

## PRODUCT DESCRIPTION

Emergency shower and eye/facewash stations with corrosion resistant PVC piping and corrosion-resistant coated bronze valves for use in areas where people may come into contact with hazardous materials. Stations are designed for installation into areas where exposed metals are challenged by the corrosive environment that may exist.



## GENERAL INFORMATION

Following are requirements of ANSI Z358.1 for Emergency Eyewash and Shower Equipment. A complete copy of this standard may be purchased from the International Safety Equipment Association.

- 1) Unit shall be installed in accordance with the manufacturer's instructions and acceptable plumbing practices.
- 2) The height of the shower head shall be not less than 208.3 cm (82 inches) nor more than 243.8 cm (96 inches) from the surface on which the user stands.
- 3) The eye/facewash shall be positioned with the water nozzles between 83.8 cm (33 inches) and 114.3 cm (45 inches) from the floor and 15.3 cm (6 inches) minimum from the wall or nearest obstruction.
- 4) The unit shall be connected to a system capable of supplying adequate flushing fluid to meet the flow requirements of each component operating simultaneously. The supply line shall provide an uninterrupted supply of potable water at a recommended minimum 0.207 megapascal (30 pounds per square inch) of flow pressure.
- 5) Where the possibility of freezing conditions exists, equipment shall be protected from freezing or freeze-protected equipment shall be installed.
- 6) When a shower is installed, it shall be tested in accordance with the following procedures:
  - a) With the unit correctly connected to the water source and the valve(s) closed, visually check the piping connection for leaks.
  - b) Open the valve to the full open position. The valve shall remain open without requiring further use of the operator's hands
  - c) With the valve in the "full on" position, measure the diameter of the spray pattern. It shall be a minimum of 50.8 cm (20 inches) at 152.4 cm (60 inches) above the standing surface. The center of the spray shall be at least 40.6 cm (16 inches) from any obstructions.
- 7) When the eye/facewash is installed, it shall be tested in accordance with the following procedures:
  - a) With the unit correctly connected to the water source and the valve(s) closed, visually check the piping connection for leaks.
  - b) Open the valve to the full open position. The valve shall remain open without requiring further use of the operator's hands.

- c) With the valve in the “full on” position, measure the flushing fluid flow pattern with the use of a test gauge to determine a suitable eyewash pattern as required by ANSI standards. Determine that both eyes can be irrigated simultaneously at a velocity low enough not to be injurious to the user.

NOTE: Test that all devices on combination units are capable of operating simultaneously to ANSI standard.

- 8) Shower units shall be in accessible locations that require no more than 10 seconds travel time from the farthest hazard.  
 9) Each unit location shall be identified with a highly visible sign. The area around the unit shall be well lit.  
 10) Plumbed units shall be inspected annually for proper operation to ensure compliance to ANSI Z358.1 standard.

## ASSEMBLY AND INSTALLATION INSTRUCTIONS

**CAUTION: CHECK FOR ADEQUATE FLOOR AND WALL STRENGTH.**

### Attachment to Floor and Wall or to a Similar Wall Support

Floor and wall flange mounting hardware and PVC adhesive are not included. Must be supplied by others. Use appropriate adhesive specifically for PVC pipe. Follow the manufacturer’s instructions on the adhesive package.

- NOTES:**
1. Bolts should be long enough to allow at least a ½” bolt clearance for nut attachment.
  2. Floor flange assembly should be positioned on floor to where waste connection is facing away from standing area of user.
  3. **DO NOT USE PIPE SEALANT ON ANY PART OF THE PVC ASSEMBLY.**

**Concrete:** Secure floor and wall flanges using four (4) per flange ½” dia. expansion anchors or similar type anchors. **NOTE:** If a concrete base is required, ensure raised area is no more than 2” from standing level.

**Metal:** Secure floor and wall flanges using four (4) per flange ½”-13 UNC machine bolts and nuts for thick metal surface (drill and tap thick metal surface) or four (4) per flange ½”-13 bolts and nuts for thin metal surface. Bolts (supplied by others) should be long enough to allow at least a ½” bolt clearance for nut attachment.

