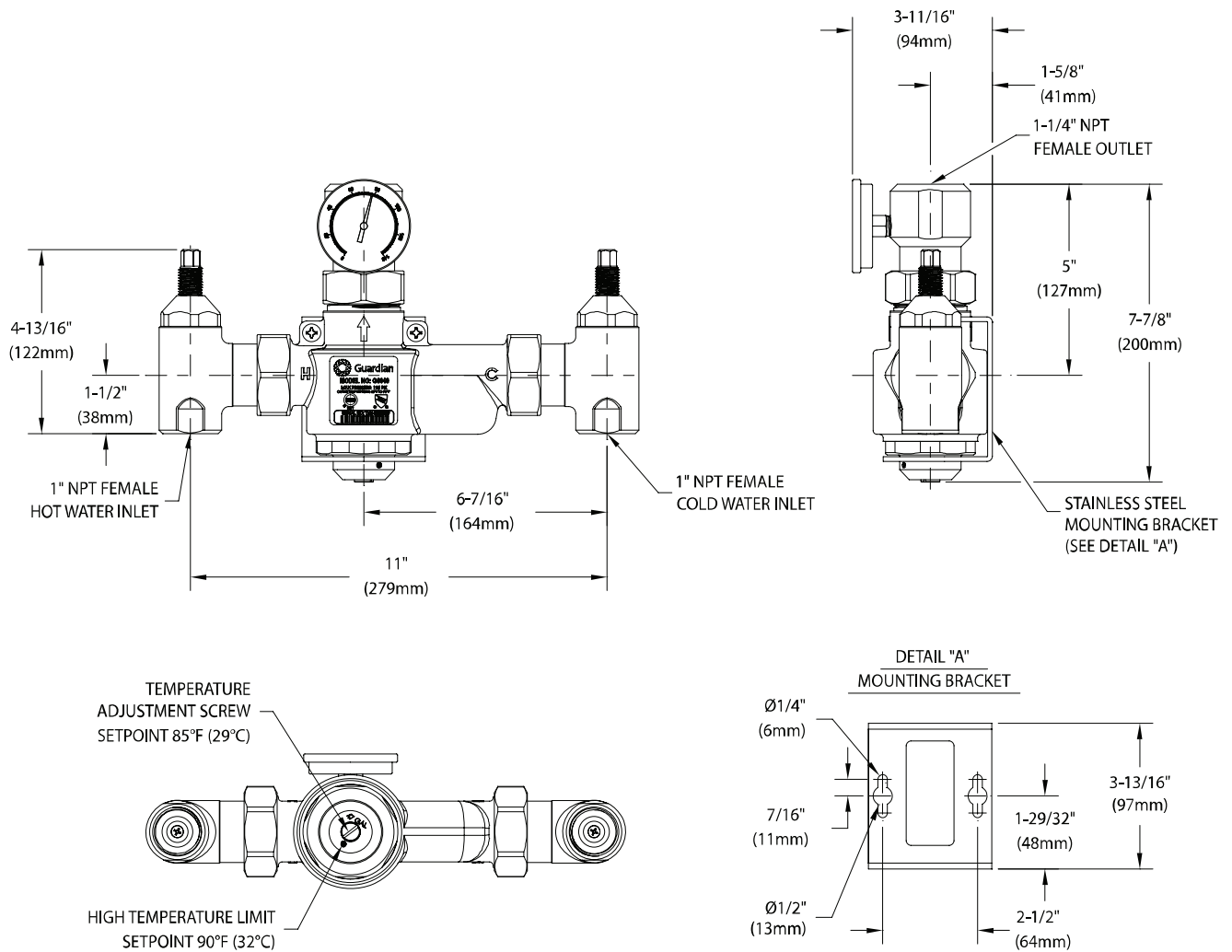
Available Options

<input type="checkbox"/>	Finish	Chrome plated finish in place of raw brass (add suffix "CP")
<input type="checkbox"/>	Inlet/Outlet Threads	G1 female thread on inlets and G1-1/4 female thread on outlet (add suffix "G")
<input type="checkbox"/>	Temperature Gauges	Temperature gauges on hot and cold water inlets (add suffix "IT")
<input type="checkbox"/>	Pressure Gauges	Pressure gauges on hot and cold water inlets (add suffix "IP")
<input type="checkbox"/>	Temperature/Pressure Gauges	Temperature and pressure gauges on hot and cold water inlets (add suffix "ITP")

Note: Installation of temperature and/or pressure gauges will change rough-in dimensions of valve. Contact factory for catalog drawing.



G6040 Thermostatic Mixing Valve, 50 Gallon/189 Liter Capacity



Notes:

1. ANSI Z358.1-2014 states that the water temperature delivered by emergency equipment should be “tepid”. Tepid is defined as 60°F - 100°F (16°C - 38°C). However, in circumstances where a chemical reaction can be accelerated by water temperature, a medical professional should be consulted to determine the optimum water temperature for the application.
2. For thermostatic mixing valves to deliver the required water temperature and volume, the system must be sized correctly. Please refer to the flow capacity, pressure and temperature requirements herein when designing the tepid water system.
3. Valve is factory set to deliver 85°F (29°C) tepid water. Depending on pressure and temperature of the incoming water supplies, this setting may require adjustment in the field. The adjustment screw is locked in position after adjusting.
4. Thermostatic mixing valves, like all emergency equipment, must be installed in accordance with the manufacturer’s instructions and maintained on a regular basis. Per ANSI Z358.1-2014, all emergency equipment should be activated weekly and inspected at least annually. Thermostatic mixing valves should be treated the same.
5. Per ANSI Z358.1-2014, plumbed emergency equipment must be connected to a potable water supply. This valve meets the requirements of the U.S. Safe Drinking Water Act as lead-free and is safe for use with potable water.
6. This valve is supplied with shutoff valves. Per ANSI Z358.1-2014, if shutoff valves are installed on the water supply to emergency equipment, the valves must be lockable to prevent unauthorized shutoff. Accordingly, each shutoff valve stem on this valve has a hole for installing a lock to secure the stem in the open position.

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