



Installation, Operation and Maintenance Instructions

Mobile Emergency Safety Shower (2000L)

- **Heated**
MHW2000-1

Warranty Information

Hughes Safety Showers Ltd guarantees the products it manufactures or sells against defects in workmanship and material for a period of one (1) year from the date of shipment or date of invoice, whichever is later. The product must be used, maintained and installed according to the instructions and procedures provided, or this warranty is void. Any alteration or modification of the product will also void this warranty. Hughes Safety Showers obligation under this warranty is limited to repair or replacement of defective products. No other warranty or remedy shall be provided. This warranty specifically does not guarantee or cover payment or reimbursement of any damages or consequential damages other than repair or replacement of the product.

Any claim under this warranty must be made in writing within twelve (12) months of the date of shipment or the date of invoice, whichever is later. The owner must prepay shipping costs of all products returned to Hughes Safety Showers Ltd under this warranty. If it is determined that the product is defective in material and /or workmanship the repair or replacement will occur, at Hughes Safety Showers option, at no charge and return freight prepaid by Hughes Safety Showers. All other return of the product to the owner shall be at the owner's expense.

Proper use by the customer is necessary for the effectiveness of the product, as well as the safety of those using the same. The user is solely responsible to determine the suitability of any Hughes Safety Showers product for any intended use. The user assumes all risk and liability for use of any Hughes Safety Showers product. User specifically acknowledges receipt of proper instructions regarding the use of the product in the original packaging and disclaims any consequential damages to person or property, damages for loss of use, lost time, loss of profit, lost income, loss of the Hughes Safety Showers product itself and/or other incidental or consequential damages other than as warranted by this limited warranty. User accepts the responsibility of removing from service any product that becomes worn out, unusable, unfit for the intended use or defective in any way such as to make the product a potential safety hazard. Hughes Safety Showers is unable to undertake such obligations or responsibilities on behalf of the user as the user is in sole possession and control of the product.

General Considerations

When planning the installation of emergency safety showers and eye/face wash equipment, the advice of a qualified first aid representative or medical advisor should be sought to establish the most suitable location and procedures for first aid and decontamination.

Installation should be in accordance with local legislation and industry standards such as ANSI Z358.1-2014 recommendations. Visit www.hughes-safety.com/standards for more information.

Location & Accessibility

- Emergency safety showers and eye/face wash equipment must be installed within 66 feet, or 10 seconds reach of, and on the same level as, a potential hazard. Where strong acids or caustics are used, equipment must be immediately adjacent to the hazard and outside of any spray paths.
- Equipment must be in a prominent position, free from any obstructions and clearly visible.
- Adequate drainage should be available in the area around and underneath the safety shower or eye/face wash. Consideration should be given to the placement of equipment in the vicinity of the safety shower that are sensitive to water or diluted chemicals, notably electrical items.
- For equipment located indoors, wastewater must be contained for subsequent safe disposal or there must be adequate drainage. Procedures must be in place for cleaning residue water after safety shower use.
- Loose objects or gravel should not obstruct the operation of the shower where walk-on foot panels or foot treadles are fitted.

Visibility

- An ISO 3864.1 compliant safety sign should be displayed on or near the safety shower or eye wash. The sign should be well positioned so it is visible to all within the hazardous area.
- The area must always be well lit with the operating mechanism remaining clearly visible.

Installation and Commissioning

Assembly and mounting

The safety shower is supplied ready assembled.

Once in position, the stability should be tested to ensure it is safe and poses no danger to the user.

Prior to use

1. Secure the stabilizers in position to ensure stability.
2. Fill the unit with clean potable water.
3. Connect the power to the unit and leave for a minimum 6-8 hours to warm the water.
4. The immersion heater power is 110V 1Ph 60Hz. The supplied pump is 3/4hp 120V 60Hz.
5. Position unit in desired location.
6. Ensure brakes on the unit are applied.
7. Connect shower pipework to the operating valve on the unit.
8. Ensure shower valve is in upright position (closed).
9. Connect electricity supply and test unit to verify operation.

The shower rose or nozzle, and eye wash diffusers should be removed during initial flushing.

All pipework should be flushed prior to connection to clear the line of all installation debris.

The shower should be activated to ensure proper operation.

Care must be taken not to over-tighten the shower rose, nozzle or eye wash diffusers when replacing after flushing.

CAUTION: For units with electrical heating, it is essential that a water supply is established, and the equipment is checked before connection to an electrical supply.

