

PRODUCT DESCRIPTION

Emergency Combination Shower and Eyewash unit is designed as a barrier free station for installation in areas where people may come into contact with hazardous materials. Three overhead shower configurations are available to meet various installation site requirements, as shown in Figure 1. The eyewash station, including the shower and eyewash actuators, are in a recessed cabinet flush mounted on wall for barrier free accessibility.

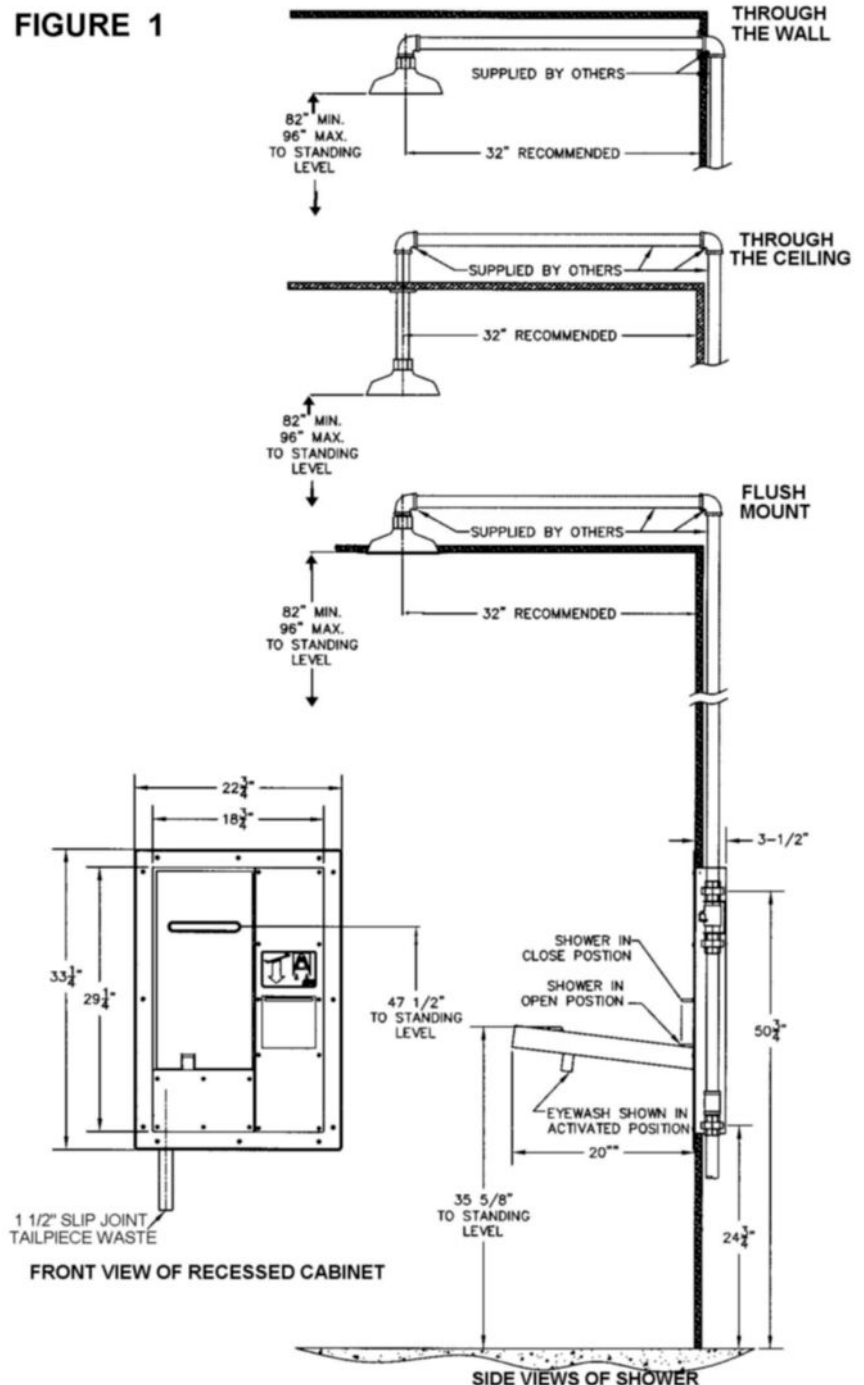
PATENT PENDING

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

FIGURE 1



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: ADEQUATE WALL SUPPORT IS RECOMMENDED.

