BUILDING PRODUCT INFORMATION REQUIREMENT

Cube 175mm pre-painted metal spouting system

BPIR:C17PM-SYS:2026.V2 – Supersedes BPIR:C17PM-SYS:2023.v1 (issued as C17PM-SYS) – Issued by Continuous Group Limited

PRODUCT AND MANUFACTURER DETAILS

ITEM	DETAIL
Product name	Cube 175mm pre-painted metal spouting system
Product identifier	C17PM-SYS
Manufacturer's name & address	Refer to Table 4 for Continuous Group branded manufacturing and/or supply locations.
Manufacturer's email address	cg@continuous.co.nz
Manufacturer's web address	www.continuous.co.nz
Place of manufacture	Aotearoa New Zealand
Warnings & bans	No

PRODUCT DESCRIPTION

Cube 175mm pre-painted metal spouting system is an external spouting system with overflow designed to collect and drain water from a roof. To complete the installation of this system the following components are required.

TABLE 1 — SYSTEM COMPONENTS

SYSTEM COMPONENTS	COMPONENT — MATERIAL
Cube 175 spouting CG Cube 175 stop-ends (as required)	Manufactured from "Factory Painted" pre-painted metal that complies with NZS:2728 (Eg: ColorCote or Colorsteel brands). Minimum 0.55mm BMT, grade G300 steel with minimum 150gsm zinc/alloy coating (Type 6).
CG Cube 175 internal bracket	4.00mm BMT aluminium, grade 5052-H32
CG Cube 175 external bracket (pan fix available)	4.00mm BMT aluminium, grade 5052-H32
CG droppers (outlets) 6550DR-PL, 65EDR-PL, 80DR-PL, 80DR-AL, 80EDR-PL, 100DR-PL, 10050DR-PL, 100DR-AL	Appropriate size/diameter to be selected according to roof area being drained: Material: Grade 3003 aluminium or uPVC. Note: Maximum size dropper to fit sole of spouting is 100mm.
Fastenings / fixings	Minimum Class 4 coated steel screws with a minimum 4.0mm head height and minimum 10 gauge screw thickness. Minimum 4/3 aluminium rivet fasteners. Fixings must be compatible with both the substrate and the bracket material.
Sealant	Recommended: Selleys (Admil) Mastersil SMP25, silane-based adhesive. Acceptable: industrial grade 100% silicone fit for external application.

SPECIFICATIONS & INSTALLATION REQUIREMENTS

Cube 175 pre-painted metal spouting system is an external gutter system with overflow designed with the following system specifications when installed as per instructions.

TABLE 2 — SYSTEM SPECIFICATION

SYSTEM DETAILS	SPECIFICATION / INSTALLATION
Pre-installation design	Designers must review the system capacities required before specifying this system, using the online calculators available on the NZMRM website.
Maximum cross-sectional capacity	19250mm²
Flow capacity	357.7 litres per minute
Installation fall	Minimum: 1:1000
Fall high point location	At the high points of installation. The back of the gutter must be a minimum of 10mm vertically below the top of the fascia board.
Minimum overflow gap	Minimum 6mm gap located between the back of the gutter and the fascia board (refer to E1/AS1 Section 5.5.2 below).
Outlet cross-sectional capacities	Minimum 3550mm² (65mm diameter), Maximum 7690mm² (100mm diameter)
Maximum bracket spacing	Brackets to be located within 200mm of all stop-ends and corners, then 600mm maximum centreline spacing.
Warranty	MagnaFlow and Maxam pre-painted steel: 15-year perforation warranty, 10-year paint warranty (Exposure Zones B, C and D), subject to the maintenance conditions in this document. Refer to the warranty document listed under Supporting documentation.

SCOPE OF USE

Cube 175 pre-painted metal spouting system is an external spouting system with overflow, designed to collect and channel water that runs off a roof. It is intended that the system will be positioned at the perimeter of the building, outside the building envelope.

