

Pedestal Mounted Emergency Eye & Eye/ Face Wash

Installation and Maintenance Instructions

- EEE180 ENBE180
- EEE210 ENBE210
- EFE360 ENBE360
- EFE390 ENBE390



technical data

Inlet Connection	1/2" BSP male (DN 15mm)	
Water Supply Line Size	Supply piping shall be adequately sized to meet flow requirements	
Minimum Requirements to achieve ANSI Z358.1-2009 and AS/NZS 4775 2007 compliance	Min Working Pressure: 210 kPa (30 psi) Caution should be taken when pressure exceeds 550 kPa (80 psi)	
	Eye Wash Minimum Flow	1.5 lpm (0.4 US gpm)
	Eye/Face Wash Minimum Flow	11.4 lpm (3 US gpm)
Enware Performance	At Working Pressure: 210 kPa (30 psi)	
	Eye Wash Flow	17 lpm (4.5 US gpm)
	Eye/Face Wash Flow	26 lpm (6.9 US gpm)
Waste water outlet connection	G 1-1/4" BSP	
Mounting Base Plate Size	150 x 150 mm with 4 bolts 11 mm	
Approximate Shipping Weight	7 - 8 kg	
Shipping Dimensions	1150 x 290 x 200 mm	

installation compliance

Installation of emergency showers, eye and eye/face wash equipment shall be in accordance with AS/NZS4775-2007 or ANSI Standard Z358.1-2009 - whichever is applicable to the installation.

Supply Lines

Installation procedures shall be in accordance with proper plumbing practices. Supply piping shall be adequately sized to meet flow requirements. If shut off valves are installed for maintenance purposes, provisions shall be made to prevent unauthorised shut off.

Placement of Emergency Equipment

Emergency eyewash and shower equipment shall be available for immediate use. It shall take no longer than 10 seconds for an individual to reach the nearest facility. Factors that influence the location of emergency facilities include workplace lighting, obstructions to the path of travel and the work environment.

It should be noted that some situations may warrant the placement of equipment significantly closer to the hazard. In these situations, such as exposure to highly corrosive chemicals, the proper distances should be selected based on the advice from appropriate consultants. For situations such as exposure to strong acids or alkalis, due consideration needs to be given to possible reaction between the flushing fluid and the chemical if the flushing fluid enters a bulk container of the chemical.

Flushing Fluid Temperature

Continuous and timely irrigation of affected tissues for the recommended irrigation period are the principal factors in providing first aid treatment. Providing flushing fluid at temperatures conducive to use for the recommended irrigation period is considered an integral part of providing suitable facilities. Medical recommendations suggest a flushing fluid at tepid temperature be delivered to affected chemically-injured tissue. Temperatures in excess of 38°C have proven to be harmful to the eyes and can enhance chemical interaction with the eyes and skin. During design and installation, the effects of exposure of pipe to sun, radiant heat or other heat sources should be considered, and suitable control measures should be introduced to avoid any risk of scalding.

While cold flushing fluid temperature provide immediate cooling after chemical contact, prolonged exposure to cold fluids affects the ability to maintain adequate body temperature and can result in the premature cessation of first aid treatment.

Before emergency eyewash and shower equipment is selected, a risk assessment shall be carried out to determine the most appropriate delivery temperature for the application. Means to ensure a constantly suitable delivery temperature shall also be identified during selection, so that equipment can perform as desired once installed.

This product must be installed and commissioned by a qualified plumber.

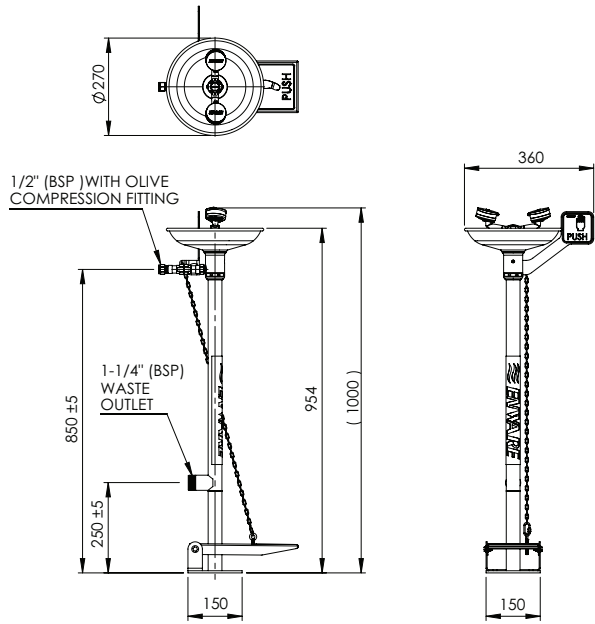
For use with potable water only.

