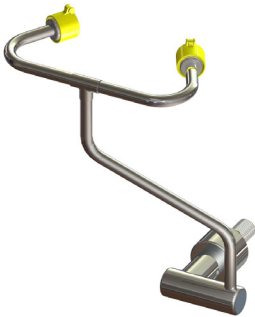


# Enware Pull Down Eye Wash - Wall Mounted

## Installation and Maintenance Instructions

EL487

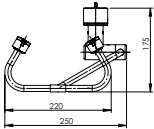
EL487ARM



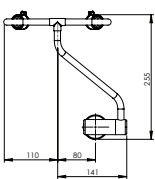
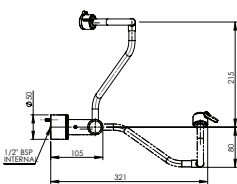
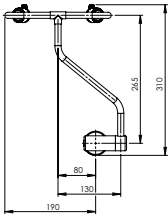
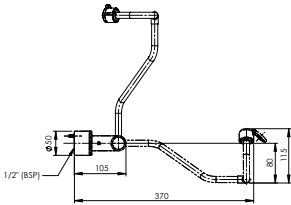
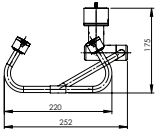
### technical data

Inlet Connection	1/2" BSP (DN15)
Working Pressure Range	Min 50 kPa Max 500 kPa
Maximum Static Pressure	1000 kPa
Recommended Working Pressure	210 kPa
Suggested Flushing Water Temperature	Tepid 16°C min - 38°C max

EL487



EL487ARM



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# installation compliance

Before proceeding with installation ensure all operating and dimensional specifications are suitable for the intended installation.

Installation of emergency showers, eye and eye/face wash equipment shall be in accordance with AS/NZS4775 or ANSI Standard Z358.1 - whichever is applicable to the installation. To meet ANSI Z358.1 and AS4775, eye wash outlets need to be between 838mm to 1143mm from the surface where the user stands.

For use with potable water only.

## Supply Lines

Installation procedures shall be in accordance with correct 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.

Ensure all supply lines are flushed thoroughly to remove debris prior to the installation of this product. Strainers (40 mesh) are recommended if debris is an ongoing problem.

## Supply Pressure

A Pressure reduction valve may be required to comply with recommended maximum supply pressure.

## Flushing Fluid Temperature

Flushing Fluid Temperature: Tepid.

Suggested temp range 16°C min – 38°C max.

Refer to AS4775 and ANSI Z358.1 for installation guidelines of Plumbed Eyewash Equipment.

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.

# installation

## DETERMINE EYE WASH LOCATION

1. Position eyewash unit so that it is clear of any obstructions that can prevent its operation - i.e. place the unit where desired on bench and move the eye wash to "open" position, ensuring that the arm does not hit any obstruction and that the user can reach the unit easily.

The unit must be positioned at a height where the flushing aerators are not less than 838mm and no greater than 1143mm from the surface on which the user stands, when in the open position. **SEE IMAGE 01**

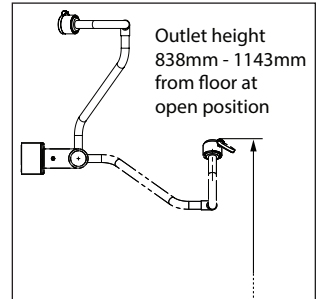


IMAGE 01

## INSTALLATION

2. Prepare 1/2" BSP male thread inlet point on wall. Allow for 14mm of thread protruding from finished wall. **SEE IMAGE 02**
3. To disassemble the mounting insert from eyewash frame, first use a 2.5mm Allen key to take out two grub screws from the sides of eyewash frame. Loosely fit a 1/2" BSP threaded fitting onto the female thread of mounting insert, and pull out the mounting insert from the eyewash frame.
4. Loosely screw mounting insert onto the thread on wall, all the way until the mounting insert is tight against the finished wall. Back off the mounting insert and position it so that the grub screw dimples are facing straight - horizontal and vertical. **SEE IMAGE 03-2** At this position, mark the drill hole for the anti-rotation screw, and remove mounting insert from thread. **SEE IMAGE 03**