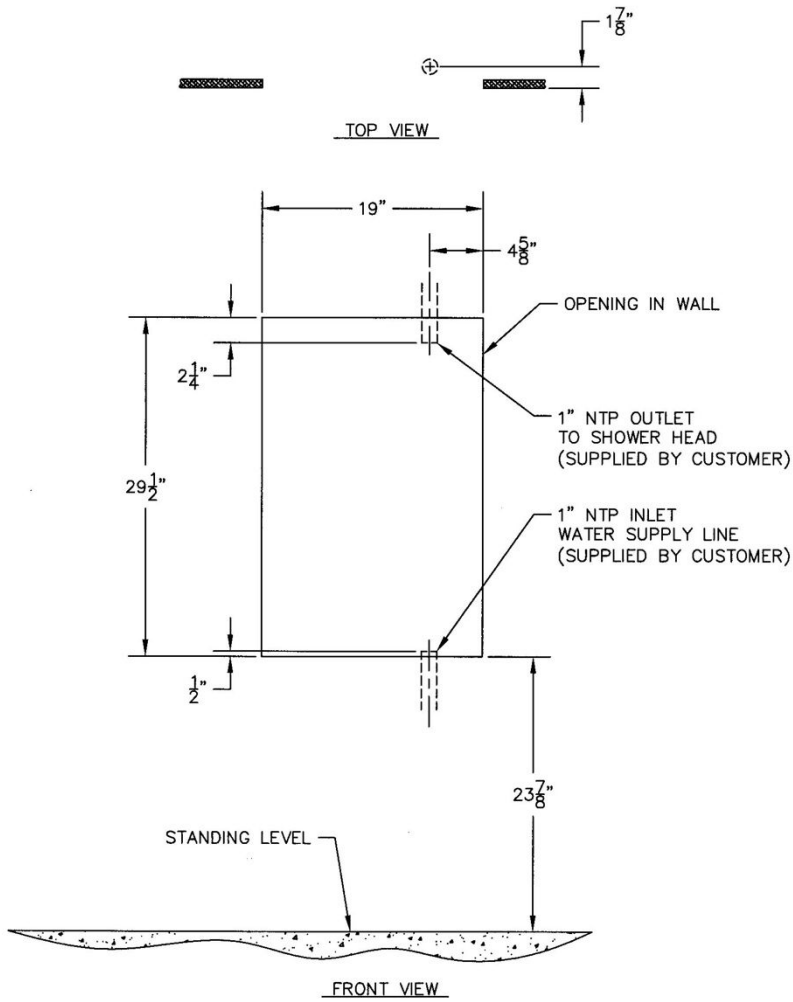
ATTACHMENT TO WALL - NOTE: Mounting fasteners are not included.

- Stud:** Fasten wood to existing studs. Use twelve (12) ¼" dia. lag screws to mount recessed cabinet.
- Concrete Block:** Use twelve (12) ¼" dia. toggle screws.
- Concrete:** Use twelve (12) ¼" dia. expansion anchors or equal

NOTES:

