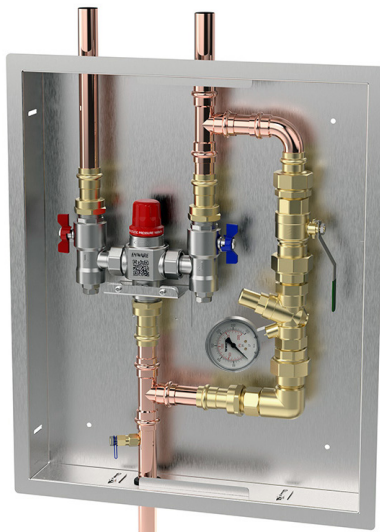


# Tepid Water System for Emergency Shower and Eye Wash

## Installation and Maintenance Instructions

ETW2500L

ETW2500L-BRK



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## safety

The ENWARE Tepid Water System is a high performance valve designed to give stable and dependable operation, provided it is installed, commissioned, operated and maintained as per the recommendations outlined in this manual. It should be noted however that this product should not be considered as an alternative to adequate supervision and duty of care during its use and operation.

**Note:** When installed, the mixing valve, inlet controls, pipework and the surrounding area may become hot, which may cause burn injuries. Precautions should be taken to ensure that these surfaces cannot cause such injuries.

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## installation compliance

Enware products are to be installed in accordance with the Plumbing Code of Australia (PCA) and AS/NZS3500. Installations not complying with PCA and AS/NZS 3500 may void the product and performance warranty provisions.

Reference should also be made to the Australasian Health Facility Guidelines (AHFG), ABCB and Local Government regulations when considering the choice of, and the installation of these products.

This product is compliant with the Lead Free requirements of NCC Volume Three.

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.

# product description

The ENWARE Tepad Water System features Aquablend 2500 Megamix - a high performance Thermostatic Mixing Valve (TMV). It is suitable for use with Emergency Showers, Eye Washes and Eye/Face Washes.

The Tepad Water System has the following features:

- Provides high stability of mixed water temperature even under changing inlet conditions
- Ensures rapid shut down of mixed outlet flow in the event of cold or hot water supply failure, and uninterrupted re-instatement of cold water flow through the bypass in case of hot water failure, ensuring continued supply for emergency use
- Designed for in-situ servicing
- Suitable for installation into AS3500 compliant systems with hot water temperature as low as 55°C
- Fitted with a tamper resistant temperature adjustment mechanism