NOTE: Enware Australia advises:

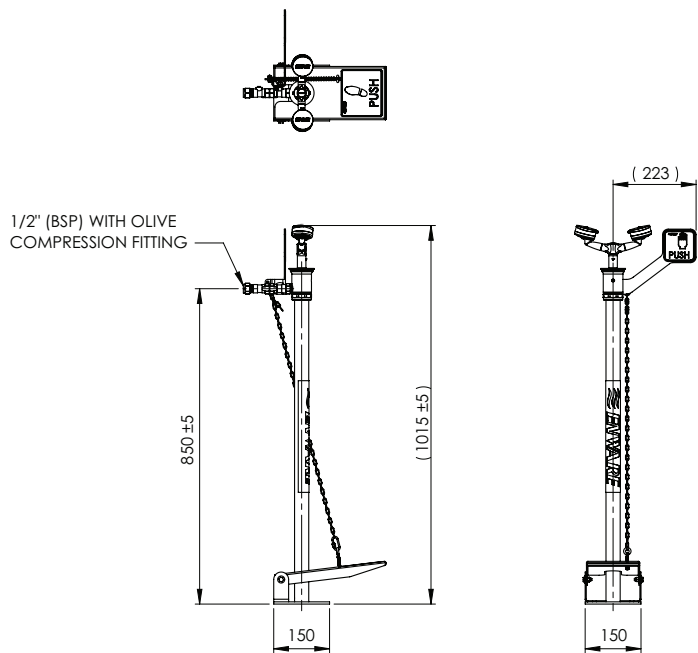
1. Due to ongoing Research and Development, specifications may change without notice.
2. Component specifications may change on some export models.