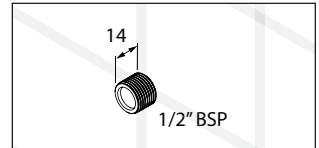


IMAGE 02

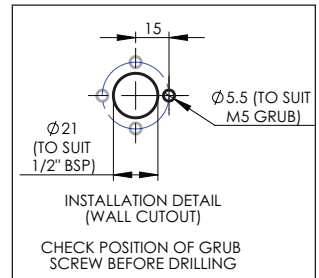


IMAGE 03

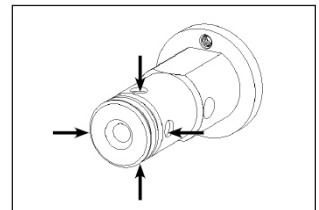


IMAGE 03-2

5. Drill a 5.5mm hole for the locking grub screw in the marked position.
6. Apply thread sealant to thread on wall. Screw mounting insert onto the thread and use a spanner on the flats of the mounting insert to tighten into position. **SEE IMAGE 04**
7. Fit locking grub screw and secure the mounting insert into position.
8. Fit Dress Flange over mounting insert. The hole in the flange should align with the ball valve. **SEE IMAGE 05**
9. Fit the eye wash frame onto mounting insert, and fix the eye wash frame into position using the two cone tipped grub screws supplied, making sure each grub screw engages onto a dimple on the mounting insert. **SEE IMAGE 05**

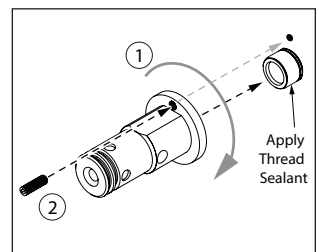


IMAGE 04

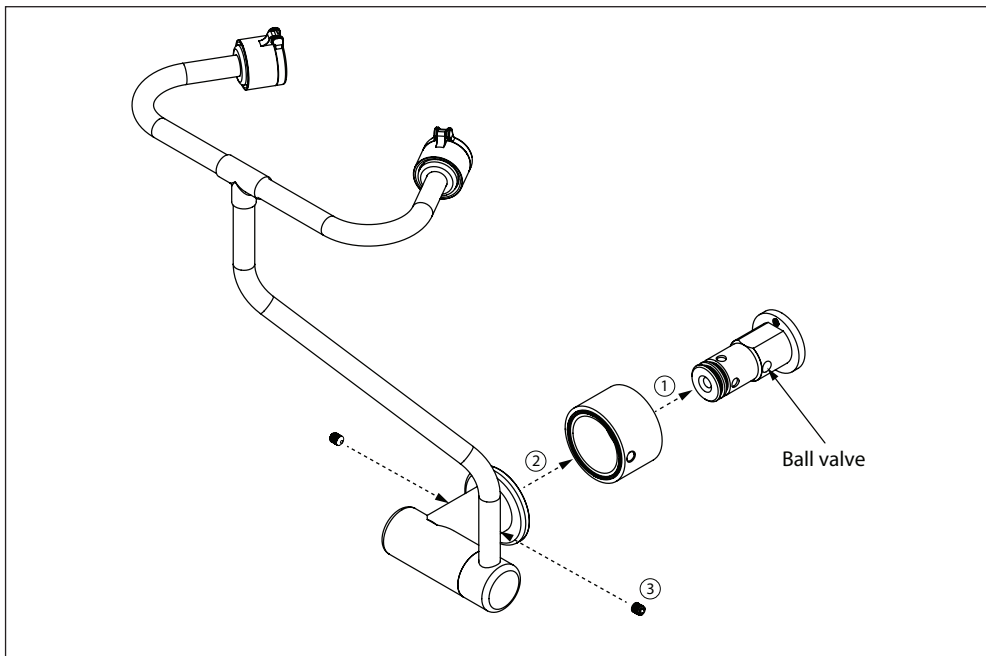


IMAGE 05

## COMMISSIONING

1. Turn on water supply to eye wash.
2. Turn ball valve to fully on position and check for any leaks on all connections and joints.
3. Pull down the eyewash arm and test water flow.  
While eyewash is on, use the ball valve to adjust the flow of the water to achieve the correct flow pattern as according to the requirements of AS4775. **SEE IMAGE 06**
4. Once correct operation has been checked, turn off the valve by raising the eyewash frame back up to the fully OFF position.
5. Flip the dust covers over eyewash outlets.
6. Mount appropriate Eye Wash signage as required. (Enware part code ESS509)

