

BUILDING PRODUCTS INFORMATION SHEET (BPIS) RAINWATER SYSTEMS



CLASS 1

REVISION VERSION 2.0 ISSUE DATE: AUGUST 2024

PRODUCT NAME

Metalcraft Roofing - **Rainwater Systems**

For names of individual gutter, fascias and downpipes refer to product identifier.

PRODUCT LINE

N/A

BPIS INCLUSION / EXCLUSION

This BPIS includes Metalcraft Roofing's Rainwater Systems and associated brackets, downpipes, joins, end stops and all other items Rainwater items that are manufactured by Metalcraft Roofing. Metalcraft Roofing do supply fasteners, however demonstration of compliance of these items are not the responsibility of Metalcraft Roofing. Please refer to: Other products supplied by Metalcraft roofing for a list of those items and links to manufacturers.

PRODUCT DESCRIPTION AND ITS INTENDED USE

Metalcraft Gutters and Fascias provide for an attractive finish to any barge or eaves lines. For more technical product information download from

<https://www.metalcraftgroup.co.nz/>

INTENDED USE

Metalcraft Gutters provide for a functional requirement of channeling the rainwater from the roof into downpipes and ultimately into the storm water drainage system.

Metalcraft Fascias provide for an attractive finish to any barge or eaves lines.

Downpipes allow the water to discharge from the gutters and correct sizing of gutters and downpipes are required.

Metalcraft Roofing's Rainwater Systems can be used with various Metalcraft COLORSTEEL® flashings, gutters and fascias.

MATERIAL OPTIONS:

Most gutters are manufactured out of COLORSTEEL® MAXAM™ Product datasheets list the availability of the other material options available, these can be downloaded from

<https://www.metalcraftgroup.co.nz/>

COLORSTEEL® MAXAM™

0.40mm and 0.55mm BMT G550.

0.55mm BMT or 0.75mm BMT G300 for flashings.

Limited availability -check product datasheets:

COLORSTEEL® ALTIMATE®

0.90mm Aluminium 5052 H36 for roll-forming.

0.90mm Aluminum 5005 H34 for flashings.

ZINCALUME®

0.40mm and 0.55mm BMT G550.

0.55mm BMT or 0.75mm BMT G300 for flashings.

GALVSTEEL®

0.40mm and 0.55mm BMT Z450.

0.55mm BMT G300 for flashings.

For more information on COLORSTEEL®

refer www.colorsteel.co.nz

For more information GALVSTEEL® & ZINCALUME®

refer www.nzsteel.co.nz

Above thicknesses are the nominal base metal thickness rather than the total coated thickness.

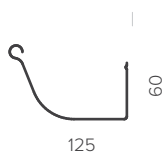
CLASS 1

REVISION VERSION 2.0 ISSUE DATE: AUGUST 2024

PRODUCT IDENTIFIER

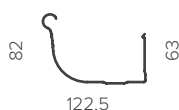
125 QUARTER ROUND
GUTTER

Manufactured in:
Palmerston North.
Available nationwide.



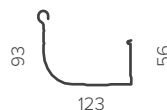
COLONIAL QUAD
GUTTER

Manufactured in:
Palmerston North, Hamilton,
Cromwell, Christchurch and
New Plymouth.
Available nationwide.



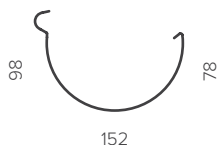
QUADLINE
GUTTER

Manufactured in:
Auckland.
Available nationwide.



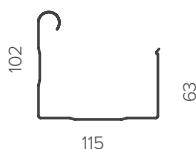
HALF ROUND
GUTTER

Manufactured in:
Christchurch.
Available nationwide.



SQUARELINE
GUTTER

Manufactured in:
Christchurch.
Available nationwide.



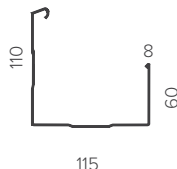
150 QUARTER ROUND
GUTTER

Manufactured in:
Tauranga.
Available nationwide.