dimensions

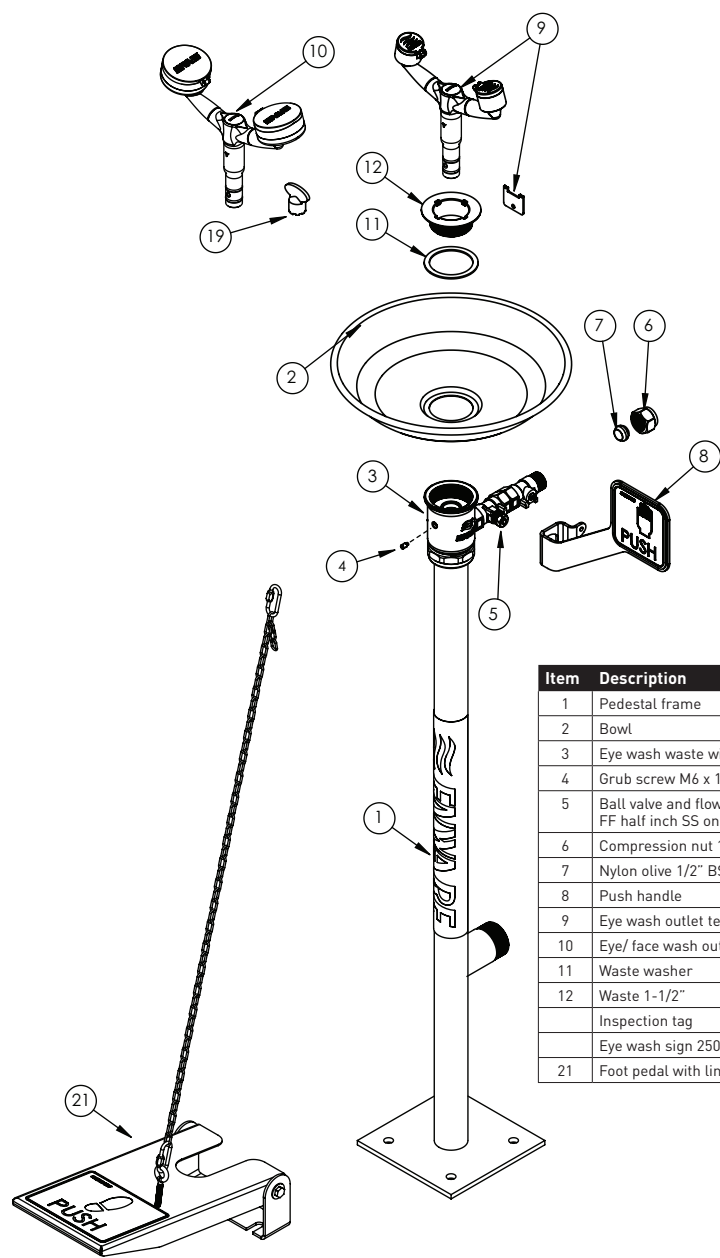
EFE390



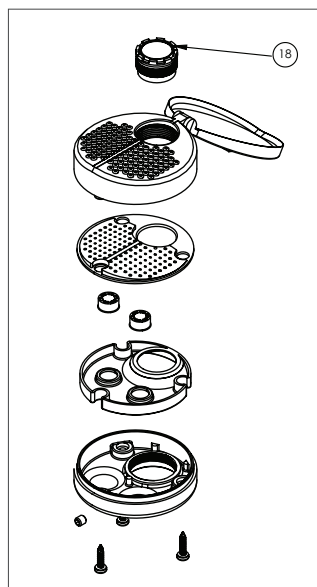
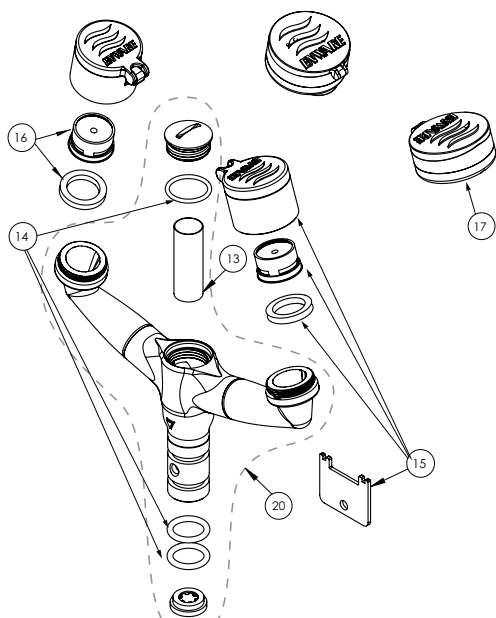
ENBE390



components



Item	Description	
1	Pedestal frame	
2	Bowl	ESPE008
3	Eye wash waste with inlet control valve	ESPE818
4	Grub screw M6 x 12mm waste tee	ESPE814
5	Ball valve and flow control assembly FF half inch SS one piece	ESP005
6	Compression nut 1/2"	
7	Nylon olive 1/2" BSP	
8	Push handle	ESPE010
9	Eye wash outlet tee piece assembly	
10	Eye/ face wash outlet tee piece assembly	
11	Waste washer	
12	Waste 1-1/2"	
	Inspection tag	ESS521
	Eye wash sign 250mm x 250mm vinyl	ESS509
21	Foot pedal with link chain	ESPE001



Item	Description	
13	Mesh Filter 1/2" (40 Mesh)	ESPE811
14	O-rings for Eye & Eye/Face Wash Tee Piece (2x Spigot O-rings, 1x Strainer Cap O-ring)	ESPE812
15	Eye Wash Dustcover With Aerator (1 Pair) and key	ESPE016
16	Aerator and Washer to Suit Eye Wash (1 each)	ESPE015
17	Eye/Face Wash Outlet (each)	ESPE012
18	Aerator to Suit Eye/Face Wash	ESPE013
19	Aerator Key to Suit Eye/Face Wash Only	ESPE014
20	Eye wash & eye/ face wash frame only incl. grub screw, mesh filter, O-rings	ESPE815

installation

1. Place the unit so there is enough space for any additional plumbing fixtures being used.
Bolt the base of pedestal frame to a level floor, using 4 corrosion resistant anchors (refer to AS/NZS 2982.1, ANSI Z358.1-2009 and AS/NZS 4775-2007).

Base Plate is 150mm square with mounting holes at 100mm centres. **SEE IMAGE 1**

2. Attach the Eye (Eye/Face) wash push handle to the Activation Ball Valve using the spring washer and hexagonal nut already on the ball valve. **SEE IMAGE 2**
3. If a bowl is to be included with the Eye (Eye/Face) wash, place the Bowl on top of the Waste Adaptor. Using the Washer and the Waste – screw the waste into the Waste Adaptor to secure the bowl. Turn as tight as you can with fingers, then turn Waste and Bowl together using the outside edge of the bowl for extra leverage. **SEE IMAGE 3**
4. Take off the plastic cover cap off the eye (eye/face) wash assembly to expose the two pre-greased O-rings.
5. 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 making sure the directional arrow is facing the front. Ensure it is pushed all the way in so it bottoms out.

Now fit the grub screw from the front of the waste adaptor and screw in until it locates within the locating hole of the eye (eye/face) wash assembly. Tighten grub screw using a 3mm Allen key. **SEE IMAGE 4**

6. Connect water supply to the 1/2" BSP inlet thread of control valve. (Minimum size: DN15 / 1/2" copper pipe - do not use 1/2" flexible hose.) Ensure that the line is flushed to eliminate any debris before connecting.
7. Connect drain line (if applicable) to the 1-1/4" BSP outlet located on the rear of pedestal frame.