- 1) Piping between recessed cabinet and shower head assembly must be supplied and installed by others.
 - 2) Mounting fasteners are not included. Must be supplied by others.
 - 3) Identify desired target area for shower head assembly and cabinet.
 - 4) Required height of the shower head should be between 82" to 96" from the surface in which the user stands. Recommended location 32" from wall to centerline of shower head directly in front of the recessed cabinet. For reference, see **Figure 1**.
 - 5) Recessed cabinet requires an opening in the wall 19" wide by 29 ½" long, with the bottom of the opening at 23 7/8" above standing level. For reference, see **Figure 2** Wall Mount Layout on page 3. There should be at least 2" clearance beyond opening to accommodate cabinet mounting flange.
 - 6) It is recommended to frame the opening so that the recessed cabinet has a sturdy structure and surface mount.
 - 7) Required location for the installation of customer supplied water lines are:
 - a) 1" NPT inlet potable water supply line (supplied by others): 4 5/8" from the right side of the wall opening and extend upwards ½" from the bottom of the wall opening.
 - b) 1" NPT outlet potable water supply line (supplied by others): 4 5/8" from the right side of the wall opening and extend down 2 ¼" from the top of the wall opening.For reference, see **Figure 2** Wall Mount Layout on page 3.
 - 8) An area 48" wide by 30" deep in front of the recessed cabinet must be kept clear for wheelchair accessibility.
- 1) Mark wall to identify recessed cabinet location and carefully cut away for opening. Opening should be 19" wide by 29 ½" long, with the bottom of the opening at 23 7/8" above standing level. For reference, see **Figure 2** on page 3.
 - 2) Hole requirements for installation of Shower Head Assembly:
 - a) Flush mount and through the ceiling shower head models:
 - i) Mark ceiling to identify shower head assembly hole location and carefully cut away for opening (see **Note 4** above). Size of opening:
 - (1) Flush Mount Model: 8 ½" diameter to accommodate shower head and trim ring
 - (2) Through the Ceiling Model: 1 ½" diameter to accommodate 1" NPT nipple
 - b) Through the wall shower head model:
 - i) Mark wall to identify shower head assembly hole location and carefully cut away for opening (see **Note #4** above). Required height location of opening should be between 87 ½" to 91 ½" from centerline of opening to standing level and directly above centerline of the recessed cabinet. Opening should be 1 ½" diameter to accommodate escutcheon plate and nipple.
 - 3) The recessed cabinet is packaged fully assembled. Prior to wall installation, remove plate cover (#1) by unscrewing ten ½ x 10-32 screws (#2) using a hand screwdriver. For component parts list, see **Figure 3** on page 3. **CAUTION: DO NOT USE A POWER TOOL OR AN AIR TOOL.** Place plate cover and screws to one side.

- 4) Slide plate (#5) and valve actuator arm (#6) are now free to swing to the side allowing access to upper and lower unions (#3A/B).
- 5) Remove the appropriate half of the lower union (#3B) and attach the union fitting to 1" NPT inlet potable water supply line using pipe wrench and appropriate pipe sealant.
- 6) Insert recessed cabinet into wall opening, with the 1 ½" slip joint tailpiece introduced first.
- 7) Reconnect lower union (#3B) to the union fitting. Use appropriate pipe sealant. **DO NOT TIGHTEN UNION AT THIS TIME.**
- 8) Attach 1" NPT outlet water supply piping (supplied by others) to upper union (#3A) and run piping to shower head assembly site using pipe wrench and appropriate pipe sealant. **DO NOT TIGHTEN UNION AT THIS TIME.**
- 9) Waste water plumbing (supplied by others) should be attached to the 1 ½" slip joint tailpiece for spent fluid drainage.
- 10) Ensure recessed cabinet is level and secure cabinet mounting flange to wall using appropriate fasteners (supplied by others).
- 11) **TIGHTEN ALL UNIONS AT THIS TIME USING PIPE WRENCH.** Note: Do not replace plate cover (#1) at this time.
- 12) Installation of Shower Head Assembly:
 - a) Flush mount model: With trim ring placed around shower head, insert shower head assembly into ceiling opening. Attach shower head to the 1" overhead water supply line connection (supplied and installed by others) using a crescent wrench (recommended hand tool) and appropriate pipe sealant. Tighten until snug.
 - b) Through the ceiling model: Insert 1" NPT nipple (included) through ceiling opening and attach nipple to the 1" overhead water supply line connection (supplied and installed by others) using pipe wrench and appropriate pipe sealant. Place escutcheon plate (included) around nipple with flange side facing ceiling and position plate flush to the ceiling. Attach shower head to nipple using a crescent wrench (recommended hand tool) and appropriate pipe sealant. Tighten until snug.
 - c) Through the wall model: Insert 1" NPT nipple (included) through wall opening, and attach nipple to the 1" water supply line connection (supplied and installed by others). Place escutcheon plate (included) around nipple with flange side facing wall and position plate flush to the wall. Attach 1" x 90° street elbow (included) to nipple, follow by the 1" x close nipple (included). Use pipe wrench and appropriate pipe sealant when threading components. Attach shower head to the 1" x close nipple using a crescent wrench (recommended hand tool) and appropriate pipe sealant. Tighten until snug.
- 13) Prior to replacing plate cover (#1), test unit for leaks and proper water flow patterns by activating shower and eyewash valves to open position using protruding handles (#7 & #9). Individual activation graphics are shown on cabinet.
- 14) After testing is complete, replace plate cover (#1) and ten ½ x 10-32 screws (#2) using a hand screwdriver. **CAUTION: DO NOT USE A POWER TOOL OR AN AIR TOOL.**
(Recommended maximum dynamic water pressure 80 psi / minimum dynamic water pressure 30 psi)