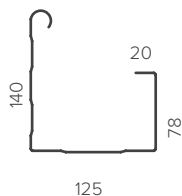
BOX
GUTTER 115

Manufactured in:
Wellington.
Available nationwide.



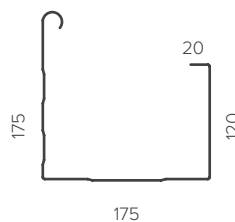
BOX
GUTTER 125

Manufactured in:
Auckland, Whangarei,
Palmerston North and
Christchurch.
Available nationwide.



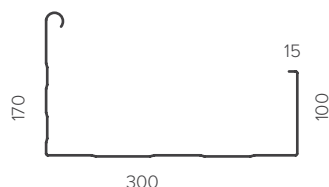
BOX
GUTTER 175

Manufactured in:
Auckland, Palmerston North,
Christchurch.
Available nationwide.



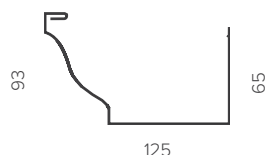
BOX
GUTTER 300

Manufactured in Auckland,
Palmerston North and
Christchurch. Available
nationwide.



OLD GOTHIC 125

Manufactured in: Auckland.
Available nationwide.

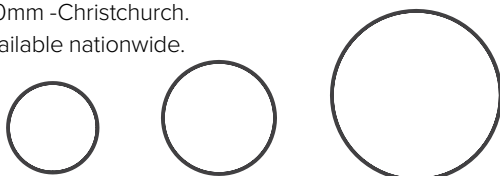


Dimensions are in mm and nominal and may vary with manufacturing and installation tolerances. Please check with your local Metalcraft Roofing branch.

For more information on installation, maintenance and warranty, please visit: www.metalcraftroofing.co.nz

ROUND
DOWNPIPE

80mm - Christchurch, Tauranga.
100mm -Tauranga, Christchurch.
150mm -Christchurch.
Available nationwide.



RECTANGULAR
DOWNPIPE

Manufactured in
Christchurch.
Available nationwide.



FASCIA 185

Manufactured in Palmerston
North, Hamilton,
Christchurch, Cromwell
and New Plymouth.



FASCIA 155

Manufactured in Wellington,
Whangarei, Tauranga and
Auckland .
Available nationwide.



FASCIA 135

Manufactured in Auckland
Available nationwide.



For more information, refer to product data sheets, and gutter details for bracket options and overflows of gutter systems.
These can be downloaded from <https://www.metalcraftgroup.co.nz/>

RELEVANT BUILDING CODE CLAUSES:

B2 DURABILITY

B2.3.1 (b)(i)

E1 SURFACE WATER

E1.3.2

E2 EXTERNAL MOISTURE

E2.3.1

F2 HAZARDOUS BUILDING MATERIALS

F2.3.1

G12 WATER SUPPLIES

G12.3.1

STATEMENT ON HOW THE BUILDING PRODUCT IS EXPECTED TO CONTRIBUTE TO
COMPLIANCE:

Metalcraft Roofing's Rainwater systems including brackets, gutters, fascias and downpipes and if selected, designed and installed correctly and used in combination with fasteners and design installation recommendations as per NZMRM, will contribute to meeting the following performance requirements of the NZ Building Code.

B2.3.1 (b)(i)

Metalcraft Rainwater systems and associated flashings are manufactured from steel from NZ Steel:

COLORSTEEL® MAXAM™ (Steel substrate may be either G300 or G550 consistent with AS 1397. Metallic coating is Metallic coating is AM 150 consistent with AS 1397:2021. MAXAM® is a Product Type 6 consistent with AS/NZS 2728:2013 and therefore is consistent with the NZ Building Code for use in environments as described in Acceptable Solution E2/AS1 Table 20. Tolerances are consistent with the requirements of AS/NZS 1365:1996.

COLORSTEEL® ALTIMATE®

Aluminium substrate is in accordance with AS/NZS 1734:1997 covering chemical composition, mechanical properties, and allowable tolerances on dimensions. Altimate® is a Type 6 product in accordance with AS/NZS 2728:2013 and therefore is consistent with the NZ Building Code for use in environments as described in Acceptable Solution E2/AS1 Table 20.

