

# Industry Bulletin 161

## Heated water delivery temperature requirements from 1 May 2024

*The purpose of this bulletin is to remind licensed plumbers of the circumstances that a maximum allowable delivery temperature of heated water must be provided to the outlets of fixtures used primarily for personal hygiene purposes in Western Australia.*

Fixtures used for personal hygiene (sanitary fixtures) include but are not limited to showers, baths, basins and bidets.

The regulations and standards referenced in this bulletin are the minimum requirements for heated water delivery temperature control.

The Plumbers Licensing and Plumbing Standards Regulations 2000 (the Regulations) adopts the Plumbing Code of Australia (PCA) as the primary plumbing standards that apply in WA.

The PCA contains deemed-to-satisfy (DTS) requirements for maximum delivery temperature, and approved temperature control devices under Part B2 Heated water services. The PCA also calls up AS/NZS 3500.4:2021 Heated water services as DTS standards.

PCA 2022 is the latest version of the PCA and came into effect on 1 May 2023.

PCA 2022 expanded the requirements to provide heated water delivery temperature control from only applying to **new heated water installations**<sup>1</sup> to applying to **all heated water installations** – which includes when a water heater is replaced, relocated, or added to an **existing heated water installation**<sup>2</sup>.

The Regulations also **modify** certain plumbing standards to suit WA conditions. The Regulations modified PCA 2022 delaying the expanded heated water delivery temperature control requirements in WA until **1 May 2024**.

### Heated water delivery temperature requirements

For existing heated water installations, the PCA requirement applying heated water delivery temperature control to **all heated water installations** will apply when a water heater is **replaced, relocated, or added**.

It is widely recognised that tap water scalding incidents mainly occur during bathing or showering, with scalding at basins being rare. To assist licensed plumbers to meet the changed PCA requirements without reducing amenity (for example, lower heated water temperature to kitchens and laundries), basins are excluded (other than in a class 3<sup>3</sup> or class 9<sup>4</sup> building) as a mandatory sanitary fixture requiring heated water delivery temperature control – when **replacing, relocating or adding** a water heater to an existing heated water installation.

Excluding basins as a mandatory sanitary fixture for existing heated water installations, enables licensed plumbers to install temperature controlled taps at the bath and/or shower points of use, while maintaining hotter water to the other fixtures for cleaning and washing purposes, if that is what property owners/customers desire.

<sup>1</sup> A **new heated water installation** is – a new construction or network of pipework and fixtures including the water heater for the service and use of intentionally heated water.

<sup>2</sup> An **existing heated water installation** is – an existing construction or network of pipework and fixtures including the water heater for the service and use of intentionally heated water.

<sup>3</sup> A class 3 building is a residential building providing long-term accommodation and includes accommodation for the aged, children or people with disability and residential care buildings.

<sup>4</sup> A class 9 building is a building of a public nature including health care buildings, childcare centres and residential care buildings.



## Mandatory heated water delivery temperature control

The requirements to provide delivery temperature control in accordance with the Regulations and plumbing standards are as follows:

1. A new heated water installation (water heater, pipework and fixtures) installed in a newly constructed building (PCA 22 B2D5);
2. a new heated water installation (additional water heater, pipework and fixtures) installed in an existing building (PCA 22 B2D5);
3. replacement or relocation of an existing water heater, with the exception of a water heater that forms part of a multiple or banked water heater installation (Regulation 49(1), PCA 22 B2D5);
4. in the case of an existing multiple or banked water heater installation – when all of the water heaters that form the bank of water heaters are replaced or relocated (Regulation 49(1), PCA 22 B2D5);
5. an additional water heater is added to an existing heated water installation (Regulation 49(1), PCA 22 B2D5); and
6. in the case of an existing water heater replacement or relocation, a basin (other than in a class 3 or class 9 building) may be excluded from the sanitary fixtures requiring delivery temperature control provisions (Regulation 49(1), PCA 22 B2D5).

## Further to the above requirements please note the following:

- A. When replacing an existing water heater or maintaining an existing heated water installation where delivery temperature control provisions are already in place, the provisions must be maintained (Regulation 49(1), PCA 2022 B2D5); and
- B. when a thermosiphon or direct fired water heater with an uncontrolled heat source is installed or replaced, the delivery temperature control provisions apply to all fixtures including kitchen sinks and laundry troughs (AS/NZS 3500.4:2021, clause 7.2.1).

A table clarifying when delivery temperature control to sanitary fixtures is mandatory can be found on [page 3](#).

To help clarify when delivery temperature control to sanitary fixtures is mandatory, please refer to the following chart:

Water heater and heated water installation scenarios	Temperature control to be provided
1. A water heater and pipework serving sanitary fixtures is installed as part of a new construction.	 YES
2. An additional water heater and pipework serving new sanitary fixtures, is installed in an existing building (for example, an additional bathroom with its own new water heater is installed).	 YES
3. Replacement or relocation of a water heater in a heated water installation (except a water heater that forms part of an existing multiple or banked water heater installation).	 YES
4. Replacement of all water heaters that form a multiple or banked water heater installation.	 YES
5. Existing sanitary fixtures are disconnected from an existing water heater and connected to an additional water heater.	 YES
6. Additional sanitary fixtures are connected to an existing heated water installation where temperature control <b>is not yet</b> in place.	 NO
7. Repair or replacement of taps, pipes, fittings or fixtures (other than a water heater) in an existing heated water installation where temperature control <b>is not yet</b> in place.	 NO
8. Repair or replacement of taps, pipes, fittings or fixtures (other than a water heater) in an existing heated water installation where temperature control <b>is already</b> in place.	 YES

Disclaimer – The information contained in this fact sheet is provided as general information and a guide only. It should not be relied upon as legal advice or as an accurate statement of the relevant legislation provisions. If you are uncertain as to your legal obligations, you should obtain independent legal advice.

<p><b>Building and Energy</b>                  Department of Energy, Mines, Industry Regulation and Safety</p> <p><b>1300 489 099</b></p> <p>8.30am – 4.30pm</p> <p>Level 1 Mason Bird Building                  303 Sevenoaks Street (entrance Grose Avenue)                  Cannington Western Australia 6107</p> <p>M: <b>Locked Bag 100, East Perth WA 6892</b>                  W: <a href="http://www.demirs.wa.gov.au/building-and-energy">www.demirs.wa.gov.au/building-and-energy</a>                  E: <a href="mailto:be.info@dmirs.wa.gov.au">be.info@dmirs.wa.gov.au</a></p>	<p><b>Regional Offices</b></p> <table border="0"> <tr> <td>Goldfields/Esperance</td> <td>(08) 9021 9494</td> </tr> <tr> <td>Great Southern</td> <td>(08) 9842 8366</td> </tr> <tr> <td>Kimberley</td> <td>(08) 9191 8400</td> </tr> <tr> <td>Mid-West</td> <td>(08) 9920 9800</td> </tr> <tr> <td>North-West</td> <td>(08) 9185 0900</td> </tr> <tr> <td>South-West</td> <td>(08) 9722 2888</td> </tr> </table> <p>National Relay Service: 13 36 77                  Translating and Interpreting Service (TIS): 13 14 50                  This publication is available in other formats on request to assist people with special needs.</p>	Goldfields/Esperance	(08) 9021 9494	Great Southern	(08) 9842 8366	Kimberley	(08) 9191 8400	Mid-West	(08) 9920 9800	North-West	(08) 9185 0900	South-West	(08) 9722 2888
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