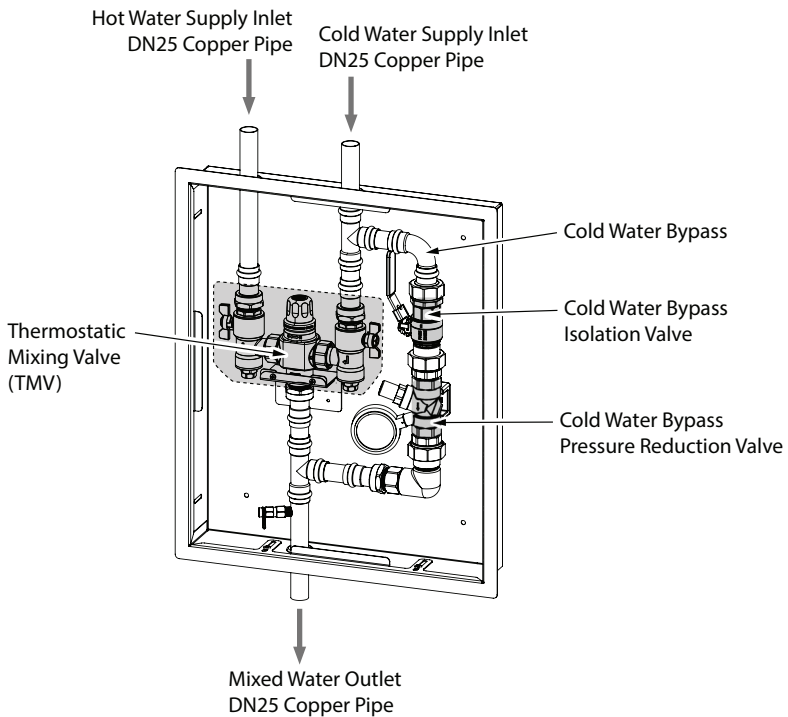


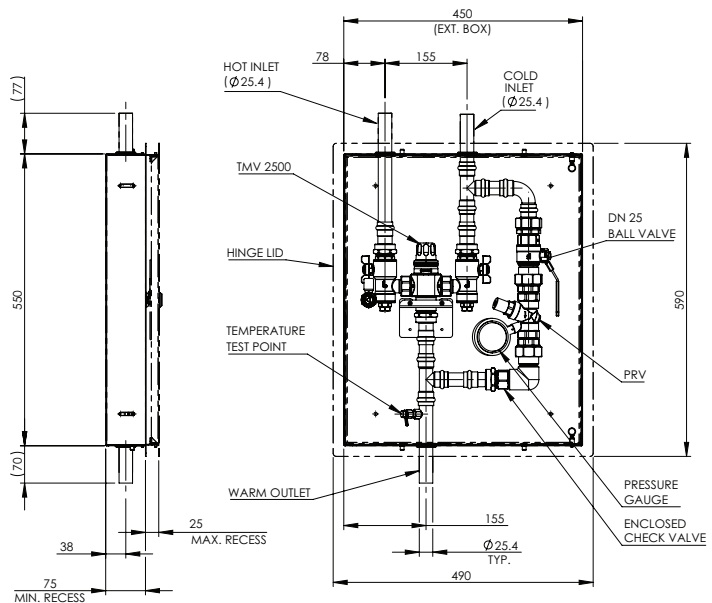
IMAGE 01

## technical data

|  |  |
|--|--|
| Mixed Outlet Temperature Range   | 22°C – 37°C  |
| Cold Inlet Temperature Range <sup>^</sup>  | 5°C – 30°C   |
| Hot Inlet Temperature Range  | 55°C – 90°C  |
| Cold Inlet Size  | DN 20 - DN 25 (DN 25 copper pipe)  |
| Hot Inlet Size   | DN 25 (DN 25 copper pipe)  |
| Mixed Outlet Size  | DN 25 (DN 25 copper pipe)  |
| Dynamic Inlet Pressure Range for flow compliance to AS4775<br>(To maintain a minimum of 75.6 lpm at the fixture) | 250 kpa – 600 kpa  |
| Static Inlet Pressure  | Max. 1600kPa<br>(For testing purposes/ system commissioning)   |
| Maximum Flow Rate  | 118 lpm @ 250 kpa pressure loss  |
| Bypass Flow Rate<br>In case of hot water supply failure  | 81 lpm @ 550 kpa   |
| Hot to Cold Supply Ratio   | 1:4<br>(Note: Supply conditions of 15°C cold and 60 °C hot, TMV outlet set point at 35°C @ 500kpa inlet) |

<sup>^</sup> Where cold inlet temperature may exceed recommended range due to seasonal variation, a 5°C temperature differential between the inlet cold supply and outlet mixed temperature setting must be maintained.

## dimensions



# flow sizing graph

The Tepid Water System is suitable for use with Emergency Showers, Eye Washes and Eye/Face Washes.

The Pressure Loss Characteristic for Mixed Outlet Flow Rate versus Balanced Inlet Pressure is shown below.

If the valve is to be installed and operated under unequal inlet pressures, the lower inlet pressure determines the outlet flow rate. However, for optimum performance and stability, it is recommended that the valve be installed with balanced dynamic inlet pressures (+/- 10%).

## PRESSURE LOSS CHART FOR FULL SYSTEM

| Flow Rate (L/min) | Pressure Loss (kPa) |
|-------------------|---------------------|
| 76                | 130                 |
| 80                | 136                 |
| 90                | 155                 |
| 105               | 185                 |
| 110               | 200                 |
| 115               | 215                 |

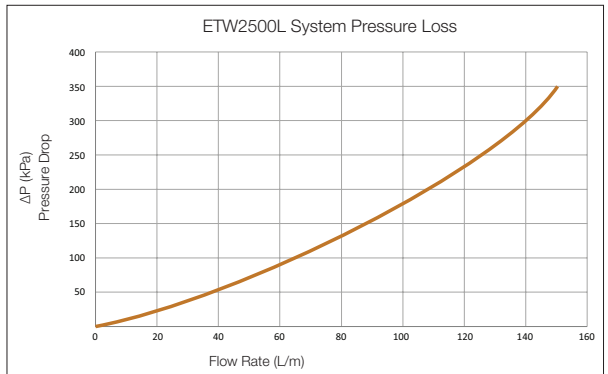


IMAGE 02

## BYPASS PRESSURE LOSS

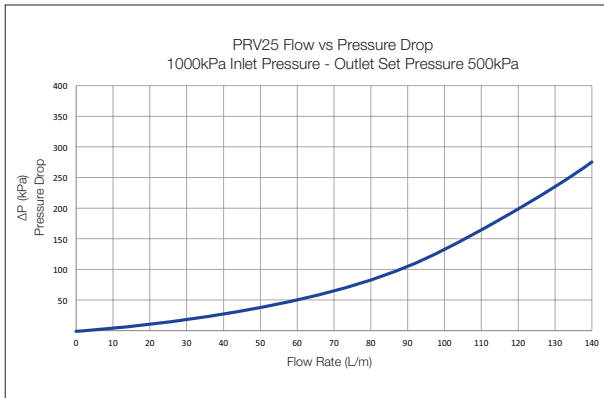


IMAGE 03

## INLET TO OUTLET TEMPERATURE CHART

TMV set point 35°C @500kPa

| COLD IN (°C) | HOT IN (°C) | OUTLET (°C) |
|--------------|-------------|-------------|
| 5            | 60          | 22          |
| 10           | 60          | 24          |
| 15           | 60          | 26          |
| 20           | 60          | 30          |

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# installation

## BEFORE INSTALLATION

The Tepad Water System should be installed to conform with AS3500, Code of Practice and legislation applicable to each state and following the details outlined in this section.

The Tepad Water System TMV must be installed by a licensed plumber, or where applicable, a licensed plumber who has undertaken TAFE training in Thermostatic Mixing Valves.

If the valve is not installed correctly then it will not function correctly and may put the user in danger. It may also void the warranty of the valve.

Prior to the installation of the valve, the system must be checked to ensure that the system operating conditions fall within the recommended operating range of the TMV as detailed in Technical Data on Page 4. If the hot water supply temperature is greater than 90°C, the valve may be damaged. A suitable temperature limiting valve must be fitted to the hot water supply prior to the inlet fittings, if the temperature of the hot water will rise above 90°C.

The valve is for use with potable water only. The water quality conditions should be checked and in some cases it may be necessary to install a water softener or water treatment device.

## INSTALLATION PROCEDURE

1. Flush the pipework with clean water before the valve is installed. During the flushing procedure, care should be taken to prevent water damage occurring to the surrounding area.
2. Determine location of the Tepad Water System to be installed.

The TMV should be installed as close to the shower/ eye wash as practically possible. Long distances from the TMV to the outlet will result in the mixed water not reaching the user in time in case of emergency. It is recommended that the length of pipe between the TMV and the outlet is no more than 10 lineal metres, or that it takes no more than 30 seconds for the heated water to reach the outlet. **SEE IMAGE 05**

The TMV should be installed so it can be accessed easily for maintenance or servicing.

3. Fix the cabinet or TMV support bracket to a wall or rigid support structure.

If the TMV is to be installed without a cabinet, use support brackets or clips to ensure that the connecting pipework is not under load from the valve. Do not use the pipework to and from the valve to support the weight of the valve.

The cabinet can be installed partially recessed inside wall cavity. Note the maximum and minimum dimensions for wall cavity.