ZINCALUME®

Non-factory painted steel substrate may be either G300 or G550 consistent with AZ150 consistent with E2/AS1 Table 20.

GALVSTEEL®

Non-factory painted Galvanised steel Z450 to AS 1397 consistent with E2/AS1 Table 20.

Selection of correct product must be suitable for their end-use, location and environment as per Acceptable Solution E2/AS1 Table 20.

Refer also to COLORSTEEL® Environmental Categories, Warranty & Product Maintenance recommendations.

Contact with corrosive and incompatible materials, prolonged exposure to damp or corrosive internal environments, or excessive periods of wet stacking must be avoided as per table 20 E2/AS1.

Fixings of Metalcraft Rainwater Systems to be in accordance with E2/AS1 and NZMRM Code of Practice and be compatible with the base material of the Corrugate profile.

Material warranties are closely linked to environmental categories. The correct grade of material for use in various environments is given in the COLORSTEEL® Residential Warranty, Environmental Categories & Product Maintenance Guide.

This can be downloaded from:

<https://www.metalcraftgroup.co.nz/>

E1.3.2

Metalcraft gutter information indicates the total cross section area, the nett freeboard area, the wetted perimeter and also shows the bracket options and overflow of each install configuration in accordance with the recommendations of the NZMRM Code of Practice.

For more information, refer to product data sheets, and gutter details for bracket options and overflows of gutter systems. These can be downloaded from <https://www.metalcraftgroup.co.nz/>

Refer also to section: Gutter Capacity.

E2.3.1, E2.3.2

Gutter details are available from <https://www.metalcraftgroup.co.nz/>

Alternative details complying with the "4 D's" (Deflection, Draining Drying and Durability) will also comply with the performance requirements of NZ Building Code.

F2.3.1

COLORSTEEL® MAXAM™, ZINCALUME® and GALVSTEEL® will meet the performance requirements of F2, 2.3.1.

G12.3.1

COLORSTEEL® and ZINCALUME® Rainwater collected from roofs clad with products made from ZINCALUME® coated steel and COLORSTEEL® prepainted steel, will comply with the provisions of NZBC G12.3.1, provided the water is not contaminated from other sources.

Claimed by NZ Steel -Source:

<https://www.nzsteel.co.nz/products/zincalume/features/#:~:text=Rainwater%20collected%20from%20roofs%20clad,not%20contaminated%20from%20other%20sources.>

LIMITATIONS ON THE USE OF THE BUILDING PRODUCT:

- To be used in situations where there are no dissimilar metals or compatibility issues as per NZMRM Code of Practice and Table 20 E2/AS1.
- Gutters not to be used where catchment areas are greater for that of the capacity of gutter taking into consideration the overflow requirements of the project design versus the Metalcraft gutter and bracket information.
- The correct grade of material for use in various environments is given in the COLORSTEEL® Residential Warranty, Environmental Categories & Product Maintenance Guide. This can be downloaded from:
<https://www.metalcraftgroup.co.nz/>

DESIGN REQUIREMENTS THAT WOULD SUPPORT THE APPROPRIATE USE OF THE BUILDING PRODUCT

- Metalcraft Roofing's gutters, downpipes and fascia's The correct application of each grade of material is critical to product performance and life expectancy. Before commencing a project the user must refer to the COLORSTEEL® Residential Warranty, Environmental Categories & Product Maintenance Guide and Metalcraft Roofing's product information. It is important that the requirements of these guides are taken into account when making the selection of the material to be used.
- Alternative details complying with the "4 D's" (Deflection, Draining, Drying and Durability) will also comply with the performance requirements of NZ Building Code.
- Designer or Architect must determine and evaluate the catchment area to be drained and is responsible for the correct selection of gutters and downpipes, including gutter fall, overflow, discharge and design (overflow, downpipe requirements, minimum fall, roof overhang into gutter, gutter eaves flashing requirements, snow strap provisions, number of downpipes and any other considerations in order to satisfy E1 of the NZ Building Code.
- Discharge and water run off and compatibility. Contact with corrosive and incompatible materials, prolonged exposure to damp or corrosive internal environments should be considered. Refer to NZMRM Code of Practice for advice on compatibility.
<https://www.metalroofing.org.nz/>