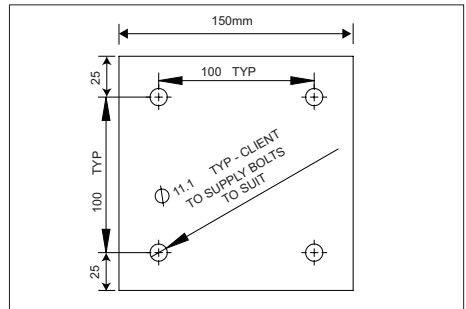


IMAGE 1

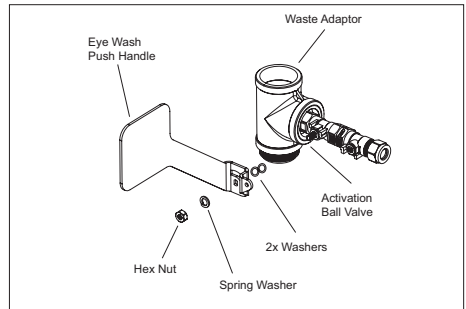


IMAGE 2

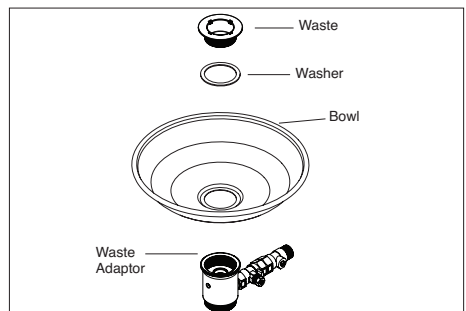


IMAGE 3

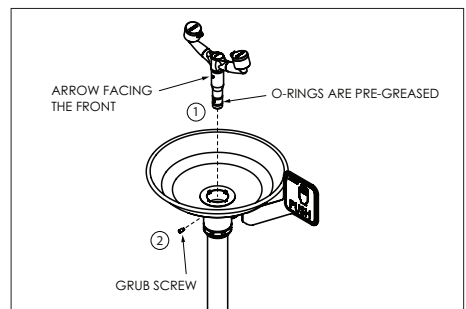


IMAGE 4

8. (For Foot-Operated Models Only)

Remove the two bolts of the foot pedal at the hinge and dismantle foot pedal assembly. Keep the bolts and nuts at hand.

Loosen the two rear mounting bolts on the base of pedestal frame. Slide the foot pedal bracket under the washers of the two mounting bolts, and re-tighten. Re-attach foot pedal plate to bracket using the two bolts. Do not over tighten. **SEE IMAGE 5 & 6**

Attach link chain to push handle and if required, adjust the length of link chain. To do this, turn the push handle to the fully ON position, and lower the foot pedal to approximately 3mm from the floor. Loosen the carabiner at top, re-position the link chain to suit the height, and lock the carabiner. Return push handle to the off position. **SEE IMAGE 7**

