

This step-by-step guide outlines how to install and maintain a Storemasta combination emergency shower and eyewash.

Before you install

- Refer to the Australian Standards to ensure you have adequate equipment for your chemical handling and storage area.
- Choose a location that is convenient and easily accessible.
- Make sure the equipment is within 2-10 metres (within 10 second reach) of the specific chemical hazard. It must also be on the same level as the hazard.
- Emergency decontamination equipment must be in a well-lit location, easily identifiable by a highly visible sign.
- The equipment must be positioned so that each component of the combination unit may be used simultaneously by the same user.

Plumbing and Water Pressure

- 1.** Plumbed equipment must be connected to a continuous source of flushing fluid supply. This may be drinking water, preserved water, preserved buffered saline solution or another medically acceptable solution (manufactured and labelled in accordance with applicable government regulations).
- 2.** Ensure that all plumbing is supplied to meet minimum flow requirements (see below for details).

To achieve AS/NZS 4775 2007 compliance

- Minimum working pressure: 210kPa (30psi) - caution if pressure exceeds 550kPa (80psi)
- Minimum flow: shower 75.5 lpm, eyewash 1.5 lpm, eye/face wash 11.4 lpm

Product performance 210kPa (30psi)

- Shower flow 76 lpm, eyewash flow 17 lpm, eye/facewash 26 lpm
- Wastewater outlet size 38.1mm
- Mounting base plate size 150 x 150mm with 4 bolts 11mm

Installation Checklist

In line with the requirements of **AS 4775:2007**, make sure the following practices are adhered to during the installation process:

1. Installation must be in accordance with proper plumbing practices. Supply piping shall be adequately sized to meet flow requirements.
2. Employees who may be exposed to hazardous materials shall be trained in the location and proper use of emergency equipment.
3. Emergency equipment shall be activated weekly to verify operation.
4. The combination unit must be inspected annually to ensure conformance with the requirements of AS4775.
5. Combination unit components must comply with the individual performance requirements of the shower, eye wash & eye/face wash while operating simultaneously.

Drench Hoses

1. Drench hoses are considered supplemental equipment to provide immediate flushing to support plumbed and self-contained equipment, but it must not replace them. Drench hoses shall be simple to operate and shall go from closed to fully open in one second or less. The valve must be corrosion resistant.

Shower

1. Showerhead must not be less than 2083mm and not more than 2438mm from the surface on which the user stands.
2. Shower must deliver a minimum of 75.7 l/min of flushing fluid at 210kPa, with the flushing fluid being substantially dispersed throughout the pattern which shall be of a minimum diameter of 508mm when measured at 1524mm above the surface on which the user stands.
3. The shower operating control valve shall remain open without the use of the operator's hands. The valve shall be simple to operate, capable of going from closed to fully open in one second or less — and not be located more than 1733mm from the surface on which the user stands. The valve must be corrosion resistant.

Eye / Face Wash

1. Eyewash equipment must deliver flushing fluid to both eyes simultaneously at a flow rate not less than 1.5 l/min at 210kPa. The flushing fluid streams should rise to approximately equal heights and should cover the areas between the interior and exterior lines of the test gauge, and when lowered not more than 38mm below the fluids peak.

2. Eye / face wash equipment must deliver flushing fluid to the eyes simultaneously at a flow rate not less than 11.4 l/min at 210kPa. The flushing fluid streams should rise to approximately equal heights and should cover the areas between the interior and exterior lines of the test gauge when lowered not more than 38mm below the fluids peak.
3. The flushing fluid nozzles of eye and eye/face wash units must be not less than 838mm and no greater than 1143mm from the surface on which the user stands — and 153mm from the wall or nearest obstruction.
4. The eye and eye/face wash operating control valve shall remain open without the use of the operator's hands. The valve must be simple to operate and go from closed to fully open in one second or less. The valve must be corrosion resistant.