**SEE IMAGE 04**

4. Connect inlet and outlet pipes to the Tapid Water System (TMV).  
During installation or servicing, heat must not be applied near the mixing valve or fittings as this will result in damage to the valve and inlet fitting internals, and void warranty.
5. Turn on hot and cold water supplies, open all isolation valves and check all connections for leaks.
6. Once Tapid Water System (TMV) is installed, proceed to commissioning of the valve.  
(Continued next page.)

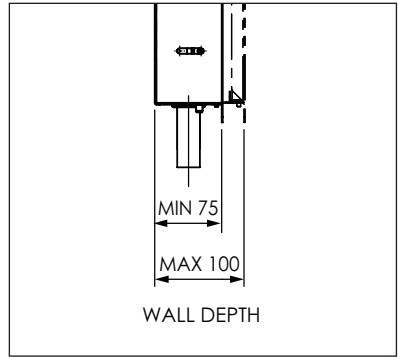


IMAGE 04

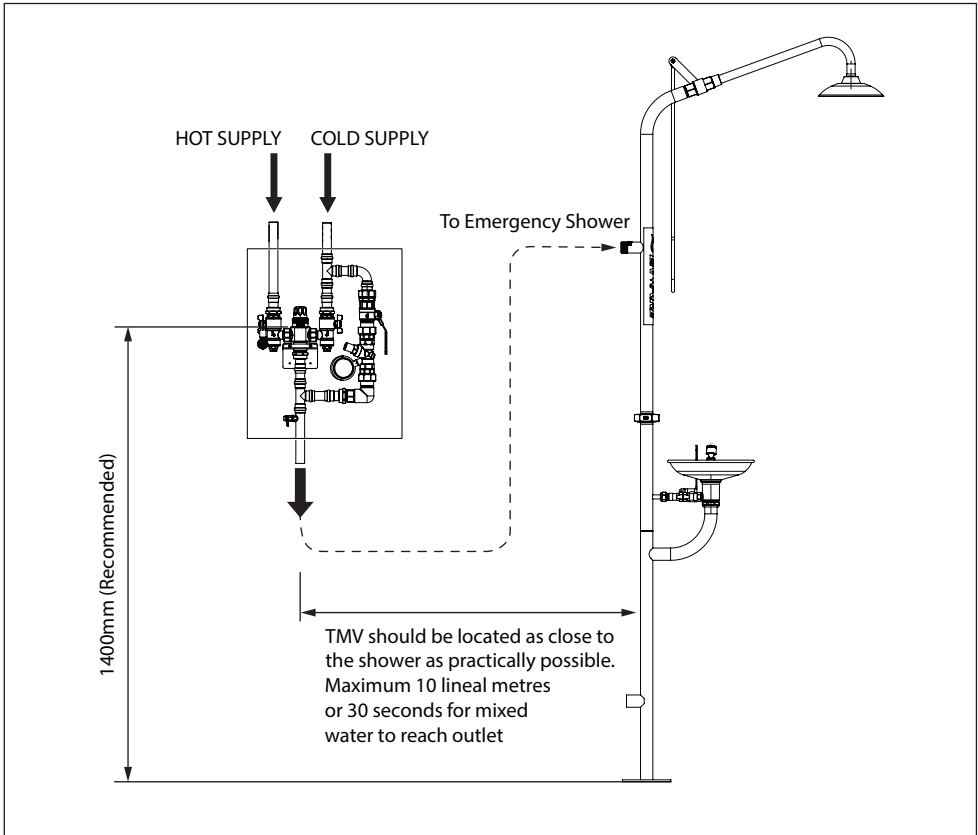


IMAGE 05

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## commissioning of the valve

Upon completion of the installation, the Tepad Water System including TMV should be tested and commissioned as per the procedure outlined below or as specified by the local authority. The entire procedure should be read through thoroughly prior to the commissioning of the valve.

A calibrated digital thermometer having rapid response time with maximum temperature hold, and 3mm Allen key will be required to check and set the outlet mixed temperature of the valve.

Commissioning involves the following steps:

1. Cold Water Bypass - Flow Test for Shower:  
Test water flow through cold water bypass to check that the minimum flow required for a shower is delivered, and adjust the flow rate if necessary.
2. TMV Commissioning:
  - Check Mixed Water Temperature - Test the mixed outlet temperature, to ensure the desired tepid water temperature is delivered to the shower or eye wash. Adjust outlet water temperature by changing the temperature setting on TMV if required.
  - Cold Shut Down Test - Conduct cold water shut-down test, and check that the water flow stops completely.
  - Hot Shut Down Test - Conduct hot water shut-down test, and check that cold water bypass is fully activated.
  - Record test results and complete the Commissioning Report.

## COLD WATER BYPASS - FLOW TEST FOR SHOWER

1. Close both hot and cold isolation valves of the TMV. Leave the Cold Bypass Shut-Off Valve open. **SEE IMAGE 06**
2. Turn the shower ON, and measure the flow rate by using a known size container and a stop watch. Ensure the shower can deliver adequate flow in conformance with AS4775.

For example, to achieve minimum of 76 L/ min for a shower, it cannot take longer than 15.7 seconds to fill up the 20L bucket.

$$\text{Flow rate (L/min)} = 20 \text{ (Litres)} \div \text{Time (seconds)} \times 60$$

3. If the shower flow is not adequate, adjust the pressure setting on Pressure Reduction Valve (PRV). The pressure setting can be changed by gently turning the spindle of the PRV with a slotted screw driver. **SEE IMAGE 07 & 08**

*To increase the flow, increase the pressure setting on the PRV by turning clockwise.*

*To decrease the flow, reduce the pressure setting on the PRV by turning anti-clockwise.*