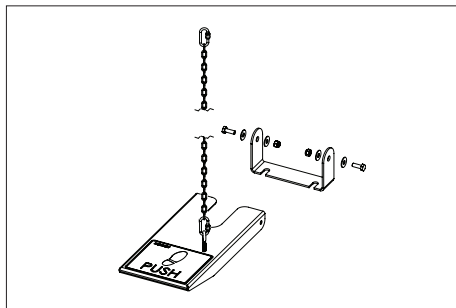


IMAGE 5

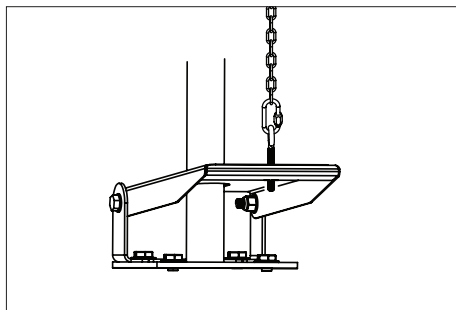


IMAGE 6

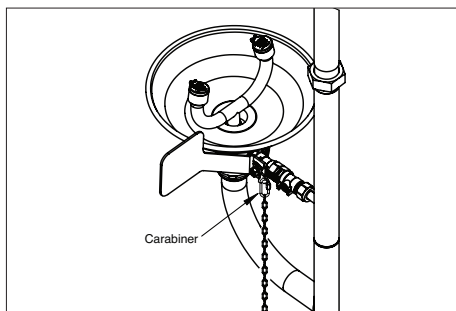
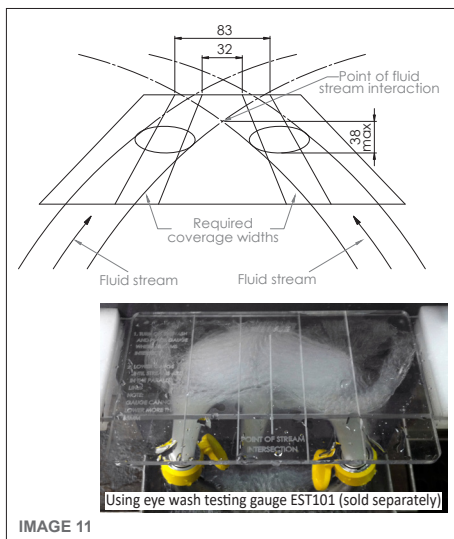
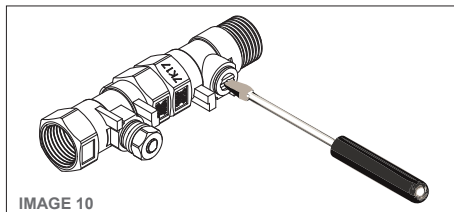
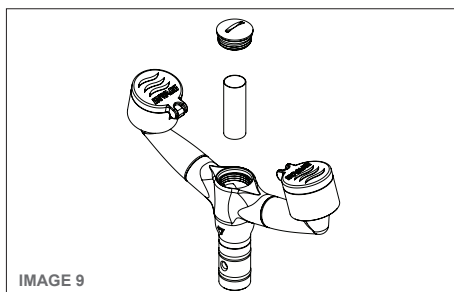
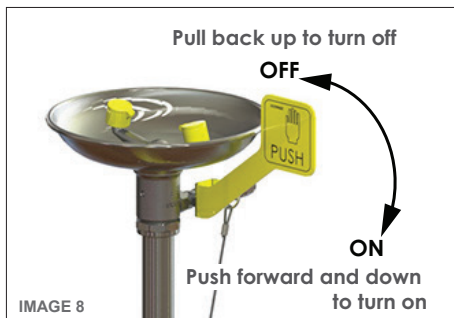


IMAGE 7

testing & commissioning / operation / maintenance

TESTING & COMMISSIONING

1. Before turning on the water supply to the unit make sure eye wash valve is closed. Pull forward the eye wash "PUSH" handle back up to ensure the valve is in the closed position. **SEE IMAGE 8**
2. Turn water supply on. Check for leaks before proceeding.
3. Slowly push the "PUSH" handle forward to start the water flow. Flush until the water runs clean then pull back on the handle to stop flow. **SEE IMAGE 8**
4. Remove internal strainer by unscrewing the strainer cap with a flat head screw driver. Clean the strainer and fit the strainer back. **SEE IMAGE 9**
5. Use a flat screwdriver to turn off the Ball Valve before eye wash activation ball valve. Turn the push handle to the full open position and adjust the second ball valve with screwdriver until the correct flow is achieved. **SEE IMAGE 10 & 11**
6. Once correct operation has been checked, turn off the valve by positioning the handle back up to the fully OFF position. **SEE IMAGE 8**
7. Place dust covers over eye wash or eye/face wash outlets.
8. Mount appropriate Eye Wash (Eye/Face Wash) signage as required. (Enware part code ESS509)



EYE, EYE/FACE WASH OPERATION

The Eye/Face wash is activated by pushing forward (away from the user) the flat “PUSH” handle. This opens the 1/2" ball valve allowing water to flow to the Eye, Eye/Face wash outlets. To close the valve and stop flow, gently pull the handle back up (towards the user). **SEE IMAGE 12**

FOOT PEDAL OPERATION

(EEE210, EFE390, ENBE390, ENBE210)

The Eye, Eye/Face wash can be activated by pushing down the foot pedal where marked. This opens the 1/2" ball valve allowing water to flow to the Eye, Eye/Face wash outlets.

To close the valve and stop flow, gently pull the handle back (towards the user). Releasing the foot pedal will not stop the flow. **SEE IMAGE 12**

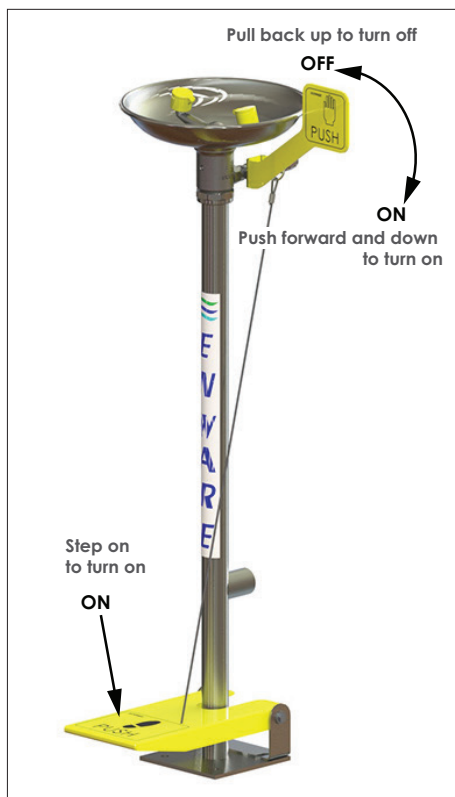


IMAGE 12

MAINTENANCE

The unit should be activated every week for a period long enough to verify operation and ensure the flushing fluid is available.

