Plumbing Practice Note RP-01: Regulatory Framework

This Practice Note specifies the regulatory framework requirements for roof (stormwater) plumbing.

The tables and context below provide guidance on:

- What is roof (stormwater) plumbing work?
- What is not classified as roofing (stormwater) plumbing work?
- What types of roofing (stormwater) material are acceptable?
- Supporting documents for roof catchments to meet the deemed to satisfy requirements

This Practice Note may be read in conjunction with the Roof Plumbing Practice Note Package. For further information, please refer to Practice Notes RP-02 to RP-06.

What is regulated roof (stormwater) plumbing work?

Roofing (stormwater) work is defined as **regulated work** outlined in Part 4, Division 7 of the Plumbing Regulations 2018 (the Regulations).

Roofing (stormwater) work is defined as the "construction, installation, replacement, repair, alteration, maintenance, testing or commissioning of any roof covering or roof flashing, or any part of a drainage system involved in the collection or disposal of stormwater".

Roofing (stormwater)work is inclusive of:

- metal and plastic roof sheeting
- flashing including apron, soaker barge and ridge flashings
- parapet and barge capping's
- guttering systems including box gutter and eaves gutters
- downpipes and above stormwater drainage systems
- Furthermore, the inclusion of any connection of a stormwater piping to a below-ground stormwater drain or to an onsite storage/retention tank, or any design work carried out by a plumber that is incidental to/ or associated with this work.

What is not classified as roofing (stormwater) plumbing work?

The following roof materials **are not** classified as regulated roof covering or roof flashing, or part of a regulated drainage system:

- non-metallic tiles
- timber
- concrete
- glass
- bitumen; or
- slate

As defined in Division 7 of the Regulations, other work that **is not** classified as roof (stormwater) plumbing work includes:

- cleaning, painting, or preparation work in relation to any item, device or equipment involved in the collection or disposal of stormwater other than the connection, disconnection or alteration of that item, device, or equipment
- any work on a membrane applied to a roof covering or roof flashing
- the construction, installation, replacement, repair, alteration, maintenance, testing or commissioning of any roof covering consisting of non-metallic tiles, timber, concrete, glass, bitumen, or slate
- any work defined as regulated roof (stormwater) plumbing work
- any work that is carried out in relation to a freestanding Class 10a building that has a floor area not exceeding 10 m² except where the Class 10a building requires connection to a below-ground drain or retention tank
- the installation of fascia's
- the surface drainage of a balcony
- the installation of wall cladding

What types of roofing (stormwater) material are acceptable?

A roofing system may consist of various types of materials that are interconnected to ensure protection of the building. When considering the type of roofing material to use you must ensure the product and material selected is fit for purpose.

As a minimum, you must consider:

- the shape of the roof
- the location of the building e.g. coastal areas, bushfire prone areas, strong wind area's
- the insulation of the building
- WH&S requirements
- the manufacturers installation requirements
- the compatibility of different metals that are in direct contact (see Table 2.3(A) below)
- the compatibility of drainage from an upper surface to a lower metal surface (see Table 2.3(B) below)

Table 1: The acceptability of the direct contact between different types of metals, *referenced from HB39 Table 2.3(A)*

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TABLE 2.3 (A)

ACCEPTABLITY OF DIRECT CONTACT BETWEEN METALS

	Roof drainage system components and any cladding material	Accessory or fastener material												Fastener material
		Aluminium alloys		Copper and copper alloys*		Stainless steel (300 series)		Zinc-coated steel and zinc		Aluminium/zinc alloy – coated and aluminium/ zinc/magnesium alloy – coated steel		Lead		Ceramic or organic coated
		Atmospheric classification												
		SI and VS	Mild	SI and VS	Mild	SI and VS	Mild	SI and VS	Mild	SI and VS	Mild	SI and VS	Mild	SI and VS and Mild
Al	Aluminium alloys	Yes	Yes	No	No	+	Yes	++	++	Yes	Yes	No	No	Yes
Co	Copper and copper alloys	No	No	Yes	Yes	No	Yes	No	No	No	No	No	Yes	Yes
Fe	Stainless steel (300 series)	No	No	No	No	Yes	Yes	No	No	No	No	No	Yes	Yes
Zn	Zinc-coated steel and zinc	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Al Zn Mg	Aluminium/zinc and aluminium/zinc/ magnesium alloy* – coated steel	Yes	Yes	No	No	No	Yes	++	++	Yes	Yes	No	No	Yes
Pb	Lead§	No	No	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes