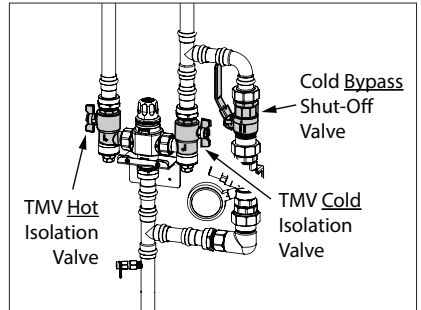


IMAGE 06

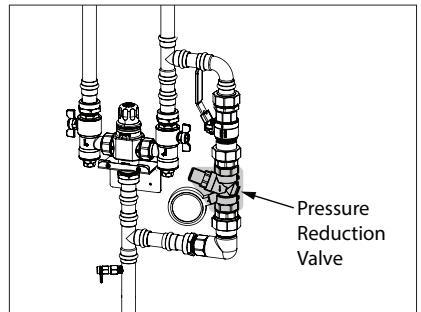


IMAGE 07

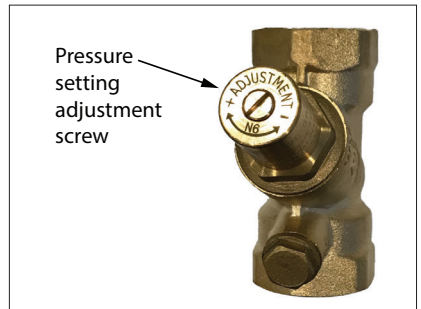


IMAGE 08

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## TMV COMMISSIONING

### CHECK MIXED WATER TEMPERATURE

1. Open the cold supply to the TMV, then open the hot supply, ensuring there are no leaks.
2. Open the outlet fixture (shower, eye wash, or eye/face wash).
3. Allow the mixed outlet to flow for at least 60 seconds to allow the temperature to stabilise before taking a temperature reading at the outlet with a digital thermometer. The flow rate should be at least 17 L/min. (The flow rate can be checked with the aid of a known size container and a stopwatch.)
4. The temperature at the outlet fixture should be in the tepid range of minimum 15.6°C - maximum 37.8°C.

If the outlet temperature requires adjustment, proceed to the following section to adjust the TMV temperature setting.

### TEMPERATURE ADJUSTMENT

1. Using a small flat bladed screw driver, lever the Red Lock Shield (protective cover) off the TMV.

**SEE IMAGE 09**

2. Loosen the temperature adjustment locking grub screw located on the hex of the top cap using 3mm Allen Key. **SEE IMAGE 10**

If the grub screw is not easily accessible, relocate the grub screw to the most accessible screw hole (3 screw holes are provided on the top cap for convenience). Leave the grub screw loose.

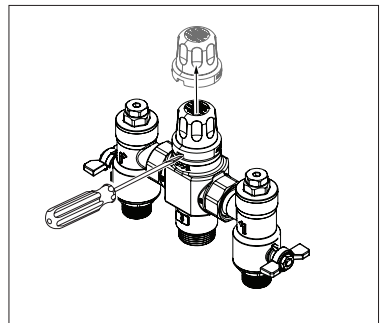


IMAGE 09

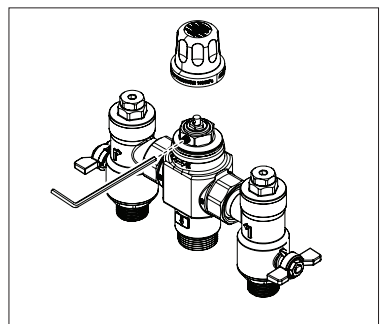


IMAGE 10

3. Fit supplied key over the adjusting spindle. **SEE IMAGE 11**

- To **increase** the mixed outlet temperature, rotate the spindle **anti-clockwise**.
- To **decrease** the mixed outlet temperature, rotate the spindle **clockwise**

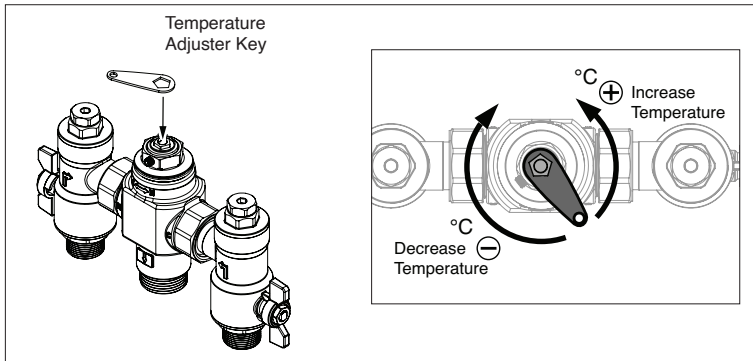


IMAGE 11

4. Allow the mixed outlet temperature to stabilize for 60 seconds and once again take a temperature reading. Repeat the procedure until the desired temperature has been reached.

If temperature is still too high or too low, adjust the pressure setting on Pressure Reduction Valve (PRV). **SEE Page 9 - Step 3.**

- Increasing the pressure setting on PRV will increase the flow of cold water and will lower the mixed water temperature.
- Decreasing the PRV pressure setting will increase the mixed water temperature.

5. Tighten the temperature adjustment locking grub screw. **SEE IMAGE 10**
6. Push the Red Lock Shield firmly back on to the top of the valve until it 'snaps' back into place.
7. Check the outlet temperature is stable over the full range of flow rates and that flow rate is adequate for the application.
8. Close the outlet.
9. Now that the mixing valve has been set and locked, it is necessary to perform a shut-down test. (Continued next page.)

## SHUT DOWN TEST

Turn on the shower or eye wash. Allow the mixed water temperature to stabilise and note the outlet temperature.

### Cold Shut Down Test

- While holding a digital thermometer in the outlet flow, quickly turn OFF both the "Cold Bypass Shut-Off Valve" and the "Cold Isolation Valve" of TMV. The outlet flow should quickly cease flowing. The flow should be less than 0.1L/min following the isolation.
- Monitor maximum outlet flow temperature, and record this on the Commissioning Report. The temperature should not exceed that allowed by the applicable standard or code of practice for each state.
- Restore the cold water supply to TMV and turn ON the Cold Bypass Shut-Off Valve. After the mixed water temperature has stabilised, note the outlet temperature ensuring the outlet temperature has re-established.