LIMITATIONS OF THE USE OF THIS BUILDING PRODUCT

1. All Continuous Group Spouting Systems should only be installed by a trade professional.
2. The system cannot be installed onto fascia or cladding of incompatible materials, and cannot receive run-off from incompatible materials. Material compatibility — selection, contact and run-off — is to be adhered to in accordance with E2/AS1 Tables 20, 21 and 22.
3. The system cannot be used as an internal gutter as described in the NZMRM Code of Practice: "a gutter positioned inside the building envelope".
4. The System uses various components as specified in Table 1. These components make up the entire system and cannot be substituted under any circumstances.
5. The system cannot be used in Exposure Zone "E" (Reference E2/AS1 Table 20).
6. The system may require an additional snow support system depending on site location and altitude (Reference Section 15 "Snow Loading" NZS 3604).
7. Site locations must be evaluated in areas with high wind and/or salt and/or thermal / industrial atmospheric conditions. These types of locations may require specific engineering design (SED). Designers must consult the metal supplier's information for specific durability requirements (Reference E2/AS1 Table 20).

MAINTENANCE REQUIREMENTS

(Link to Care and Maintenance Document below under "Supporting documentation")

1. Inspection of the system is required every 3 months to check for build-up of residue and organic matter inside and outside of the system.
2. Wash the painted surface of the system at a minimum of every 6 months, and immediately after inspection if required. Spray and rinse with clean water, and scrub with a soft nylon brush if needed.
3. Remove any debris from the inside of the spouting at least every 6 months, and immediately after inspection if required.

RELEVANT BUILDING CODE CLAUSES

TABLE 3 — COMPLIANCE AND REGULATION

COMPLIANCE / REGULATION	DETAIL
E1/AS1 Surface Water	Sections 5.1.1, 5.1.4, 5.2.1, 5.3.1 & 5.5.2
E2/AS1 External Moisture	Tables 20, 21 & 22
AS/NZS 2179.1:2014	Sections 2.3.2, 3.2.1 and Table 3.1
NZBC C3	Fire Rating Compliance
NZBC F2 Hazardous building materials	Section F2.3.1
AS/NZS 4020:2018	Testing of products for use in contact with drinking water
B2/AS1	Table 1: Durability Requirements of Nominated Building Element
NZMRM Code of Practice v26.09	Sections as noted in reference to further installation best practice

Cube 175 pre-painted metal spouting system contributes to compliance by –

E1/AS1 Section 5.1.1 — "Roof gutters shall discharge to downpipes that are sized as given in Paragraph 4.2." Outlets connect to downpipes. Outlet diameters as shown in Table 2 of this BPIR are a minimum of 65mm &/or a maximum of 100mm and are required to be matched to cross sectional capacity required for roof drainage.

E1/AS1 Section 5.1.4 — "In no case shall the cross-sectional area of any gutter be less than 4000 mm^2." Gutter cross-sectional area is 19,250mm^2.

E1/AS1 Section 5.2.1 — "Roof gutter materials shall comply with the standards stated in Table 6 (AS 1397)." Manufactured from zinc / aluminium / magnesium alloy coated steel to AS 1397, which is an acceptable material standard for roof gutters.

E1/AS1 Section 5.3.1 — "Roof gutters shall fall to an outlet."
Minimum fall requirement of 1:1000 as shown in Table 2 of this BPIR.

E1/AS1 Section 5.5.2 — "External gutters do not require overflow outlets but shall be installed to ensure any overflow from the gutter spills to the outside of the building."
System is designed with a minimum 6mm overflow gap located between the back of the gutter and the fascia board. "Fall high point location" as shown in Table 2 of this BPIR must be 10mm vertically below the top of fascia. Any overflowing water is eliminated from entering the inside of the building via a continuous overflow system located a minimum of 10mm below the top of the fascia board.

E2/AS1 Table 20 — "Material Selection"
The system is classified as "Sheltered", and the material selection shown in Table 1 of this BPIR meets the requirements of Table 20 for Exposure Zones B, C and D: factory painted material to AS/NZS 2728, and aluminium and uPVC materials. Zone D may require a pre-approval warranty application based on the site address.

E2/AS1 Tables 21 & 22 — "Compatibility of material in contact and subject to run-off."
All of the materials shown in Table 1 of this BPIR are compatible in contact and run-off with each other, provided they are installed on, and run off onto, compatible materials.

AS/NZS 2179.1:2014 Section 2.3.2 — "...Pre-painted metals shall comply with AS/NZS 2728"
Spouting is manufactured from pre-painted metals that complies with AS/NZS 2728 material as shown in Table 1 of this BPIR.