**Wood:** Secure floor and wall flanges using four (4) per flange ½” x 3” lag screws.

## SHOWER STATION ASSEMBLY

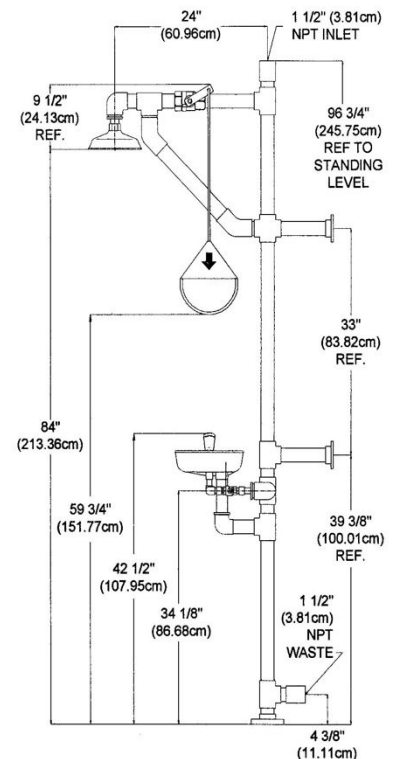
- NOTES:**
1. When secure, check all flanges to ensure correct installation and no movement of the flanges are present.
  2. If an obstruction exists that may prevent the assembly of the overhead shower section to the upper stanchion, complete Steps 2-6 of the Assembly and Installation Instructions prior to mounting the floor flange to the floor.

### CONVENTIONAL SHOWER/EYEWASH STATION

See Figure 2 Shower Installation Layout on page 4 for reference.

1. Secure floor flange assembly, includes lower stanchion, to the desired location using hardware as recommended (see Attachment to the Floor and Wall section above). Position waste connection away from standing area of user.
2. Once placement and installation of the floor flange assembly is complete, attach fountain section to the lower stanchion using PVC adhesive. **NOTE: ALIGN EYE/FACEWASH FOUNTAIN IN THE PREFERRED DIRECTION IMMEDIATELY UPON APPLYING ADHESIVE.** Let stand for a minimum of 10 minutes.
3. Attach 54” upper stanchion to the tee fitting on the fountain section using PVC adhesive. Let stand for a minimum of 10 minutes.
4. Place wall support slip-on cross and tee fittings (shipped loose) through upper stanchion. **NOTE: DO NOT APPLY PVC ADHESIVE.** To achieve greater support of the shower unit to wall, place slip-on tee in the preferred location, either above or below slip-on cross.
5. Attach the overhead shower assembly to the upper stanchion using PVC adhesive. **NOTE: ALIGN OVERHEAD SHOWER ASSEMBLY WITH EYE/FACEWASH FOUNTAIN IMMEDIATELY UPON APPLYING ADHESIVE.** Let stand for a minimum of 10 minutes
6. Attach one end of the diagonal brace to the plugged end of the slip-on tee fitting on overhead shower assembly and other end to the cross fitting on upper stanchion, using PVC adhesive. Let stand for a minimum of 10 minutes.
7. Attach wall supports to the slip-on tee and cross fittings using PVC adhesive. Let stand for a minimum of 10 minutes.
8. Secure wall supports to wall surface using hardware as recommended (see Attachment to the Floor and Wall section above). When secure, check flanges to ensure correct installation and no movement of the flanges are present.
9. Thread shower head to overhead section, taking care not to cross thread. **Tighten – hand tight only. Do not use a pipe wrench. Pipe sealant or tape is not required or recommended.**
10. Remove cotter pin and washer from the pull rod and insert tip through the hole at the end of the shower actuator arm. Tip of pull rod should be on the actuator arm side closest to the overhead piping. Re-attach washer and cotter pin to secure pull rod.

**FIGURE 1**



11. Place push plate over stem of ball valve and attach with lock nut provided. Assemble the eye/facewash head onto the fountain section, taking care to avoid cross threading. Hand tightened until snug. Once snug, rotate assembly back until eyewash heads are aligned with push plate (when in off position). **CAUTION: DO NOT OVER TIGHTEN. DO NOT USE ADHESIVE, PIPE SEALANT OR SEALING TAPE.**
12. Connect water supply piping to shower unit at the upper 1½" NPT water inlet.
13. Test shower unit for leaks and proper water flow pattern by activating valves to open position using pull rod and push plate, simultaneously. (Recommended maximum dynamic water pressure 551 kPa [80 psi] / minimum dynamic water pressure 207 kPa [30 psi].)