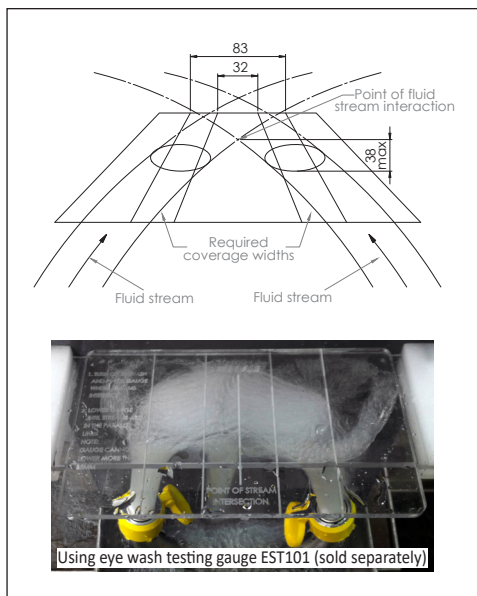


IMAGE 06

## operating instructions

Instructions for all emergency equipment should be readily accessible to maintenance and training personnel.

1. To turn ON, pull eyewash frame towards the user and down. **SEE IMAGE 07**

Water starts to flow.

2. To turn OFF, gently lift up the eyewash frame and push away from the user.  
**SEE IMAGE 08**
3. Flip the dust cover back on after use.

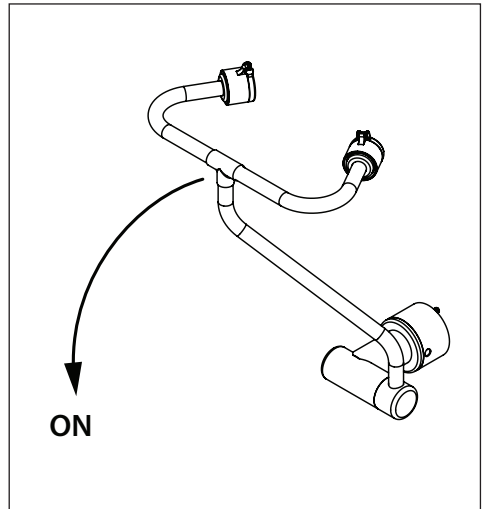


IMAGE 07

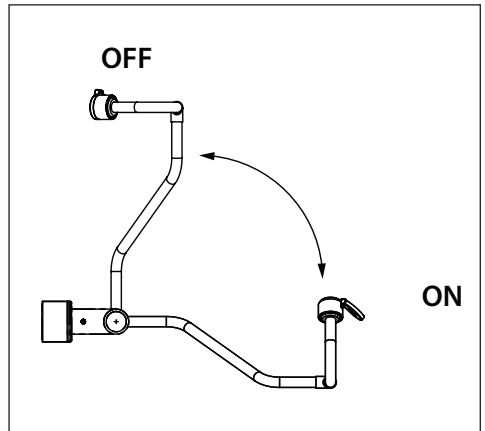


IMAGE 08

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## **maintenance**

The eyewash needs to be activated weekly for a period long enough to verify operation and ensure the flushing fluid is available (AS4775 & ANSI Z358.1).

Note: the intent is to ensure that there is a flushing fluid supply at the head of the device, 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 minimize microbial contamination due to sitting water. Eyewash and outlets should also be checked for damage or wear.

All eyewash units shall be inspected annually to assure conformance with AS4775 & ANSI Z358.1. The equipment should be inspected and tested annually to ensure correct operation. Aerator outlet should be dismantled with aerator key, checked for any debris, and cleaned or replaced. All connections and joints should be checked for leaks.