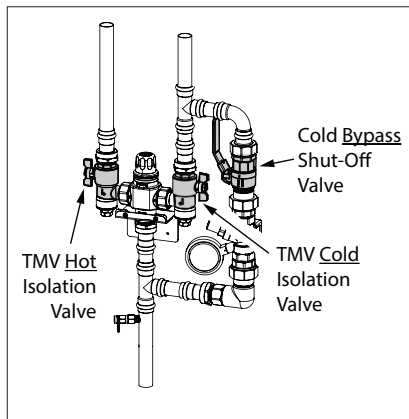


IMAGE 12

### Hot Shut Down Test - with Cold Bypass Activation

- Now repeat the above test, except this time quickly turn OFF the "Hot Isolation Valve" of TMV. The mixed water flow through the TMV should cease, and full flow of cold water should now flow through the Cold Water Bypass to continue the water supply to the connected safety apparatus. Measure and record the outlet water temperature, and confirm that the valve has switched over to full cold water flow.

Measure the flow rate of connected safety apparatus to ensure that the minimum required flow of water is still delivered to the outlet with the Cold Water Bypass activating. For example, to achieve minimum of 76 L/min for a shower, it cannot take longer than 15.7 seconds to fill up the 20L bucket.

$$\text{Flow rate (L/min)} = 20 \text{ (Litres)} \div \text{Time (seconds)} \times 60$$

- Restore the hot water supply to TMV. The TMV restores mixed water delivered to the outlet. Measure and record the outlet temperature after the mixed water temperature has stabilised, ensuring the original outlet temperature has re-established.

---

## RECORD TEST RESULTS AND COMPLETE COMMISSIONING REPORT

Ensure that all details of the Commissioning Report are completed and signed, and a copy of this report should be kept with the installer and owner of the premises.

*See Commissioning/ Maintenance Report on page 22*

The valve is now commissioned and it can be used within the technical limits of operation.

# maintenance and servicing of TMV

The Aquablend 2500 TMV will only require minimal preventative maintenance work to ensure it operates at its optimum level of performance. The valve should be commissioned and serviced annually, unless the installed conditions dictate more frequent servicing is necessary.

## ANNUAL MAINTENANCE PROCEDURE

Every 12 months, the Aquablend 2500 TMV should be inspected and tested. The service involves the following:

- Clean strainers
- Check operation of non-return valves
- Re-commission TMV (including shut down tests and setting the temperature)

The valve's external surfaces should be given a light wipedown. The valve and surrounding area should be inspected for leaks or water damage, and action taken if required. Ensure a clean dry work area is available.

### CLEANING THE STRAINERS

Firstly isolate the hot and cold supplies to the TMV by closing the TMV isolation ball valves. With a suitable spanner, remove inlet cap (located on the TMV isolation), then remove mesh strainer. **SEE IMAGE 13**

Clean strainers with a suitable descaling solvent (such as CLR) diluted with water. Check for physical damage and thoroughly rinse with clean water. Strainers can then be re-installed into the valve and inlet cap replaced and tightened to a maximum torque of 15Nm into the inlet valve bodies.

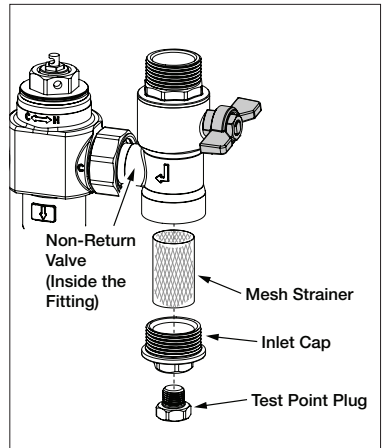


IMAGE 13

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## NON-RETURN VALVE OPERATION

To check Non-Return Valve on the HOT inlet side, carry out the following steps:

1. Turn OFF the isolation valve of TMV on the HOT inlet only (COLD inlet must be open)
2. Open Test Point Plug on the HOT inlet side. Note - water will drain out of test point.
3. Let the water drain out of the test port completely, and check that the water flow stops.
4. If the water draining out of test port does not stop and continues to flow, this may indicate a fouled or faulty Non-Return Valve. If this is the case, inspect the non-return valve for damage or any debris, and replace Non-Return Valve if required.
6. Replace the Test Point Plug on HOT inlet side, ensuring it is tightly secured.
7. Turn the isolation valve on the HOT inlet back ON.
8. To check Non-Return Valve on the COLD inlet side, repeat steps above using the COLD inlet side.

Check that the Test Point Plugs on the inlet fittings are tight, and that there is no evidence of water leakage.

The valve must then be recommissioned as per Commissioning procedure on page 8, including temperature adjustment and the shut down tests.

If the valve fails to shut down or fails to maintain its set temperature, refer to the troubleshooting solutions outlined on page 18.

## 5-YEAR SERVICE

In addition to the Annual Maintenance, the TMV valve piston O-ring and Thermostatic Element/Piston Assembly must be replaced at intervals not exceeding 5 years from commissioning. (See Spare Parts on page 21.)

For re-greasing of O-rings, use food grade silicone based grease (e.g. Molykote 111, Clare FU5).

## thermal flush option

The Aquablend 2500 TMV includes a built-in Thermal Flush feature allowing the facilities maintenance team or licensed service contactors to perform a controlled thermal flush to the TMV and warm water plumbing system.

*NOTE: The thermal flush procedure is optional and does not form part of commissioning and service requirements set out in AS4032.3*

Before commencing the thermal flush, a site-specific procedure must be implemented to control the risk of scalding. Hot water will run directly to the outlets fed by the Thermostatic Mixing Valve, and precautions shall be taken to prevent the chance of injury.