### **BARRIER-FREE SHOWER/EYEWASH STATION**

See Figure 3 Shower Installation Layout on page 4 for reference.

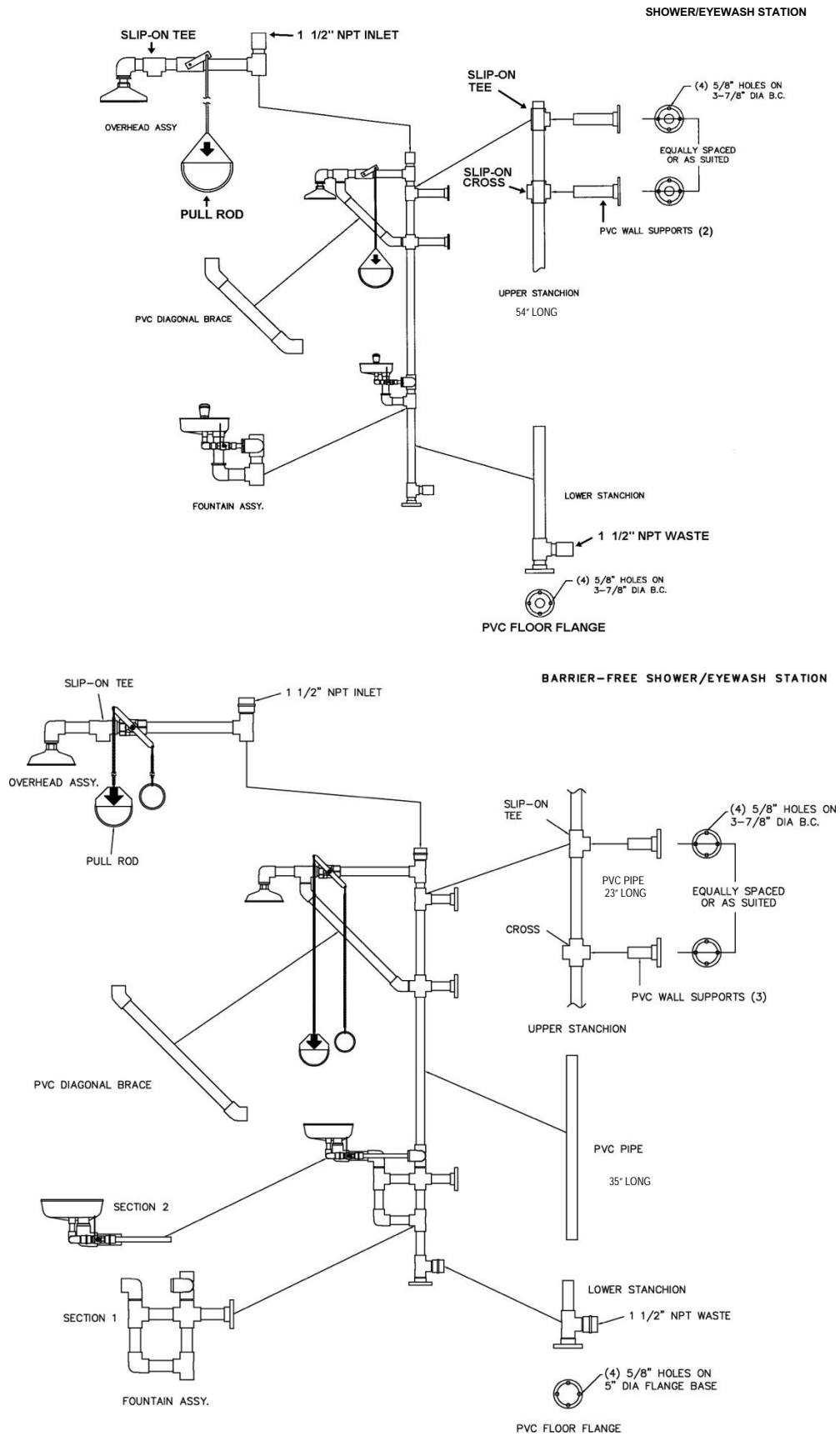
1. Secure floor flange assembly, includes lower stanchion, to the desired location using hardware as recommended (see Attachment to the Floor and Wall section above). Position waste connection away from standing area of user.
2. **NOTE: THE FOUNTAIN SECTION IS SHIPPED IN TWO (2) SECTIONS.** Once placement and installation of the floor flange assembly is complete, attach fountain section 1 to lower stanchion using PVC adhesive. **NOTE: ALIGN EYE/FACEWASH FOUNTAIN IN THE PREFERRED DIRECTION IMMEDIATELY UPON APPLYING ADHESIVE.** Let stand for a minimum of 10 minutes.
3. Attach fountain section 2 to fountain section 1 using PVC adhesive. Let stand for a minimum of 10 minutes.
4. Attach 35" upper stanchion to the tee fitting on the fountain section using PVC adhesive. Let stand for a minimum of 10 minutes.
5. Attach cross fitting (ship loose) to the 35" upper stanchion using PVC adhesive. Let stand for a minimum of 10 minutes.
6. Attach 23" upper stanchion to cross fitting using PVC adhesive. Let stand for a minimum of 10 minutes.
7. Place wall support slip-on tee fitting (shipped loose) through 23" upper stanchion. **NOTE: DO NOT APPLY PVC ADHESIVE.**
8. Attach the overhead shower assembly to the upper stanchion using PVC adhesive. **NOTE: ALIGN OVERHEAD SHOWER ASSEMBLY WITH EYE/FACEWASH FOUNTAIN IMMEDIATELY UPON APPLYING ADHESIVE.** Let stand for a minimum of 10 minutes
9. Attach one end of the diagonal brace to the plugged end of the slip-on tee fitting on overhead shower assembly and other end to the cross fitting on upper stanchion, using PVC adhesive. Let stand for a minimum of 10 minutes.
10. Attach wall supports to the slip-on tee and cross fittings using PVC adhesive. Let stand for a minimum of 10 minutes.
11. Secure wall supports to wall surface using hardware as recommended (see Attachment to the Floor and Wall section above). When secure, check flanges to ensure correct installation and no movement of the flanges are present.
12. Thread shower head to overhead section, taking care not to cross thread. **Tighten – hand tight only. Do not use a pipe wrench. Pipe sealant or tape is not required or recommended.**
13. Remove cotter pin and washer from the pull rod and insert tip through the hole at the end of the shower actuator arm. Tip of pull rod should be on the actuator arm side closest to the overhead piping. Re-attach washer and cotter pin to secure pull rod.
14. Place push plate over stem of ball valve and attach with lock nut provided. Assemble the eye/facewash head onto the fountain section, taking care to avoid cross threading. Hand tightened until snug. Once snug, rotate assembly back until eyewash heads are aligned with push plate (when in off position). **CAUTION: DO NOT OVER TIGHTEN. DO NOT USE ADHESIVE, PIPE SEALANT OR SEALING TAPE.**
15. Connect water supply piping to shower unit at the upper 1-½" NPT water inlet.
16. Test shower unit for leaks and proper water flow pattern by activating valves to open position using pull rod and push plate, simultaneously. (Recommended maximum dynamic water pressure 551 kPa [80 psi] / minimum dynamic water pressure 207 kPa [30 psi].)