General Installation Process

1. Using a trolley, retrieve the equipment from the delivery area (leaving the packaging on). Take the equipment to the installation location.
2. Carefully unwrap the emergency decontamination facility.
3. Place the combination unit in a spot that allows enough space for any additional plumbing fixtures. Bolt the base of Lower Shower Assembly to a level floor using 4 corrosion resistant anchors.
4. Apply sealing tape of Loctite 577 to threaded end of shower rose assembly. Screw it into the ball valve of the Upper Shower Assembly. Tighten to an aligned position so shower head is parallel to the floor.
5. Attach the pull arm to the Upper Ball Valve using the nut already on the ball valve. The valve arm should point up at 45 degrees when in the off position.
6. Connect the Upper Shower Assembly to the Lower Shower Assembly using the integral Stainless Steel Union. This part requires no tools.
7. Make sure the rubber O-ring is in place on the tapered section of the union. Tighten by hand. Make sure the arm of the shower is centred over the eye or eye/face wash.

Eye (Eye/Face) Wash Installation Process

1. Moving on with your installation, you can now attach the eye or eye/face wash push handle to the Activation Ball Valve. Use the spring washer and hexagonal nut already on the ball valve.
2. If you have a bowl included in the eye (eye/face) wash, place this bowl on the Waste Adaptor. Using the Washer and the Waste, screw in to the Waste Adaptor to secure the bowl. Turn as tight as you can with your fingers, then turn Waste and Bowl together using the outside edge of the bowl for extra leverage.

3. Remove the grub screw from the front of the Waste Adaptor. Push the eye (eye/face) wash assembly into the centre of the Waste Adaptor. Make sure the directional arrow is facing the front. Re-fit the grub screen then tighten it until it locates within the eye wash frame.
4. Connect water supply line to the 1" thread which is located on the Upper Shower Assembly. Use thread tape or Loctite 577 on all threads.
5. Connect the drain line, if applicable, for the Eye (Eye/Face) Wash Sink using the 1 1/2" OD outlet on the Lower Shower Assembly. There should be enough room for the addition of the drain trap, if required.

If your unit is foot-operated:

- Back off the 2 rear shower mounting bolts. Slide the bracket under the washers of the shower mounting bolts and retighten. Reattach foot pedal plate to bracket using the bolts provided. Don't over tighten.
 - Attach cable to push handle and set cable length. To set the length, turn the push handle to the full on position and lower the foot pedal to about 3mm from ground. Loosen the locking nut using the 4mm Allen key, pull excess cable through and re-tighten the nut. Return the push handle to the off position.
6. Make sure the shower and eye (eye/face) wash valves are closed before you turn on the water supply to the unit
 7. Push up the shower pull rod so the valve arm is pointing back up and pull forward the Eye (Eye/Face) wash "PUSH" handle back up to ensure the valves are in the closed position.
 8. Turn the water supply on and check for leaks before proceeding.
 9. To start the water flow, slowly push the eye (eye/face) wash valve handle forward. Flush until the water runs clean — then pull back on the push handle to stop flow. Replace aerator assemblies. Remove internal strainer by unscrewing the strainer cap with a flat head screwdriver. Clean strainer and re-fit.
 10. Push the eye (eye/face) wash valve handle forward again to start the water flow. Use a slotted screwdriver to turn off the second ball valve located before eye (eye/face) wash activation ball valve. Turn the push handle to the full open position and adjust the second ball valve with the screwdriver until the correct flow is achieved. The point of fluid stream interaction should be no more than 38mm above the position of user's eyes.
 11. To activate the shower, pull down on the triangular pull rod. A large amount of water will flow from the showerhead on to the floor. The spray pattern should be 508mm in diameter at a height of 1524mm from the floor. The shower should also deliver at a minimum flow rate of 75.7 lpm.

12. Once the correct operation has been checked, turn off the valves by positioning the handles to the fully off position.

IMPORTANT: Water will drain through the 2mm hole near the shower head/ball valve connection. This is a self-draining feature designed to drain water remaining in shower head to reduce Legionella risk. Be sure to place dust covers over eye (eye/face) wash outlets. Mount appropriate shower and eye (eye/face) wash signage as required.

Get in touch

Need some more advice on the installation or use of your combination shower and eyewash unit? It's easy to get in touch with our Storemasta team. Simply send your enquiries to sales@storemasta.com.au or give us a call on **1300 134 223**.

Further resources:

Click on the below links for more information about emergency decontamination equipment.

- [Deciding Where To Put Your Safety Shower and Eyewash Station](#)
- [Developing Operating Procedures For Your Safety Shower and Eyewash](#)
- [How To Keep Your Emergency Eyewash and Shower Equipment Compliant](#)