### THERMAL FLUSH PROCEDURE

1. Turn OFF Cold Bypass Shut-Off Valve, and turn OFF both hot and cold isolation valves to the TMV.
2. Remove the TMV's Red Lock Shield. **SEE IMAGE 14**
3. Check that the temperature adjustment locking grub screw is tight. (Grub screw is located on the hex of the top cap.) **SEE IMAGE 15**
4. Hook the Lift Lever Key onto the thermal flush activation point located in the centre of the temperature adjustment screw on the valve's top cap. **SEE IMAGE 16**
5. Lift the lever up and over all the way until it comes to a stop. **SEE IMAGE 16**

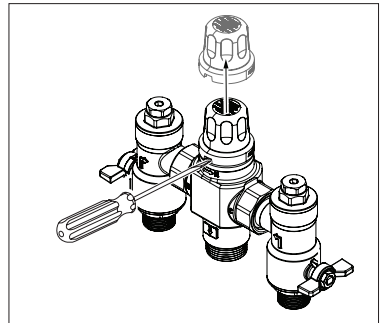


IMAGE 14

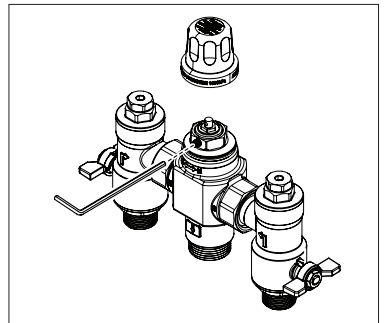


IMAGE 15

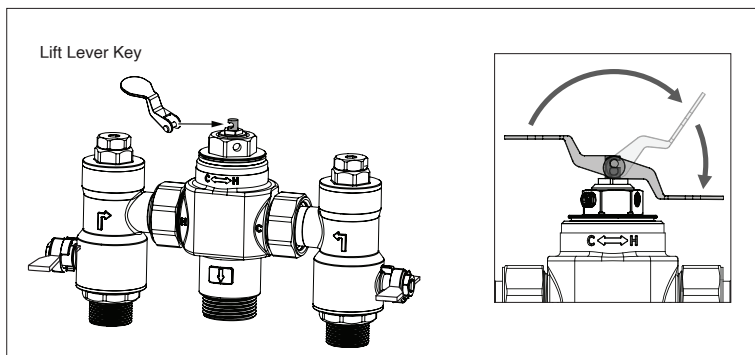


IMAGE 16

- 
6. Turn the hot water TMV isolation valve to the ON position.
  7. Turn the outlet fixture to the ON position.

**WARNING: Full temperature hot water will flow from the outlet fixture. Care must be taken to prevent scalding.**

8. Once the required time set in the facility's thermal flush procedure has passed, turn the TMV hot water isolation valve to the OFF position.
9. Leaving the outlet fixture in the on position, turn the TMV cold water isolation valve to the ON position.
10. Slowly pull the Lift Lever Key back to the original position.
11. Turn the TMV hot water isolation valve to the ON position.
12. Turn the Cold Bypass Shut-Off Valve to the ON position.
13. Check the outlet flow, making sure it is within the required temperature range.
14. Turn off the water at the outlet fixture.
15. Re-fit the Red Lock Shield to the TMV

**NOTE:** *If the Red Lock Shield does not securely fit back to the top cap this indicates the thermal flush has not been disengaged. Repeat Steps 9-14*

The Lock Shield cannot be securely replaced while the Lift Lever Key is in place.

# troubleshooting

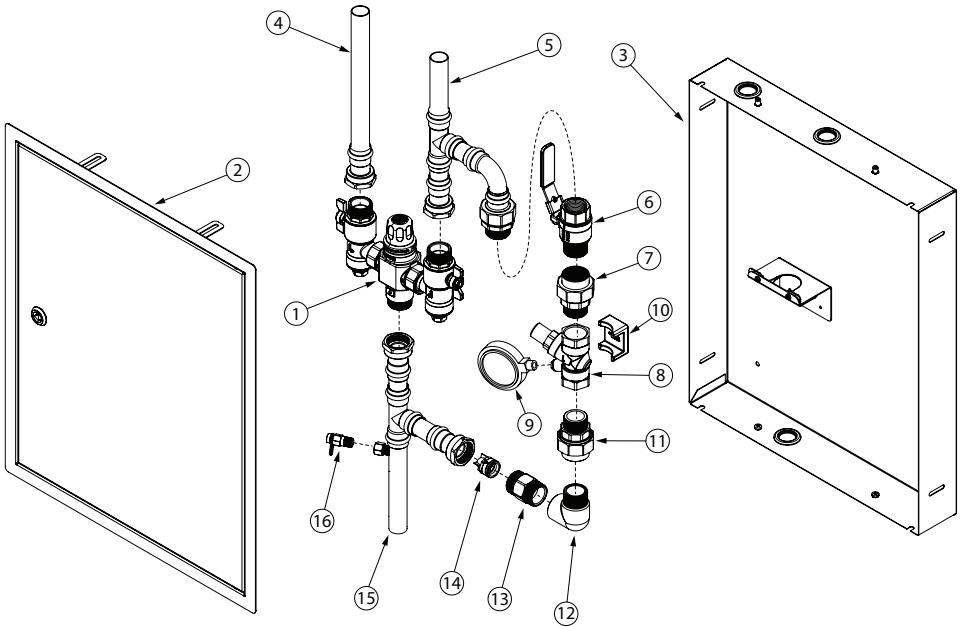
| FAULT / SYMPTOM   | CAUSE  | RECTIFICATION   |
|---|--|---|
| 1. The desired mixed water temperature cannot be obtained or valve is difficult to set. | <ul style="list-style-type: none"> <li>• Hot and cold supplies are fitted to the wrong connections.</li> <li>• Valve contains debris.</li> <li>• Strainers contain debris.</li> <li>• Non-return devices are damaged               <ul style="list-style-type: none"> <li>• Top Cap and/or Piston O-rings are damaged</li> </ul> </li> </ul>   | <ul style="list-style-type: none"> <li>• Refit the valve with hot/cold supplies fitted to the correct connections.</li> <li>• Clean the valve ensuring that all debris is removed and components are not damaged.</li> <li>• Clean strainers ensuring debris is removed.</li> <li>• Check non-return device is not jammed.</li> <li>• Clean or replace it if necessary.</li> <li>• Check Top Cap &amp; Piston O-rings for damage. Replace if necessary</li> </ul> |
| 2. The valve will not shut down on cold shut down test, hot water flowing through       | <ul style="list-style-type: none"> <li>• The supply hot water temperature is too low.</li> <li>• Element/ piston or other valve components are damaged, missing or installed incorrectly</li> <li>• Valve body seat (Hot Seat) is damaged or fouled by debris</li> <li>• Thermostatic element has failed.</li> <li>• Plastic shuttle of Thermostatic element has been damaged by debris</li> </ul> | <ul style="list-style-type: none"> <li>• Raise hot water supply temperature, ensure it is within the limits specified in Technical Data</li> <li>• Check valve internal components for damage, replace if required and re-assemble components in correct order</li> <li>• Clean seat on the mixing valve body using mild descaling solution, ensure there is no debris</li> <li>• Check and replace thermostatic element.</li> </ul>                              |
| 3. Mix temperature unstable   | <ul style="list-style-type: none"> <li>• Debris is fouling valve.</li> <li>• Flow rate below 17 L/min.</li> <li>• Strainers are fouled</li> <li>• Inlet conditions (pressures or temperatures) are fluctuating.</li> </ul>   | <ul style="list-style-type: none"> <li>• Clean the valve ensuring that all debris is removed and components are not damaged.</li> <li>• Rectify any supply pressure deterioration.</li> <li>• Clean strainers.</li> <li>• Install suitable pressure control valves to ensure inlet conditions are within the limits specified in Technical Data.</li> </ul>   |
| 4. Full cold water flowing from outlet  | <ul style="list-style-type: none"> <li>• Hot water failure. Valve has shut down, cold bypass activated</li> <li>• TMV is incorrectly set</li> <li>• Hot/Cold water has migrated to other inlet.</li> <li>• Temperature setting is too low</li> </ul>   | <ul style="list-style-type: none"> <li>• Valve functioning correctly. Restore hot water supply and check mix temperature.</li> <li>• Adjust TMV mix temperature as required.</li> <li>• Replace faulty non-return valves</li> <li>• Increase TMV mixed water temperature setting</li> </ul>   |
| 5. Full hot water flowing from outlet   | <ul style="list-style-type: none"> <li>• Valve is incorrectly set.</li> <li>• Hot water has migrated to other inlet.</li> <li>• Hot and cold supplies are fitted to the wrong connections.</li> <li>• Refer to fault/symptom 2</li> </ul>  | <ul style="list-style-type: none"> <li>• Adjust mix temperature between 15.6°C - 37.8°C +/- 2°C as required.</li> <li>• Check non-return valves, clean or replace if necessary</li> <li>• Refit the valve with Hot/Cold supplies fitted to the correct connections.</li> </ul>  |
| 6. No flow from the valve outlet  | <ul style="list-style-type: none"> <li>• Cold water supply failure. TMV has shut down.</li> <li>• Strainers are fouled</li> <li>• Water supply is turned off</li> </ul>  | <ul style="list-style-type: none"> <li>• Valve functioning correctly. Restore inlet supplies and check mix temperature.</li> <li>• Clean strainers.</li> <li>• Turn water on</li> </ul>   |