**FIGURE 2
WALL MOUNT LAYOUT**

PATENT PENDING

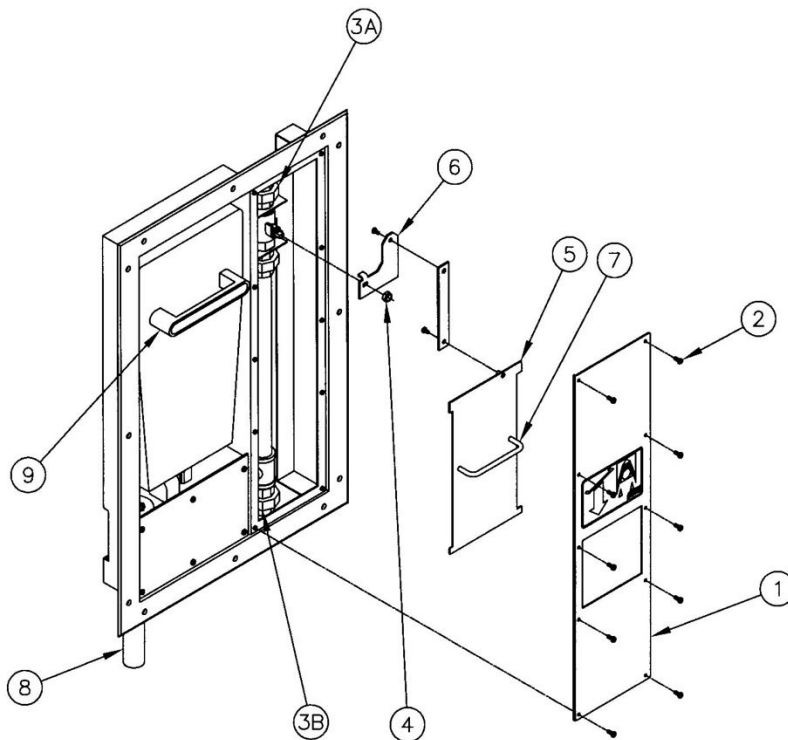


FIGURE 3

COMPONENT PARTS

| NO. | PART NO. | COMPONENT |
|-----|----------|-----------------------|
| 1 | 01110423 | Plate Cover |
| 2 | 00012825 | 1/2x10-32 Screws (10) |
| 3A | 00001205 | 1" Union (upper) |
| 3B | 00001205 | 1" Union (lower) |
| 4 | 00011207 | Valve Lock Nut |
| 5 | 01180043 | Slide Plate |
| 6 | 01110234 | Valve Actuator Arm |
| 7 | 01112342 | Shower Handle |
| 8 | 01110157 | Waste Tailpiece |
| 9 | 01110776 | Eyewash Pull Handle |

PATENT PENDING

SPARE PARTS LIST

| | | | |
|--------------|--|--------------|--|
| P/N 01040137 | 3/8" Ball Valve, eyewash | P/N 01055007 | Stainless Steel 30 GPM Shower Head |
| P/N 01052045 | Acetal Eyewash Head with Cap | P/N 01055008 | Stainless Steel 30 GPM Shower Head w/Trim Ring, for flush ceiling mount models |
| P/N 01052102 | 1" Ball Valve Kit, shower | | |
| P/N 01055005 | Stainless Steel 20 GPM Shower Head | P/N 01112842 | Decal, Eyewash Activation Graphic |
| P/N 01055006 | Stainless Steel 20 GPM Shower Head w/Trim Ring, for flush ceiling mount models | P/N 01113007 | Decal, Shower Activation Graphic |

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.

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.

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.

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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