### **CLEANING**

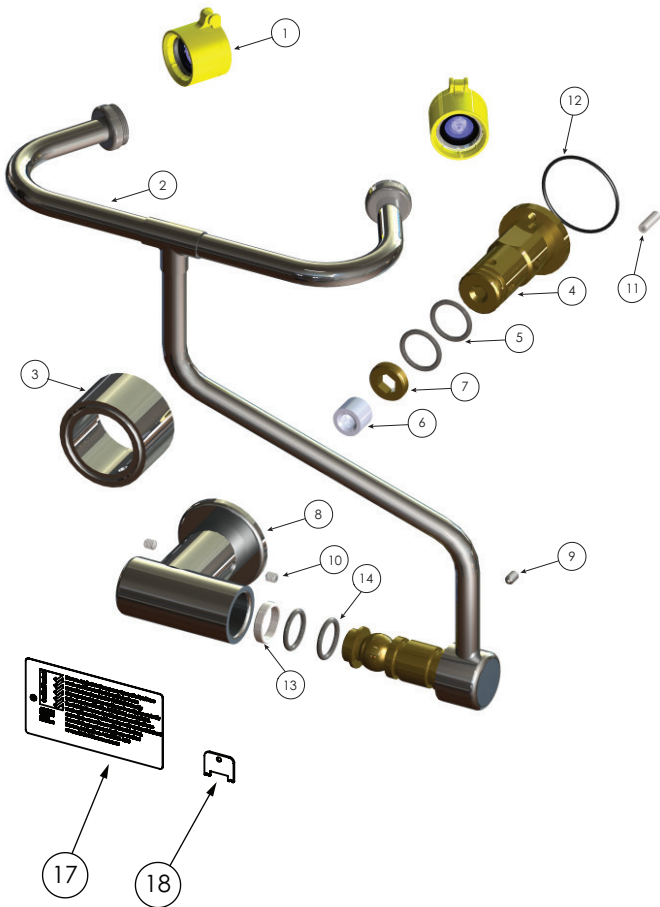
Enware Product should be cleaned with a soft damp cloth using only mild liquid detergent or soap and water. Do not use cleaning agents containing a corrosive acid, scouring agent or solvent chemicals. Do not use cream cleaners, as they are abrasive. Epoxy coated surfaces should only be cleaned with a cloth and clear water or mild detergent. Use of unsuitable cleaning agents may damage the surface. Any damage caused in this way will not be covered by warranty.

If re-greasing spindles always use a silicon based potable water approved lubricant such as Hydroseal 'O' Ring Lubricant or Molykote 111 silicone based grease.

# troubleshooting

PROBLEM	CAUSE	RECTIFICATION
Water runs constantly, drips or leaks from outlet	Spline seat not adjusted properly	Turn off isolation valve, remove eyewash body and re-tension hex nut to spline seat located inside frame
	Debris fouling spline seat	Same as above, but remove spline seat and clean before reassembly Note: Spline seat can be removed with M10 x 1.5 bolt
	Pressure is too high	Reduce water supply pressure to meet specification
No flow or low flow from outlet	Water supply/ ball valve turned off	Turn water on / turn on ball valve
	Rubbish/ debris fouling outlet	Remove blockage in line
Water discharge from between main bodies or below flange	O-rings worn	Replace O-rings and re-grease spindle
Eyewash stream too low or too high	Water supply conditions have changed or fluctuated	Re-adjust eyewash flow pattern by adjusting ball valve. A pressure control valve maybe required

# components



- 1 Aerator outlets & eyewash Cover (13Lpm)
- 2 Eyewash frame
- 3 Dress flange
- 4 Mounting insert with ball valve
- 5 O-ring BS116
- 6 Ball spline seat
- 7 Locknut
- 8 Eyewash mounting
- 9 Grub screw - rolling tip
- 10 Grub screw - cone tipped M5
- 11 Locking screw - grub M5x16 304SS
- 12 O-ring BS030
- 13 Ball spline bush
- 14 O-ring BS115
- 17 Inspection tag
- 18 Aerator key anti-vandal

## SPARE PARTS

DESCRIPTION	PRODUCT CODE
Eye wash dust cover with aerator (1 pair) and key	ESPE016
Aerator and washer (1 each)	ESPE015
Anti-vandal aerator key [Parts: 18]	SP304
Inspection tag [Parts: 17]	ESS521
Eye Wash Sign 250mm x 250mm Poly	ESS509



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# AS4775 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)
- ☐ 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)
- ☐ 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))

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# ANSI Z358.1 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 eye wash 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)
- ☐ 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))
- ☐ 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)
- ☐ 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)
- ☐ 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 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](mailto: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



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