---

## troubleshooting

| <b>FAULT / SYMPTOM</b>                                       | <b>CAUSE</b>   | <b>RECTIFICATION</b>  |
|--|--|---|
| 7. Flow rate reduced or fluctuating                          | <ul style="list-style-type: none"><li>• Valve or inlet fittings fouled by debris.</li><li>• Dynamic inlet pressures are not within recommended limits.</li></ul> | <ul style="list-style-type: none"><li>• Check valve and inlet fittings for blockages.</li><li>• Ensure operating conditions are within specified limits and the dynamic inlet pressures are balanced to within +/- 10%.</li></ul> |
| 8. Mixed water temperature does not adjust                   | <ul style="list-style-type: none"><li>• Return spring is missing</li><li>• Thermostatic element has failed</li></ul>   | <ul style="list-style-type: none"><li>• Install return spring.</li><li>• Replace thermostatic element.</li></ul>  |
| 9. Hot water flows into the cold water system or vice versa. | <ul style="list-style-type: none"><li>• Non-return valve has failed</li></ul>  | <ul style="list-style-type: none"><li>• Replace non-return valves.</li></ul>  |

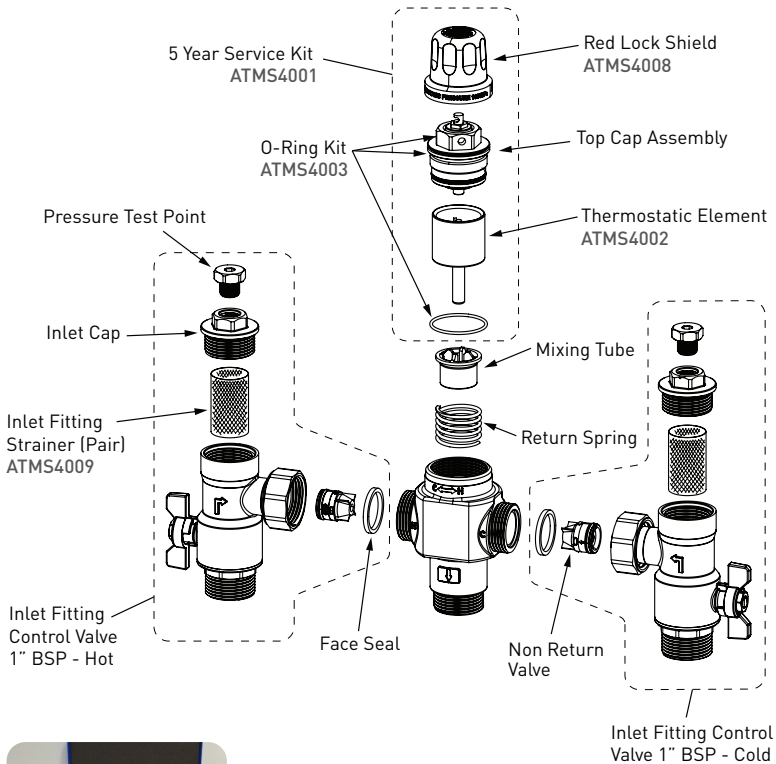
# components



- |  |  |
|--|--|
| 1 Aquablend 2500<br>Megamix TMV<br>ATM726L | 9 Pressure gauge<br>0-1000kPa 1/4"BSPT |
| 2 Hinged lid                               | 10 Support bracket                     |
| 3 Cabinet                                  | 11 Union 1"                            |
| 4 Hot inlet pipe                           | 12 Elbow 1" M/F                        |
| 5 Cold inlet pipe                          | 13 Nipple 1"                           |
| 6 Bypass shut-off ball<br>valve DN25       | 14 Check valve OV25/<br>DN25-HT        |
| 7 Union 1"                                 | 15 Outlet pipe                         |
| 8 Pressure reduction<br>valve 25mm Watts   | 16 Pete's plug test point<br>1/4" BSPT |

