

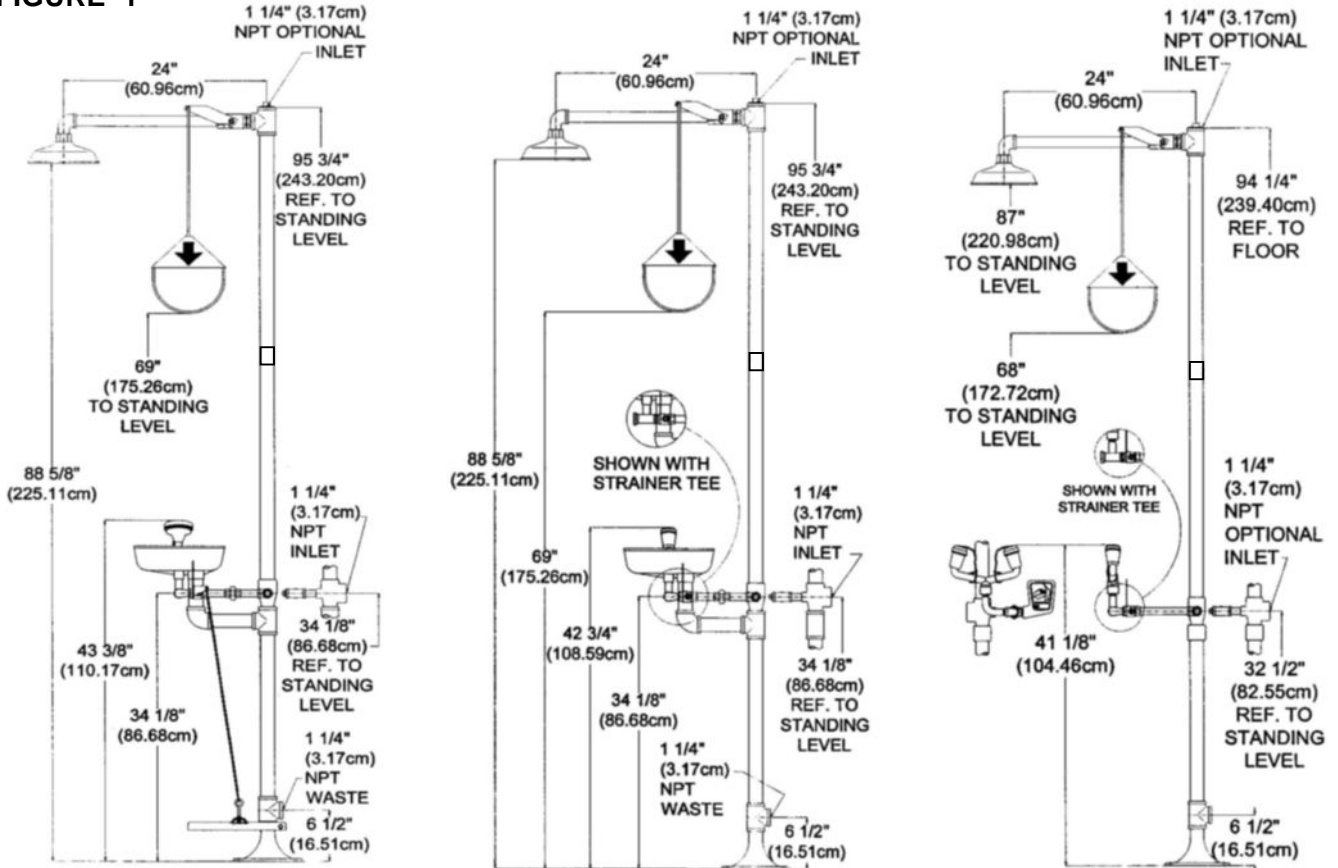
PRODUCT DESCRIPTION

Standard galvanized steel and stainless steel Emergency Combination Shower Stations, including standard freeze-resistant showers, are designed for floor mounting in areas where people may come into contact with hazardous materials.



U.S. Patent US 6,205,599

FIGURE 1



Treadle kits shown above are optional on most models.

ASSEMBLY AND INSTALLATION INSTRUCTIONS

Attachment to Floor - Mounting hardware is not included (supplied by others).

CAUTION: CHECK FOR ADEQUATE FLOOR STRENGTH.