### **EYE/FACEWASH STATIONS – Pedestal Mount, Pipe Supply or Wall Mount Stations**

1. Pedestal Mount Stations
  - a) Assemble the lower stanchion to the floor flange using PVC adhesive. Position waste connection away from standing area of user. Let stand for a minimum of 10 minutes.
  - b) Attach fountain section to the lower stanchion using PVC adhesive. **NOTE: ALIGN EYE/FACEWASH FOUNTAIN IN THE PREFERRED DIRECTION IMMEDIATELY UPON APPLYING ADHESIVE.** Let stand for a minimum of 10 minutes.
  - c) Secure floor flange using hardware as recommended (see Attachment to the Floor and Wall section above).
- Wall Mount Stations
  - a) Place wall support slip-on tee to fountain section using PVC adhesive. Let stand for a minimum of 10 minutes.
  - b) Secure wall support to wall surface using hardware as recommended (see Attachment to the Floor and Wall section on page 2).
2. Place push plate over stem of ball valve and attach with lock nut provided.
3. Assemble the eye/facewash head onto the fountain section, taking care to avoid cross threading. Hand tightened until snug. Once snug, rotate assembly back until eyewash heads are aligned with push plate (when in off position). **CAUTION: DO NOT OVER TIGHTEN. DO NOT USE ADHESIVE, PIPE SEALANT OR SEALING TAPE.**
4. Connect ½" potable water supply line to ball valve using pipe wrench and appropriate pipe sealant. **NOTE: Extra care should be taken when attaching supply line to corrosion-resistant coated ball valves to prevent damage to the ball valve coating.**