Note: the intent is to ensure that there is a flushing fluid supply at the head of the device and to clear the supply line of any sediment build up that could prevent fluid from being delivered to the head of the device and to minimise microbial contamination due to sitting water.

Internal eye/face wash strainer should also be removed and cleaned during this process or when required. **SEE IMAGE 13**

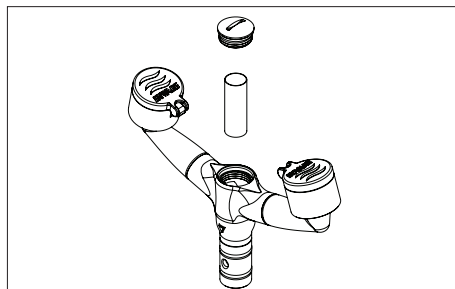


IMAGE 13

Eye wash and eye/face wash units shall be inspected annually to assure conformance with ANSI Z358.1-2009 or AS/NZS 4775-2007, whichever is applicable to the installation.

AS4775–2007 Safety Equipment Minimum Performance Checklist

- ☐ Installation shall be in accordance with proper plumbing practices. Supply piping shall be adequately sized to meet flow requirements. (Sec D1)
- ☐ All plumbed emergency equipment shall be connected to a continuous source of flushing fluid supply which may be drinking water, preserved water, preserved buffered saline solution or other medically acceptable solution manufactured acceptable solution manufactured and labelled in accordance with applicable government regulations. (Sec 4.4, 4.10, 6.7 (c)), 7.5 (b), 8.5 (b), 9.5 (b), 11.3.3 (c))
- ☐ All equipment shall be constructed of corrosion-resistant materials (Sec 4.2, 5.1) Note: The Plumbing Code of Australia does not allow the use of galvanised pipes or fittings on drinking water supply lines. AS/NZS3500.1 Sec 2.4.2(c)
- ☐ Safety equipment shall be accessible within 10 seconds of hazard. (Sec 6.6, 7.4, 8.4, 9.4)
- ☐ Safety equipment shall be located on the same level as the hazard and the path of travel shall be free of obstructions. (Sec 6.6, 7.4, 8.4, 9.4)
- ☐ Emergency equipment location shall be well illuminated and be identified by a highly visible sign complying with AS1319 visible throughout the area served by the equipment. (Sec 6.6, 7.4, 8.4, 9.4)
- ☐ Employees who may be exposed to hazardous materials shall be trained in the location and proper use of emergency equipment. (6.8, 7.6, 8.6, 9.6).
- ☐ Emergency equipment shall be activated weekly to verify operation (6.8, 7.6, 8.6, 9.6)
- ☐ Emergency equipment shall be inspected annually to ensure conformance with the requirements of AS4775. (Sec 6.8, 7.6, 8.6, 9.6)
- ☐ Drench hoses are considered supplemental equipment to provide immediate flushing to support plumbed and self-contained equipment but shall not replace them. (Sec 11.1)
- ☐ Drench hoses shall be simple to operate and shall go from closed to fully open in one second or less. The valve shall be corrosion resistant. (Sec 11.3.2)
- ☐ Eye wash equipment shall 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 when lowered not more than 38mm below the fluids peak. (Sec 7.1, 9.1 (c), 7.3.1)
- ☐ Eye / face wash equipment shall 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. (Sec 8.1, 8.3, 9.1 (d))



- ☐ The flushing fluid nozzles of eye and eye/face wash units shall 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. (Sec 7.4, 8.4, 9.1 (c), 9.1 (d))
- ☐ The eye and eye/face wash operating control valve shall remain open without the use of the operator's hands. The valve shall be simple to operate and go from closed to fully open in one second or less. The valve shall be corrosion resistant. (Sec 7.2, 8.2, 9.1 (c), 9.1 (d))