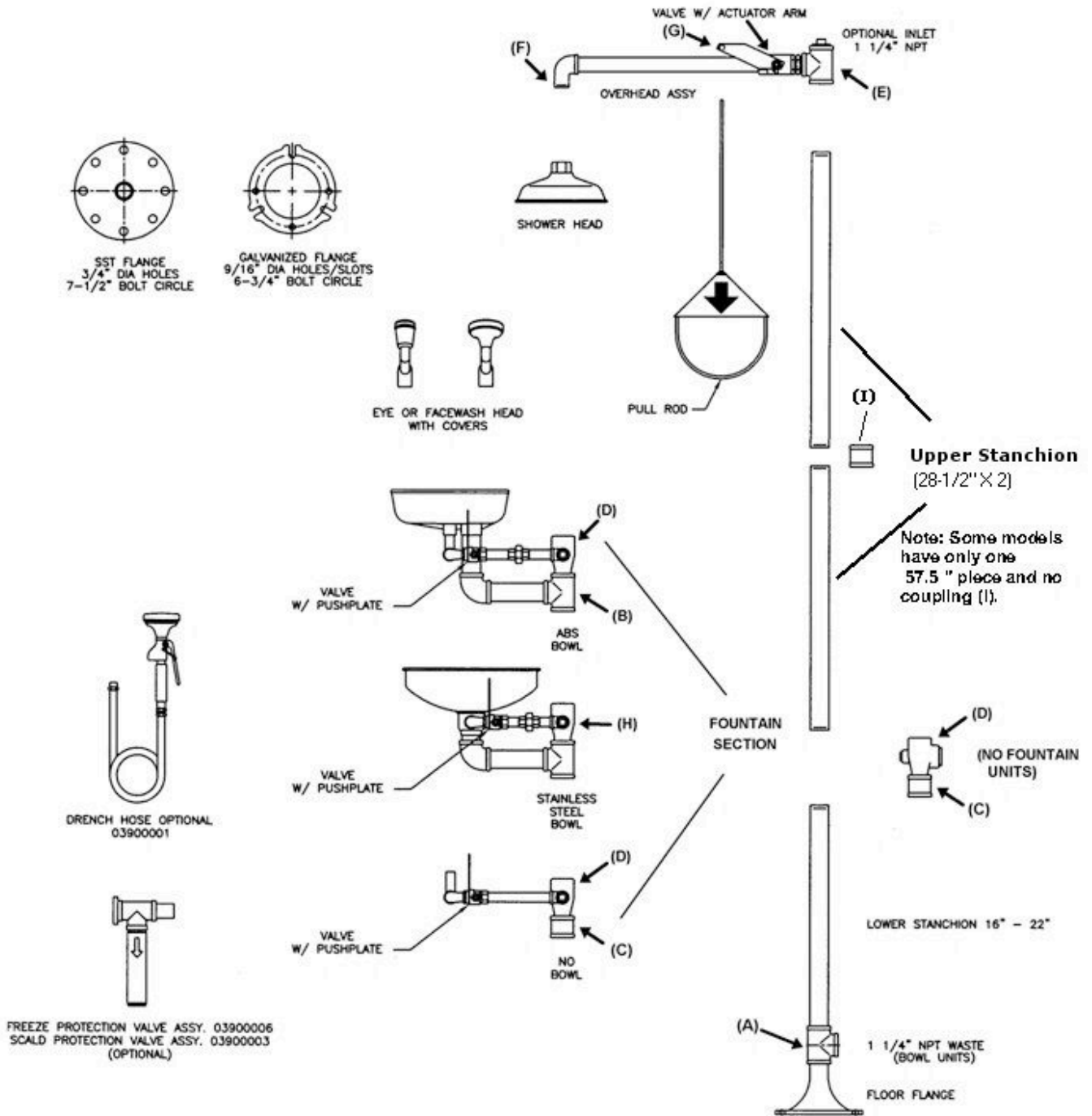
- Concrete: Secure the floor flange (stainless steel or galvanized steel) using four (4) expansion anchors or equal type anchors.
NOTE: If a concrete base is required ensure raised area is no more than 2" from standing level.
- Metal: Secure floor flange using four (4) ½"-13 UNC machine bolts and nuts for thick metal surface (drill and tap thick metal surface), or four (4) ½"-13 bolts and nuts for thin metal surface. Bolts should be long enough to allow at least a ½" bolt clearance for nut attachment.
- Wood: Secure floor flange using four (4) ½" x 3" lag screws.

NOTES:

- See **Figure 2** Installation Layout on page 3 for reference.
 - The use of a pipe wrench and appropriate pipe sealant are required for proper attachment of each component, unless otherwise noted.
 - If shower unit has a fountain section, complete Steps 1-3 (below) prior to mounting the floor flange to the floor.
 - If an obstruction exists which may prevent assembly of the overhead shower section to the upper stanchion, complete Steps 1-8 (below) prior to mounting the floor flange to the floor.
 - Floor flange should be positioned with the waste connection facing away from standing area of user.
 - When floor flange is secure, check flange to ensure correct installation and no movement of the flange is present.
- Once placement and installation of the floor flange is complete, assemble the 1 1/4" tee (A) to the floor flange. Waste connection should be properly located to rear or desired side away from standing area of user.
 - Assemble the lower stanchion (16" to 22") to the tee (A) fitting.
 - If a fountain section is present, thread fountain section tee (B) onto lower stanchion. Align fountain section into the preferred direction the shower will be facing.
 - If a fountain section is not present, thread coupling (C) (with plugged adapter [D]) directly to the lower stanchion. NOTE: The plugged adapter will have a ½" square plug--**do not remove plug**.
 - Do one of the following according to the type of upper stanchion (one piece or three piece). **One Piece:** Assemble upper stanchion (57-1/2") to the plugged adapter (D). **Three Piece:** First, assemble the bottom half of upper stanchion to the plugged adapter (D). Then, assemble the coupling (I) to the bottom half (28-1/2") of the upper stanchion. Then, assemble the top half (28-1/2") of the upper stanchion to the coupling (I).
 - Assemble the overhead assembly 1 1/4" tee (E) to the upper stanchion.
 - Align the overhead shower assembly with the fountain section (if one is present), or position to the preferred direction.
 - Attach shower head to the overhead shower elbow (F), taking care not to cross thread. Hand tightened until snug.
CAUTION: Do not over tighten. Pipe sealant or tape is not required or recommended
 - Remove cotter pin and washer from the pull rod and insert tip through the hole at the end of the shower actuator arm (G). 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.
 - If a fountain section is present, attach push plate and locknut to ball valve. Thread eye/facewash head assembly onto nipple in bowl. Hand tightened until snug. Once snug, rotate back until eyewash heads are aligned with push plate (when in off position).
CAUTION: Do not over tighten. Pipe sealant or tape is not required or recommended
 - Connect water supply piping to shower unit at the desired water inlet location (upper tee [E] fitting or mid-point plugged adapter [D]). If upper water inlet connection is desired, remove the 1 1/4" plug from upper tee (E) fitting and insert plug into the mid-point water inlet plugged adapter (D).
 - If you have ordered an accessory with your shower, such as a drench hose assembly, freeze or scald protection valve, follow the installation steps below applicable to the appropriate component. For reference, see **Figure 2** on page 3.
NOTES: (1) The piping system should be well-flushed before installation of the freeze or scald protection valves, as particles in the water may obstruct and prevent complete closing of the valves.
(2) After protection valves are in place, ensure arrows are pointing downward.
(3) Pipe wrench and appropriate pipe sealant are required for proper attachment of each component.
- Drench Hose**
 - Remove and discard the ½" square plug from the tee plugged fitting (H) at fountain section.
 - Attach threaded end of drench hose assembly to the tee plugged fitting (H).
 - Attach drench hose hanger to upper vertical stanchion using U-bolts and bracket provided.
 - Freeze Protection Valve and/or Scald Protection Valve**
 - Remove and discard the ½" square plug from the tee plugged fitting (H) at fountain section.
 - Attach threaded end of freeze or scald protection valve assembly to the tee plugged fitting (H) until secure.
 - If both valves require installation, an accessory tee assembly is provided for complete installation. Remove and discard the ½" square plug from the tee plugged fitting (H) at fountain section and replace with accessory tee assembly (threaded end onto the tee plugged fitting [H]). Thread until secure while ensuring accessory tee is positioned horizontally. Attach protection valves at the preferred open ports of the accessory tee. Thread until secure.
 - Drench Hose and Protection Valve(s):**
 - Remove and discard the ½" square plug from the tee plugged fitting (H) at fountain section and replace with accessory tee assembly provided (threaded end onto the tee plugged fitting [H]). Thread until secure while ensuring accessory tee is positioned horizontally.
 - Attach assemblies at the preferred open ports of the accessory tee. Thread until secure.
 - If both protection valve and drench hose assemblies require installation, remove and discard the ½" square plug from the tee plugged fitting (H) at fountain section. Thread the ½" nipple, then the ½" cross fitting (parts included) onto the tee plugged fitting (H). Attach assemblies at the preferred open ports of the cross fitting. Thread until secure. NOTE: If the assemblies are purchased separately, a ½" cross fitting (P/N 00001704, sold separately) is needed to complete the installation.
- Test unit for leaks and for proper water flow pattern by activating valves simultaneously using pull rod and push plate(s). (Recommended maximum dynamic water pressure 80 psi / minimum dynamic water pressure 30 psi)

FIGURE 2 INSTALLATION LAYOUT

Note: Galvanized piping layout is shown below. Stainless steel and plastic piping layouts may slightly differ.



OPERATION & MAINTENANCE

1. Plumbed units shall be activated weekly to flush lines and verify proper flow pattern and volume.
2. If freeze or scald protection valve is included with your unit, the valves should be inspected each year, and cycled before hot or cold weather sets in.
3. Test records should be maintained verifying compliance with testing procedures.

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.

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 irritates 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.

WARRANTY STATEMENT

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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.

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