- Metalcraft Roofing's Rainwater systems can be laid to a minimum 1:500 (2mm per meter) recommended fall of 1:200 is advised as this increases the velocity / flow of the discharging water and aids in self cleaning of the gutter.
- Roof drainage information can be found in E1/AS1 & E2/AS1 and the NZMRM Code of Practice has online calculation tools that can assist the designer.
<https://www.metalroofing.org.nz/>
- 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 600 mm centres to withstand the additional potential weight of any snow build-up.
- Brackets for external gutters should be located close to all stop-ends, at both ends of sumps and rain-heads at a maximum of 750 mm spacing for gutters less than 180 mm wide, and at 600 mm for gutters 180 – 300 mm wide. Brackets must be installed to provide a 1:500 (2 mm per metre) minimum gutter gradient towards the outlets.
- Placement of downpipes significantly affects gutter and downpipe calculations. Refer to NZMRM Code of Practice for more information www.metalroofing.org.nz.
- 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 25 m in steel and 12 m 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 12 m. Through-fastened gutters are not recommended as they are difficult to replace.

GUTTER CAPACITY

GUTTER TYPE	MANUFACTURING LOCATIONS	TOTAL CROSS SECTIONAL AREA (mm ²)	NETT OF FREEBOARD (mm)	WETTED PERIMETER (mm)	INTERNAL BRACKET	EXTERNAL BRACKET
125 QUARTER ROUND GUTTER	PALMERSTON NORTH	5958mm ²	4264mm ²	181mm	NO	YES / NONE
COLONIAL QUAD GUTTER	PALMERSTON NORTH HAMILTON CROMWELL CHRISTCHURCH NEW PLYMOUTH	6967mm ²	5186mm ²	191mm	YES	NO
QUADLINE GUTTER	AUCKLAND	6290mm ²	4514mm ²	180mm	YES	NO
HALF ROUND GUTTER	CHRISTCHURCH	8627mm ²	6554mm ²	199mm	NO	YES
SQUARELINE GUTTER	CHRISTCHURCH	7245mm ²	5520mm ²	211mm	YES	NO
150 QUARTER ROUND GUTTER	TAURANGA	6278mm ²	4443mm ²	180mm	YES	NO
BOX GUTTER 115	WELLINGTON	6900mm ²	5175mm ²	205mm	YES	NO
BOX GUTTER 125	AUCKLAND PALMERSTON NORTH WHANGAREI CHRISTCHURCH	9750mm ²	7875mm ²	251mm	YES	YES
BOX GUTTER 175	AUCKLAND CHRISTCHURCH	21000mm ²	18375mm ²	385mm	YES	YES
BOX GUTTER 300	AUCKLAND CHRISTCHURCH	30000mm ²	25500mm ²	470mm	NO	YES
OLD GOTHIC 125	AUCKLAND	6393mm ²	4648mm ²	184mm	YES	NO

DOWNPIPES

GUTTER TYPE	EXTERNAL DIMENSION (mm)	INTERNAL DIMENSION (mm)	MANUFACTURING LOCATIONS	TOTAL CROSS SECTIONAL AREA (mm ²)
80mm ROUND DOWNPIPE	81.5mm	79mm	CHRISTCHURCH TAURANGA	4777mm ²
100mm ROUND DOWNPIPE	103mm	101mm	CHRISTCHURCH TAURANGA	7541mm ²
150mm ROUND DOWNPIPE	159.5mm	158mm	CHRISTCHURCH	17201mm ²
RECTANGULAR DOWNPIPE	76.5x56mm	75x55mm	CHRISTCHURCH	3869mm ²

INSTALLATION REQUIREMENTS

Installation should be carried out by a suitably qualified practitioner. Installation of Corrugate should be in accordance with NZMRM Code of Practice. www.metalroofing.org.nz

Don't handle any products roughly or carelessly; gutters, downpipes and fascias perform best when handled correctly.