ANSI Z358.1-2009 Safety Equipment Minimum Performance Checklist

**RECOMMENDED TESTING FLOW PRESSURE IS 30 psi
(+5 psi -0 psi)**

- ☐ Safety equipment shall be accessible within 10 seconds of hazard. (Sec 4.5.2, 5.4.2, 6.4.2, 7.4.2)
- ☐ Safety equipment shall be located on the same level as the hazard and the path of travel shall be free of obstructions. (Sec 4.5.2, 5.4.2, 6.4.2, 7.4.2)
- ☐ All employees subject to exposure to hazardous material should be instructed in the location and proper use of emergency equipment. (Sec 4.6.4, 5.5.4, 6.5.4, 7.5.4)
- ☐ Emergency equipment shall be activated weekly. (Sec 4.6.2, 5.5.2, 6.5.2, 7.5.2) All shower units shall be inspected annually to assure conformance with ANSI Z358.1. (Sec 4.6.5, 5.5.5, 6.5.5, 7.5.5)
- ☐ Combination unit components shall be capable of operating simultaneously and shall be positioned so that components may be used simultaneously by the same user. (Sec 7.3, 7.4.4)
- ☐ All plumbed emergency equipment shall be connected to a continuous source of flushing fluid supply which may be drinking water, preserved water, preserved buffered saline solution or other medically acceptable solution manufactured acceptable solution manufactured and labelled in accordance with applicable government regulations. (Sec 4.4, 4.10, 6.7 (c)), 7.5 (b), 8.5 (b), 9.5 (b), 11.3.3 (c))
- ☐ Drench hose must deliver a controlled flow of flushing fluid at a velocity low enough to be non-injurious. (Sec. 8.2.1)
- ☐ A drench hose can only be considered an eyewash – eye/face wash if it meets performance requirements in Sec 5 and/or 6.
- ☐ Delivery of tepid flushing fluid.* (Sec 4.5.6, 5.4.6, 6.4.6, 7.4.5). *Suggested temperature range – above 60°F (16°C) and below 100°F (38°C)
- ☐ Valve shall be designed so that the flushing flow remains on without the use of the operator's hands. The valve shall be simple to operate and go from "off" to "on" in one second or less and actuator can not be more than 69 inches (173.3cm) from surface floor of user. (Sec 4.2.7.1)
- ☐ Emergency equipment location shall be well lit and identified with a highly visible sign. (Sec 4.5.3, 5.4.3, 6.4.3, 7.4.3)
- ☐ Must provide a means of controlled flow to both eyes simultaneously at a velocity low enough to be non-injurious. (Sec 5.1.1, 6.1.1, 7.1)
- ☐ Eye/face wash equipment must deliver minimum of 3 gallons (11.4L) per minute of water for 15 minutes. (Sec 6.1.6, 7.1) Eyewash only must deliver minimum of 0.4 gallon (1.5L) per minute for 15 minutes. (Sec 5.1.6, 7.1)
- ☐ The flushing fluid of an eyewash – eye/face wash shall cover the areas between the interior and exterior lines of a gauge at some point less than 8 inches (20.3cm) above the eyewash nozzle. (Sec 5.1.8, 6.1.8, 7.1)



- ☐ Outlets shall be protected from airborne contaminants. (Sec 5.1.3, 6.1.3, 7.1)
- ☐ Flushing fluid nozzles should be 33 to 45 inches (83.8cm – 114.3cm) from floor and minimum of 6 inches (15.3cm) from wall. (Sec 5.4.4, 6.4.4, 7.1)
- ☐ Valve shall be designed so that the flushing flow remains on without the use of the operator's hands. The valve shall be simple to operate and go from "off" to "on" in one second or less. (Sec 5.2, 6.2, 7.2)

product warranty statement - WATTS AUSTRALIA

EFFECTIVE FROM 20 November 2023

This Warranty Statement applies to products supplied by Australian Valve Group Pty Ltd (ACN 068 227 270) (**AVG**) or Enware Pty Ltd (ACN 662 302 767) (**Enware**) (each of AVG and Enware, a Supplier) and installed within Australia.

Subject to the terms and conditions outlined in this Warranty Statement, each Supplier warrants to its customers that a product supplied by it (**Product**) will be free from all defects in material and workmanship under normal usage for the applicable Warranty Period (as set out in the Warranty Table below). The Warranty Period commences from the date of delivery of the relevant Product.

1. Conditions

The warranty provided under this Warranty Statement will not apply in respect of a Product (or any Product defect, fault or resulting damage) if:

- (a) the Product is not installed and maintained in accordance with the requirements of the applicable laws, standards and codes (including, without limitation to, the National Construction Code Volume Three – Plumbing Code of Australia, associated reference standards as applicable at the time and AS/NZS 3500);
- (b) the Product is not installed and maintained by a qualified technician in accordance with the relevant installation and operation manual and instructions; and
- (c) any Product defect, faulty or resulting damage arises from:
 - (i) failure by you or any other person to follow the relevant manual or instructions (relating to the handling, storage, installation, fitting, connection, adjustment, maintenance or repair of the Product) published or provided by the Supplier;
 - (ii) failure by you or any other person responsible for the fitting, installation, or other work on the Product to follow or conform to applicable laws, standards and codes (including, without limitation to, the AS/NZ 3500 set of Standards, all applicable State and Territory Plumbing Codes, the Plumbing Code of Australia and directions and requirements of local and other statutory authorities);
 - (iii) any parts or components not manufactured by the Supplier (or otherwise not authorised by the Supplier) are installed or combined with the Product, without the prior authorisation of the Supplier; or
 - (iv) any act or circumstance beyond our control including, without limitation to, accident, abnormal use, vandalism, fouling caused by foreign material, damage from adverse water conditions, chemical, acts of God, damage to buildings, other structures and infrastructure and loss or damage during transit or transportation of the Product, or any abuse, misuse, misapplication, improper installation or connection, or improper maintenance or alteration of the Product.