- Test unit for leaks and proper water flow pattern by activating valve to open position using push plate.  
(Recommended maximum dynamic water pressure 551 kPa [80 psi] / minimum dynamic water pressure 207 kPa [30 psi].)

**FIGURE 2 - SHOWER INSTALLATION LAYOUTS**



## OPERATION & MAINTENANCE

1. Plumbed units shall be activated weekly to flush lines and verify proper flow pattern and volume.
2. Test records should be maintained verifying compliance with testing procedures.
3. Some chemical vapors or liquids may damage or soften plastic materials. Precaution should be taken to determine compatibility prior to installation.

## SPARE PARTS LIST

P/N 01052122	ABS Eye/Facewash Dual Stream Head Assy.	P/N 00011061	1½" Corrosion-Resistant Coated Ball Valve
P/N 01052123	ABS Eyewash Dual Stream Head Assy.	P/N 01052099	½" Corrosion-Resistant Coated Ball Valve
P/N 01052020	ABS Eye/Facewash Float Off Cover	P/N 01052001	Stainless Steel Pull Rod with Graphics
P/N 01052113	ABS Eyewash Float Off Cover	P/N 01054003	30 GPM ABS Shower Head
P/N 01052018	Stainless Steel Push Plate with Graphics	P/N 01054005	20 GPM ABS Shower Head
P/N 01110462	ABS Yello-Bowl®	P/N 00009030	PVC Floor Flange

## TRAINING

All employees who might be exposed to hazardous material shall be instructed in the location and proper use of emergency shower and eye/facewash units. Experiences have shown that initial first-aid treatment for irritants should be to wash the eyes and face for 15 minutes prior to medical treatment. It is important to hold the eyelids open and roll the eyes so water will flow on all surfaces and in the folds surrounding the eyes.

## PROPOSITION 65

WARNING: This product can expose you to BPA, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## WARRANTY STATEMENT

ENCON HEREBY DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS, EXCEPT AS HEREINAFTER PROVIDED.

Encon Safety Products warrants that for one year from the date of purchase of any Encon products, the product will be free of defects in materials and workmanship if properly used and cared for or cleaned under normal conditions in accordance with Encon's use and care instructions and properly installed, if applicable, in accordance with Encon's installation instructions. With respect to the product, Encon's only obligation and purchaser's exclusive remedy under this warranty is to repair or replace such product; provided that:

1. Encon is notified of the defect within one year of shipment, and
2. the product is determined by Encon to be defective.

Encon requires proof of original ownership as proof of warranty coverage, and Encon must receive any claim under this Limited Warranty within one year of purchase of the product.

NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, ENCON SHALL NOT BE LIABLE FOR LOSS, DAMAGE, OR EXPENSE ARISING DIRECTLY OR INDIRECTLY AS A CONSEQUENCE OF USE OF THE EQUIPMENT WITH OTHER PRODUCTS OR FROM ANY OTHER CAUSE, INCLUDING ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR EXEMPLARY DAMAGES, EXCEPT FOR ENCON'S OBLIGATION TO REPAIR OR REPLACE DEFECTIVE PRODUCTS AS EXPRESSLY PROVIDED IN THIS STATEMENT.

Replacement parts purchased from Encon are warranted for one year following the shipment of such replacement part, or until the expiration of the warranty period for the product, whichever is less. No warranty is given in connection with products that are altered without Encon's expressed written consent. The same warranty limitations and the obligations of Encon as set out herein above shall apply to replacement parts.

Encon's total liability arising out of this warranty (including, but not limited to, warranty claims) regardless of forum and regardless of whether such action or claim is based on tort, contract or otherwise will not exceed the total purchase price of the product.



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