AS/NZS 2179.1:2014 Section 3.2.1 and Table 3.1 — "The effective cross-sectional area and minimum base metal thickness (BMT) of shape or sheet for eaves gutters, stop ends and flashing saddles shall be specified as in Table 3.1 – Gutters of 10000mm^2 or greater manufactured from G300 coated steel require a minimum BMT of 0.55mm."
Spouting (Gutter) meets the specification required as detailed in Table 3.1.

NZBC C3 — Fire affecting areas beyond the fire source
Colorcote and Colorsteel products are rated as a Group 1-S when tested in accordance with ISO 5660:2002.

NZBC F2 Hazardous Building Materials F2.3.1 — "The quantities of gas, liquid, radiation or solid particles emitted by materials used in the construction of buildings, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space"
The system manufactured from pre-painted steel as shown in Table 1 of this document, will meet the performance requirements of F2.3.1.

AS/NZS 4020:2018 — "Testing of products for use in contact with drinking water"
Water that is in contact with material used in manufacturing Continuous Group Spouting Systems is safe for human consumption.

B2/AS1 Table 1 — Durability Requirements of Nominated Building Element
B2/AS1 requires external gutters to have a durability of 5 years. A 15-year perforation warranty and 10-year paint warranty are provided with this gutter system in Exposure Zones B, C and D, provided the maintenance conditions are met.

NZMRM CODE OF PRACTICE V26.09

This information is included to assist with further information outside of building code compliance.

5.4.1 DURABILITY IN PRACTICE

NZBC clause B2/AS1 requires spouting to have a durability of 5 years. In practice, this is rarely commercially acceptable. However, with sound design and reasonable maintenance, a spouting life of 10 years or more is usually achieved when using the same material as the profiled metal roof. Spouting that is difficult to access for replacement should be specified in more durable, compatible materials.

5.4.2 REQUIREMENT FOR SPOUTING

E1/AS1 does not prescribe a need for a building to have spouting; it merely requires that concentrations of water gathered by structures do not enter the building or cause damage or nuisance to other property. This is traditionally achieved by using gutters and downpipes to discharge roof catchments into stormwater drains. Minor wall projections such as bay windows and boxed penetrations are treated as part of the wall catchment and are typically excused from requiring spouting and downpipe, provided the plan view surface area of individual projections does not exceed $5m^2$.

5.4.2 OVERFLOW PROVISION

Spouting should be installed with the back lower than the fascia board or cladding to allow for draining of overflow water through the gap between the gutter back and the fascia. A 2mm gap between the back of the gutter and the fascia will give a discharge area equal to the diameter of a 75mm downpipe for every 2.2m of gutter run. This gap is only totally effective if the spouting is correctly maintained and the gap is free of debris. A designed outlet is preferred — either a gutter bracket creating a minimum 6mm space stop-end, a weir, a raised outlet above the spouting sole, a slotted front, or a low fronted gutter. A weir stop-end, or an outlet with a top edge above the sole of the gutter, can be used to increase outlet capacity.

5.4.2.2 EXPANSION AND MAXIMUM GUTTER LENGTH

All gutters are subject to expansion. Maximum gutter length is determined by the type of metal and its colour. Where gutters have an allowance for expansion (such as an external gutter on a typical gutter bracket, or an internal gutter with sliding clips), lengths should be restricted to 25m in steel and 12m for copper or aluminium. An expansion joint can be either a sump, rainwater head or a saddle flashing. Gutters that are directly through-fastened to the fascia or eaves purlin will not be free to move and should be restricted to a maximum of 12m. Through-fastened gutters are not recommended as they are difficult to replace.

5.4.2.3 BRACKET SYSTEMS AND SNOW LOADING

The spouting bracket system must withstand the potential weight of a gutter full of water. In snow load areas, spouting may be fitted with snow straps and brackets at a maximum of 600mm centres to withstand the additional potential weight of any snow build-up. Brackets should be made using compatible material or non-ferrous metal. Brackets for pre-painted external gutters should be painted or powder coated before installation. Brackets for external gutters should be located close to all stop-ends, at both ends of sumps and rain-heads, at a maximum of 750mm spacing for gutters less than 180mm wide, and at 600mm for gutters 180–300mm wide. Brackets must be installed to provide a 1:500 (2mm per metre) minimum gutter gradient towards the outlets.