*** Includes Monel metal rivets**

\+ Grade 3 1 6 in accordance with ASTM A240 is suitable.

++ Unpainted zinc-coated steel and zinc are suitable for direct contact but are not to receive drainage from an insert catchment (see Clause 2.6).

§ Due to its toxicity, lead is not recommended for rainwater goods.

LEGEND:

SI, VS, Mild	=	severe industrial, very severe and mild classifications (see AS/NZS 2312)
Yes	=	acceptable – as a result of bimetallic contact, either no additional corrosion of rainwater goods will take place or, at worst, only very slight additional corrosion; also implies that the degree of corrosion would not significantly shorten the service life
No	=	not acceptable – moderate to severe corrosion of rainwater goods will occur, a condition that may result in a significant reduction in the service life

NOTES:

1 Unless adequate separation can be assured, prepainted rainwater are to be considered in terms of the base or coated steel.

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Table 2: Acceptability of drainage from an upper surface to a lower metal surface, *referenced from HB39 Table 2.3 (B)*

TABLE 2.3 (B)

ACCEPTABLITY OF DRAINAGE FROM AN UPPER SURFACE TO A LOWER METAL SURFACE

	Lower roof drainage system material	Upper cladding or rainwater goods materials										
		Aluminium alloys	Copper and copper alloys	Stainless steel (300 series)	Zinc-coated steel and zinc	Aluminium/zinc alloy – coated and aluminium/zinc/ magnesium alloys-coated steel	Lead	Prepainted metal	Roof Tiles		Plastic	Glass
									All terracotta glazed concrete	Unglazed concrete		
Al	Aluminium alloys	Yes	No	*	Yes	Yes	*	Yes	Yes	Yes	Yes	Yes
Co	Copper and copper alloys	*	Yes	*	*	*	Yes	*	Yes	Yes	Yes	Yes
Fe	Stainless steel (300 series)	*	*	Yes		*	Yes	*	Yes	Yes	Yes	Yes
Zn	Zinc-coated steel and zinc	No	No	No	Yes	No		No	No	Yes	No	No
Al Zn Mg	Aluminium/zinc and aluminium/zinc/ magnesium alloy* – coated steel	Yes	No	*	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Pb	Lead§	*	*	*	*	*	Yes	*	Yes		Yes	Yes

* Whilst drainage between the materials shown would be acceptable, direct contact is to be avoided [see Table 2.3 (A)].

LEGEND:

Yes = acceptable
No = not acceptable

NOTES:

1 'Acceptable' and 'not acceptable' imply similar performance to those noted in Table 2.3(A).
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Referenced Technical Documents

- AS 3500.3 Stormwater drainage
- AS1562.1 Design installation of sheet roof and wall cladding- Part 1 Metal
- AS1562.3 Design installation of sheet roof and wall cladding- Part 3 Plastic
- HB 39 Installation code for metal roof and wall cladding
- HB 114 Guidelines for the design of eaves and box gutter
- National Construction Code, Volume 3, Plumbing Code of Australia (PCA) 2019: F- Stormwater drainage systems

Related Documentation

- Practice Note RP-02: Box Gutters
- Practice Note RP-03: Eaves Gutters
- Practice Note RP-04: Downpipes
- Practice Note RP-05: Flashings
- Practice Note RP-06: Roof sizing and calculations

Contact Us

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