2. Make a claim

To make a claim under this Warranty Statement, you must notify the relevant Supplier in writing within 7 days of any alleged defect in the Product coming to your attention and provide the Supplier with proof of your purchase of the Product to the relevant Supplier:

- (a) If the Product is supplied by **AVG**, please contact AVG by telephone at 1800 284 287, or by email via its online portal <https://www.wattsau.com.au/support>.
- (b) If the Product is supplied by **Enware**, please complete the Product Service Request form (ENF091), which is available on request from our office (see contact details below), or online via <https://www.enware.com.au/warranty-service-form/>. All notifications and accompanying forms must be sent to Enware marked for the attention of Enware, 9 Endeavour Road, Caringbah NSW 2229. Enware can also be contacted by telephone (1300 369 273) or by email (info@enware.com.au).

On receipt of a notification from you of a claim under this Warranty Statement, the relevant Supplier may contact you requesting you provide reasonably additional evidence, information or details about your claim, or requiring that the relevant Product should be returned to the Supplier (in accordance with the Supplier's instructions) for inspection and testing.

Your failure to comply with any such request within a reasonable amount of time may result in your claim under this Warranty Statement being rejected.

3. Our responsibilities

(a) In the event that the Supplier is reasonably satisfied that there is a defect in the relevant Product within the applicable Warranty Period, the Supplier will, at its option, replace the Product, supply an equivalent product or repair the Product, free of charge. Your costs in making a warranty claim under this Warranty Statement, including any costs in relation to freight, collection, delivery and installation, are to be borne and paid by you. However, if in respect of a Product, it is indicated in the Warranty Table that labour support will be provided, and the Supplier is reasonably satisfied that a defect in the Product takes place during the period that labour support will be provided as indicated in the Warranty Table, the Supplier will bear the costs for delivery, repair and installation of the replacement Product (as applicable).

(b) TO THE EXTENT PERMITTED BY LAW AND SUBJECT TO PARAGRAPH 4 BELOW AND THE OPERATION OF THE AUSTRALIAN CONSUMER LAW:

- (i) THE WARRANTY SET OUT IN THIS WARRANTY STATEMENT IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE SUPPLIER WITH RESPECT TO THE RELEVANT PRODUCT;
- (ii) THE SUPPLIER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED;
- (iii) THE SUPPLIER HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE; AND
- (iv) THE REMEDY DESCRIBED IN THIS WARRANTY STATEMENT SHALL CONSTITUTE THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY, AND THE SUPPLIER SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS OR THE COST OF REPAIRING OR REPLACING OTHER PROPERTY WHICH IS DAMAGED IF THE PRODUCT DOES NOT WORK PROPERLY.

4. Australian Consumer Law

This paragraph 4 applies if you are a 'Consumer' (as defined in section 3 of the Australian Consumer Law (**ACL**)) and the Product or services supplied to you falls within the goods or services which, for the purposes of the ACL, are of a kind ordinarily acquired for personal, domestic or household use or consumption.

The Products and services provided by the Supplier come with guarantees that cannot be excluded under the ACL, and noting in this Warranty Statement should be interpreted as attempting to exclude, restrict or modify such guarantees or your rights under the ACL. For major failures with any services, you are entitled:

- (c) to cancel your service contract with us; and
- (d) to a refund for the unused portion, or to compensation for its reduced value.

You are also entitled to choose a refund or replacement for major failures with Products. If a failure with the Product or a service does not amount to a major failure, you are entitled to have the failure rectified in a reasonable time. If this is not done you are entitled to a refund for the Products and to cancel the contract for the service and obtain a refund of any unused portion. You are also entitled to be compensated for any other reasonably foreseeable loss or damage from a failure in the Products or service*.

5. Warranty table

*the applicable period commences on the date of delivery of the Product.

PRODUCT GROUP	PRODUCT SERIES CODES	WARRANTY PERIOD (YEARS)*	LABOUR SUPPORT (YEARS)*
Safety	ECE, EEE, ENB, EFE, EL, ENBE, EM, SELF CONTAINED AND GRAVITY FED	2	1