5.4.3 GUTTERS CUT DOWN FOR VALLEY DISCHARGE

When the back of a gutter is cut down to allow the valley to discharge into it, the gutter capacity is affected. In these cases, gutter calculations should allow for 20mm less water height, and a minimum 3mm spacer should be attached to the back of the gutter (or fascia) at the internal corner to maintain the clearance between the gutter and the fascia.

5.4.7 GUTTER CAPACITY CALCULATOR

Designers must confirm required capacity using the gutter capacity calculator available on the NZMRM website before specifying this system.

SUPPORTING DOCUMENTATION

The following additional documentation supports the statements above.

DOCUMENT NAME	WEBLINK
Cube 175mm brochure & specification document	Cube 175 Spouting Brochure and Specification.pdf
ColorCote BPIR document	ColorCote MagnaFlow datasheet — colorcote.co.nz
ColorSteel BPIR document	NZ Steel product information documents — colorsteel.co.nz
Maintenance document	Continuous Group Maintenance Document.pdf
Material compatibility — material selection	Continuous Group Material Compatibility — Material Selection.pdf
Material compatibility — materials in contact	Continuous Group Material Compatibility — Compatibility of Materials in Contact.pdf
Material compatibility — subject to run-off	Continuous Group Material Compatibility — Compatibility of Materials Subject to Run-off.pdf
Warranty document	Continuous Group Warranties

MANUFACTURING AND SUPPLY LOCATIONS

TABLE 4 — CONTINUOUS GROUP MANUFACTURING AND/OR SUPPLY LOCATIONS

LOCATION	COMPANY DETAILS
Northland	Northland Continuous Spouting Ltd (NZBN 9429032689105) 2 Sammaree Place, Kerikeri – northland@continuous.co.nz
Auckland	Continuous Spouting Auckland Ltd (NZBN 9429034029862) 94 Takanini School Road, Takanini, Auckland – auckland@continuous.co.nz
Waikato	Continuous Waikato Ltd (NZBN 9429030330535) 141 Queens Street, Leamington, Cambridge – waikato@continuous.co.nz
Bay of Plenty	Continuous Group BOP Ltd (NZBN 9429048508520) 31B Enterprise Drive, Papamoa, Tauranga – bop@continuous.co.nz
Gisborne	Streetwise Spouting Ltd (NZBN 9429042306276) 4 Leith Street, Gisborne – gisborne@continuous.co.nz
Hawke's Bay	Rooftech Hawke's Bay Ltd (NZBN 9429035443889) 2/7 Cadbury Road, Onekawa, Napier – hawkes_bay@continuous.co.nz
Taranaki	Gutter Solutions Ltd (NZBN 9429036739240) Unit 2, 20 Pacific Place, Gonville, Whanganui – taranaki@continuous.co.nz
Whanganui / Manawatu	Gutter Solutions Ltd (NZBN 9429036739240) Unit 2, 20 Pacific Place, Gonville, Whanganui – manawatu@continuous.co.nz
Wellington	Wellington Continuous Spouting Ltd (NZBN 9429043333974) Unit B, 1 Prosser Street, Porirua – wellington@continuous.co.nz
Nelson / Marlborough	Continuous Spouting South Ltd (NZBN 9429050107209) 7 Fuji Court, Stoke, Nelson – nelson@continuous.co.nz
Westland	Continuous Spouting South Ltd (NZBN 9429050107209) 51-57 Revel Street, Hokitika – westland@continuous.co.nz
Christchurch / North Canterbury	Continuous Spouting South Ltd (NZBN 9429050107209) 16 Westland Place, Izone Industrial Estate, Rolleston – canterbury@continuous.co.nz
Mid / South Canterbury	Continuous Spouting South Ltd (NZBN 9429050107209) 126 Dobson Street, Ashburton – canterbury@continuous.co.nz
Central Otago	Continuous Spouting South Ltd (NZBN 9429050107209) 7 Connelly Way, Cromwell – otago@continuous.co.nz
Coastal Otago	Continuous Spouting South Ltd (NZBN 9429050107209) 8 Benson Close, Mosgiel – otago@continuous.co.nz
Southland	Continuous Spouting South Ltd (NZBN 9429050107209) 72 Leet Street, Invercargill – southland@continuous.co.nz

Continuous Group are members of the NZ Metal Roofing Manufacturers Incorporated and the Roofing Association of New Zealand.