Installation of eye and eye/face washes

If necessary, the flow rate of the eye/facewash diffusers be adjusted via the flow regulator knob on the side of the eyewash(See fig. 1)



Fig. 1

Electrical supply

Where an emergency safety shower, eye or eye/face wash unit requires an electrical supply, either for heating, cooling, alarms or lighting, then the supply should conform to the requirements as detailed in the job specific electrical drawings. Electrical equipment fitted to these units should be supplied through a safety protection device (MCB, RCD, RCCB for example) to provide additional protection against electric shock while also ensuring satisfactory protective bonding arrangements are in place.

Installation, commissioning and maintenance of any electrical equipment should be completed by a qualified electrician in compliance with all national and local codes. Before working on the units power must be turn off. A disconnect switch is recommended to safely interrupt power supply to the unit. Disconnect switches are in the customer scope of supply or available as an option from Hughes.

CAUTION: Safety showers for general purpose electrical areas cannot be used in hazardous areas, as per NFPA 70 and CSA 22.2. When making electrical connections be sure to follow all lockout-tag out safety procedures.

Electrical details

The electrical components of the shower are wired into junction boxes positioned as shown on the general arrangement drawing. Wiring diagrams are provided with each shower and placed inside each junction box.

Pump rating: 3/4HP 120VAC/7.4A 60hz
Immersion heater: 1.7kW, 120V/15.5A 60hz

Supplied with level switch and proximity switches. 2 plugs for power connection to pump and heater

Operation

Employees working within hazardous areas must be trained in the use and location of emergency safety showers or eye/face wash equipment. Instructions for all emergency equipment should be readily available and accessible to personnel.

Safety shower activation methods (where fitted):

- Push down lever

For optimum safety, the valves remain open when activated and must be shut off manually.

Eye and eye/face wash activation methods (where fitted):

- Pull lid down

Maintenance

Regular servicing and maintenance of emergency safety shower and eye/face wash equipment is essential to ensure correct functionality. All services and weekly activations must be recorded to ensure a full history is maintained as per European and International standard requirements.

Water should be changed regularly and emptied completely if storing.

Weekly activation

All equipment should be visually inspected and activated at least once a week to ensure it is operating properly, to clear the line of any sediment build up and check that the water runs clear.

Where fitted, the external test handle can be used for ease.

Please visit www.hughes-safety.com/weekly-activation to download the checklist and video detailing what to look out for to remain compliant.

Servicing and cleaning

Hughes recommend equipment be serviced and cleaned regularly, and at least every 6 months. To purchase spare parts call us on (1) 866-312-1652 or email customer.service@hughes-safety.com

Periodic analysis of the water quality is recommended to ensure there is no build-up of harmful bacteria.

Regular cleaning of the outside of the emergency equipment is recommended. Abrasives or solvents must not be used to clean the unit as this can damage the surface or affect the instruction stickers.

Safety showers:

- Remove the shower head/nozzle periodically to clean, disinfect and ensure any build-up of debris or bacteria is removed.

Eye and eye/face washes:

- Nozzles should be cleaned regularly; the frequency will depend on the ambient conditions of the installation.
- Diffusers can be unscrewed for cleaning.
- After any cleaning or maintenance work has been carried out on the equipment it is imperative that the eye and eye/face washes are given a full operational test and any flow regulator or volume control screws are re-adjusted to ensure optimum performance. It is recommended that eye wash diffusers are replaced every six months.

Electrical equipment:

- Thorough visual inspections should be carried out to check for external damage to the electrical units, their cables or the junction boxes. Should any part be found to be damaged, this must be reported and repaired or replaced as soon as possible. A further test should be carried out to establish that it functions as intended. Any additional electrical tests should be carried out at the discretion of a qualified electrician.

Out of Service Procedure

In the event of an emergency safety shower, eye bath or eye/face wash unit being temporarily out of service, a standard procedure should be followed.

- Place a sign on the unit indicating it is 'Out of Service'.
- Notify the relevant manager/supervisor of the area that the unit is out of service
- Prohibit or suspend any work where there is a significant hazard requiring use of the unit
- If work cannot be prohibited or suspended, a portable unit must be provided to supply the initial wash only, after which it will be necessary to move the person to a plumbed emergency safety shower, eyebath or eye/face wash unit to complete the procedure.

Note: Portable units are not acceptable as a long-term substitute for permanent locations.

A selection of our emergency safety showers are available to hire. Ensure your workforce are protected around the clock, visit www.hughes-safety.com/hire for more information.

If you require further assistance please contact us:

T: (1) 866-312-1652

E: customer.service@hughes-safety.com