Don't drag or slide roofing sheets or building products over the gutter and fascias.

Refer to Metalcraft's Rainwater Installation Guide for more information or the NZMRM www.metalroofing.org.nz. Some important considerations are as follows:

Site Storage which ensures that products are kept dry. Reducing risk of surface damage to surface coatings during handling, installation and by other trades. Ensuring that correct and sufficient fasteners are used. Installation in contact with incompatible materials is avoided.

Download the Rainwater Installation Guide from www.metalcraftroofing.co.nz.

MAINTENANCE REQUIREMENTS

Maintenance must be carried out in accordance with the COLORSTEEL® Environmental Categories, Warranty & Product Maintenance recommendations brochure. This can be downloaded from:

www.colorsteel.co.nz
www.metalcraftgroup.co.nz

IS THE BUILDING PRODUCT/BUILDING PRODUCT LINE SUBJECT TO A WARNING OR BAN UNDER SECTION 26 OF THE BUILDING ACT 2004:

NO

Metalcraft Roofing's Corrugate profile is not subject to a warning or ban under the Building Act 2004.

SUPPORTING INFORMATION

The following documents can support demonstration of compliance of Metalcraft Roofing's Rainwater systems with the NZ Building Code.

Building Act 2004
www.legislation.govt.nz

NZBC relevant clauses and acceptable solutions
NZS 3604:2011
www.building.govt.nz

Cited standards
www.standards.govt.nz

NZMRM Code of Practice
www.metalroofing.org.nz

Metalcraft Roofing's Rainwater Information Brochure.
Metalcraft Roofing Gutter Datasheets.
<etalcraft Roofing Gutter Details.
COLORSTEEL® Environmental Categories, Warranty & Product Maintenance recommendations brochure.
NZMRM Installation Guide.
Metalcraft Eco Choice Certification.

Download from:
www.metalcraftgroup.co.nz

COLORSTEEL® Product and Technical Information.
www.colorsteel.co.nz

New Zealand Steel's Quality management system conforming to ISO 9001:2015 and assessed by Telarc.

New Zealand's Steel's Environmental Management system conforming to ISO 14001:2015
www.nzsteel.co.nz

PLACE OF METALCRAFT RAINWATER
MANUFACTURE

NEW ZEALAND

For manufacturing locations of each gutter refer to Product Identifier.

METALCRAFT BRANCHES THAT CAN SUPPLY
RAINWATER SYSTEMS

METALCRAFT ROOFING -ROTORUA
15 Monokia Street, Rotorua
07 350 1138
sales.rotorua@metalcraftroofing.co.nz

METALCRAFT ROOFING -AUCKLAND EAST TAMAKI
24-26 Trugood Drive East Tamaki, Auckland
09 273 2820
orders.akl@metalcraftroofing.co.nz

METALCRAFT ROOFING - AUCKLAND HOBSONVILLE
25 -27 Westpoint Drive, Hobsonville, Auckland
09 444 1813
orders.ns@metalcraftroofing.co.nz

METALCRAFT ROOFING -WHANGAREI
42-44 Rewa Rewa Road, Whangarei
09 470 0870
sales.whangarei@metalcraftroofing.co.nz

METALCRAFT ROOFING -HAMILTON
9 Earthmover Cres, Burbush, Hamilton
07 849 3807
sales.hamilton@metalcraftroofing.co.nz

METALCRAFT ROOFING -TAURANGA
42 Poturi St, Tauriko, Tauranga
07 575 7032
sales.tauranga@metalcraftroofing.co.nz

METALCRAFT ROOFING -PALMERSTON NORTH
76 Malden Street, Palmerston North
06 358 9149
sales.palmerston@metalcraftroofing.co.nz

METALCRAFT ROOFING -NEW PLYMOUTH
218 De Havilland Drive, Bell Block, New Plymouth
06 755 2113
sales.newplymouth@metalcraftroofing.co.nz

METALCRAFT ROOFING -HASTINGS
1454A Omaha Road, Hastings
06 873 9020
sales.hastings@metalcraftroofing.co.nz