# spare parts - TMV

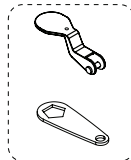
| PART  | REPLACEMENT TIME | PART NUMBER     |
|---|------------------|-----------------|
| 5 Year Service Kit (includes O-rings, thermostatic element, top cap, red lock shield) | 5 years          | <b>ATMS4001</b> |
| O-Ring Kit  | when required    | <b>ATMS4003</b> |
| Thermostatic Mixing Valve   |                  | <b>ATM726L</b>  |



Aquablend Test Kit  
ATMS1200



Pete's Plug  
1/4" Test Point Adaptor  
ATM1221



Lift Lever Key &  
Temperature  
Adjuster Key  
ATMS4007

# commissioning / maintenance report

**PRINT ALL DETAILS or MARK WITH AN X IN BOXES IN BOXES TO INDICATE CHOICE**

**PLEASE NOTE:**

1. In all cases the Licensee is to submit this report within 7 working days after commissioning and / or servicing the valve.
2. Use a separate form for each valve.
3. The original report is to be given to the owner / occupier and retained on site for a minimum of 7 years.
4. All details are to be filled in. Incomplete reports will not be accepted.

|                       |  |                |           |
|-----------------------|--|----------------|-----------|
| Name of Establishment |  |                |           |
| Street Address        |  |                |           |
| Suburb                |  | State          | Post Code |
| Phone No.             |  | Contact Name   |           |
| Date                  |  | Work Order No. |           |

|                                  |
|----------------------------------|
| Make and Model of Hot Water Unit |
|----------------------------------|

|                      |  |          |  |
|----------------------|--|----------|--|
| Make of Mixing Valve |  | Model No |  |
|                      |  | Size     |  |

|              |  |   |  |
|--------------|--|---|--|
| Valve ID No. |  | Total No. of Mixing Valves on Site/Building |  |
|--------------|--|---|--|

|                           |  |
|---------------------------|--|
| Valve Location / Building |  |
|---------------------------|--|

|                        |  |
|------------------------|--|
| Area serviced by valve |  |
|------------------------|--|

|                |                                 |                                   |  |        |
|----------------|---------------------------------|-----------------------------------|--|--------|
| Outlet fixture | Shower <input type="checkbox"/> | Eye Wash <input type="checkbox"/> | Eye/Face Wash <input type="checkbox"/> | Other: |
|----------------|---------------------------------|-----------------------------------|--|--------|

|  |  |  |
|--|--|--|
| Valve installed to requirements of:                      |  |  |
| 1. The local water supply authority                      | 2. The valve manufacturer / supplier requirements        | 3. The Australian Standards for Plumbing and Drainage    |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> YES <input type="checkbox"/> NO | <input type="checkbox"/> YES <input type="checkbox"/> NO |

|                                       |
|---------------------------------------|
| If NO, give details and action taken: |
|---------------------------------------|

|                       |          |     |                                |  |     |
|-----------------------|----------|-----|--------------------------------|--|-----|
| Hot Water             | Pressure | kPa | Cold Water                     | Pressure   | kPa |
|                       | Temp     | °C  |                                | Temp   | °C  |
| Cold Water Supply via |          |     | Pressure Reducing Valve Fitted | <input type="checkbox"/> YES <input type="checkbox"/> NO |     |

|   |
|---|
| Details of work carried out: <input type="checkbox"/> Serviced <input type="checkbox"/> Commissioned<br><input type="checkbox"/> Visually inspected and clean valve components <input type="checkbox"/> Checked function of non-return valve<br><input type="checkbox"/> Replaced O-rings and lubricate <input type="checkbox"/> Reassemble v Dismantle<br><input type="checkbox"/> Set temperature <input type="checkbox"/> Thermal shut down test |
|---|

|  |                 |  |
|--|-----------------|--|
| List of items replaced and part numbers during this visit: | Service Kit No. |  |
|  | Other Parts     |  |

Temperature range of warm water at outlet:

Tepid 15.6 - 37.8°C

Tepid 22 - 37°C

Set Temperature (°C):

|                                       |  |                           |  |
|---------------------------------------|--|---------------------------|--|
| Date of this service / commissioning: |  | Date of next service due: |  |
| Previous service carried out by:      |  | Date of previous service: |  |
| Valve installed by:                   |  | Date of installation:     |  |

**It is hereby certified that all the commissioning work has been carried out by the undersigned in accordance with local plumbing requirements for Thermostatic Mixing Valves**

|                              |  |  |                          |
|------------------------------|--|--|--------------------------|
| Contractor Business Name     |  |  |                          |
| Contractor Name (print)      |  |  | Contractor Lic / Cert No |
|                              |  |  |                          |
| Signature - Licensed Plumber |  |  |                          |
| Contractor's Phone No        |  |  | Date                     |
| Owner / Occupier Name        |  |  |                          |
| Signature                    |  |  | Date                     |

**NOTE: A duplicate copy of this report is to be retained at the site for any inspection by authorised persons**

# 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) |
|---|----------------------|--------------------------|------------------------|
| Aquablend<br>Thermostatic<br>Mixing Valves and<br>Spare Parts | ATM                  | 5                        | 5                      |