METALCRAFT ROOFING -WELLINGTON
201 Gracefield Rd, Seaview, Lower Hutt
04 566 2253
orders.wgtn@metalcraftroofing.co.nz

METALCRAFT ROOFING -CHRISTCHURCH
85 Columbia Ave, Hornby, Christchurch
03 349 7350
sales.christchurch@metalcraftroofing.co.nz

METALCRAFT ROOFING -CROMWELL
20 McNulty Road, Cromwell
03 445 4180
sales.cromwell@metalcraftroofing.co.nz

BUILDING PRODUCTS INFORMATION SHEET (BPIS) RAINWATER SYSTEMS



CLASS 1

REVISION VERSION 2.0 ISSUE DATE: AUGUST 2024

LEGAL ENTITIES:

STEEL BUILDING PRODUCTS CENTRAL LIMITED

NZBN: 9429032296389

Level 1, 30 Highbrook Drive, East Tamaki Auckland

TRADING NAME / ADDRESS FOR SERVICE:

Metalcraft Roofing - Hamilton
Metalcraft Roofing - New Plymouth

STEEL BUILDING PRODUCTS NORTHERN LIMITED

NZBN: 9429032461398

Level 1, 30 Highbrook Drive, East Tamaki Auckland

TRADING NAME / ADDRESS FOR SERVICE:

Metalcraft Roofing - East Tamaki
Metalcraft Roofing - Whangarei

STEEL BUILDING PRODUCTS SOUTHERN LIMITED

NZBN: 9429036306183

Level 1, 30 Highbrook Drive, East Tamaki Auckland

TRADING NAME / ADDRESS FOR SERVICE:

Metalcraft Roofing - Hastings
Metalcraft Roofing - Palmerston North
Metalcraft Roofing - Wellington

STEEL BUILDING PRODUCTS SOUTH ISLAND LIMITED

NZBN: 9429032296303

Level 1, 30 Highbrook Drive, East Tamaki Auckland

TRADING NAME / ADDRESS FOR SERVICE:

Metalcraft Roofing - Cromwell
Metalcraft Roofing - Christchurch

METAL LINE ROOFING LIMITED

NZBN: 9429031709583

Level 1, 30 Highbrook Drive, East Tamaki Auckland

TRADING NAME / ADDRESS FOR SERVICE:

Metalcraft Roofing - Hobsonville
Metalcraft Roofing - Rotorua
Metalcraft Roofing - Tauranga

DISCLAIMER

This Building Product Information Sheet must be read in conjunction with all cited documents.

Metalcraft Roofing states that the product will, if installed in accordance with the technical data, specifications, and advice prescribed by Metalcraft Roofing comply with the relevant provisions of the building code and satisfy our obligation to meet S14G of the Building Act 2004.

It remains the responsibility of all other professional parties to ensure they satisfy their own obligation of the Building Act 2004.

As part of Metalcraft Roofing's policy of continued improvement, final specifications may vary from those contained in this publication. The company reserves the right at any time and without notice to change the design, materials or features and withdraw products from the market without incurring any liability whatsoever.

RAINWATER SYSTEMS - STEEL SOURCED FROM NZ STEEL

Metalcraft Roofing's Rainwater Systems are manufactured from steel from New Zealand Steel:

New Zealand steel Ltd, 131 Mission Bush Road Glenbrook 2681, Auckland New Zealand

www.nzsteel.co.nz

OTHER PRODUCTS SUPPLIED BY METALCRAFT ROOFING

Metalcraft Roofing also sell other products to complement the installation of Rainwater Systems.

Please note the correct selection of these products for the project application is the responsibility of the architect/ designer.

All products where demonstration of performance is required to satisfy the NZ Building Code is the responsibility of the product manufacturer or importer of the following items: Metalcraft take on no responsibility whatsoever

Please liaise with the following companies for information:

RIVETS, FASTENERS, TOUCH UP PAINTS , LITTLE GRIPPERS.

Key Supplier:

Konnect Fastening Systems®

www.konnectfasteningsystems.co.nz

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Metalcraft Roofing are members of the Roofing Association, New Zealand and the New Zealand Metal Roofing Manufacturers Incorporated.

