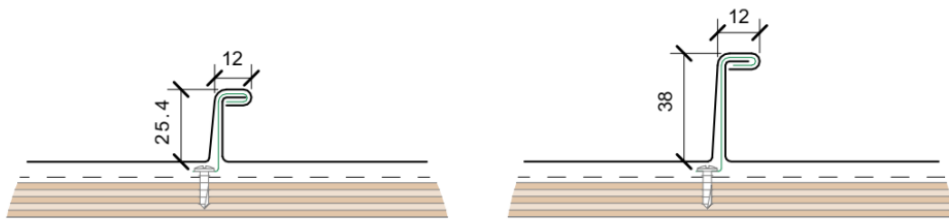


Building Product Information Sheet

Product Name:

Euro Roof Angle Seam

Product Drawing:



Product Description:

Metal Design Solutions Angle Seam profile also known as standing seam, contributes a pleasing wide pan tray and is available in seam heights of 25mm or 38mm. The Angle Seam profile is fixed to a substrate with concealed clips. The angle seam may be completed in a range of materials including Copper, Zinc, pre-painted Aluminium and pre-painted steel.

Place of Manufacture:

New Zealand

Legal and trading name of the manufacturer:

Metal Design Solutions Limited

Address for Service:

54 Rangī Road

Takanini

Auckland

2105

Website: www.mds.net.nz

Email address: info@mds.net.nz

Phone No: 09 640 0009

NZBN: 9429037336424

Scope:

Generally used for roofing and wall cladding in wind zones up to and including extra high as defined in NZS3604:2011 or a maximum wind design pressure (ULS) of 2.1kPa and all exposure zones as defined by NZS3604:2011.

Can be used on buildings located any proximity to a relevant boundary

Can be used in conjunction with a primary structure (timber or steel structural framing, or over structural panels) that complies with the NZ Building Code or where the designer has established that the existing structure is suitable for the intended building work.

Limitations on the use of the building product:

Location:

- Fixing spacing must be calculated in accordance with Section 3.9 of the NZ Metal Roofing Manufacturers (NZMRM) Code of Practice, version 23.09 or specifically designed.
- Where microclimatic conditions apply (section 4.2.4, NZS3604:2011), contact MDS for technical advice
- In exposure Zone D, steel must not be used
- The design of the other external envelop elements must comply with the relevant fire provisions of the NZ Building Code.

Building:

Roof cladding:

- A Thermal break is required where installed over steel framing
- Minimum Roof pitch is 5°
- A substrate of minimum 17mm plywood with a building wrap must be installed.
- Flashings, flexible building underlays, and fixings must be in accordance with E2/AS1 and/or the NZMRM Code of Practice, version 23.09.
- Contact with other materials must be in accordance with E2/AS1 and the NZMRM Code of Practice, version 23.09.

Wall cladding:

- Must be installed over a drained and ventilated cavity
- A substrate of minimum 17mm plywood with a building wrap must be installed.
- Where the cladding is installed vertically, H3.1LOSP or H3.2 CCA castellated cavity battens are required.
- Flashings, flexible building underlays, and fixings must be in accordance with E2/AS1 and/or the NZMRM Code of Practice, version 23.09.
- Contact with other materials must be in accordance with E2/AS1 and the NZMRM Code of Practice, version 23.09.
- Where the building has a building height of greater than 10m and upper floors containing sleeping uses or other property, then the external wall must be subject to specific fire engineering design in respect of vertical spread of flame.

Materials:

- Pre-painted grade G300/G550 steel complying with AS1397 coated in accordance to AS/2728 to Type 4
- Pre-painted H34 or H36 Aluminium in accordance to AS/2728
- Zinc in accordance with EN998
- Copper in accordance with AS1566

Clips and fasteners:

Clips:

- Stainless steel standing seam clips for all materials listed above.

Fasteners:

- Annular grooved nails 25mm long or;
- Low profile wafer countersunk head screw 24mm long

Underlay:

Underlay should be in accordance with table 23 of E2/AS1.

Installation:

Installation must be carried out by an MDS installer in accordance with MDS details and NZMRM Code of Practice, version 23.09.

Maintenance:

Maintenance should be carried out in accordance to the material manufacturers recommendations. Unwashed areas must be regularly maintained to avoid the build-up of salt and debris.

Full maintenance guides are available for selected material below:

- Pre-painted steel - [ColorSteel](#)
- Pre-painted aluminium - [ColorCote](#)
- Euramax - [Ambro Metals](#)
- Copper - [Aurubis](#)
- Zinc - [VM Zinc](#)

Relevant Building Clauses:

Clause B1 — Structure, Performance, B1.3.1, B1.3.2, B1.3.3(a), (b), (c), (f), (g) + (h)

Clause B2 — Durability, Performance, B2.3.1 (b), B2.3.2

Clause C3 — Fire, Performance C3.7 (a)

Clause E2 — External Moisture, Performance E2.3.1, E2.3.2, E2.3.5 and E2.3.7 (a), (b) + (c)

Clause F2 — Hazardous Building Materials, Performance, F2.3.1

Statement on how the building product is expected to contribute to compliance:

Clause B1 — Structure, Performance, B1.3.1, B1.3.2, B1.3.3(a), (b), (c), (f), (g) + (h)

Alternative Solution

- Manufactured in accordance with AS 1397-2001
- Generally in accordance with NZMRM Code of Practice (v23.09) and E2/AS1
- Load/span testing and analysis in accordance with procedures described in Metal Roofing and Wall Cladding Code of Practice have led to the development of the following load span tables/charts.

Generic Standing Seam Clip Spacing

Rib Height	Max pan width	NZS 3604 Wind Zone			
		Medium	High	Very High	Extra High
25mm	300mm	500mm	500mm	500mm	500mm
	400mm	500mm	500mm	500mm	500mm
	500mm	400mm	400mm	400mm	N/A
32mm	300mm	600mm	600mm	600mm	600mm
	400mm	600mm	600mm	600mm	600mm
	520mm	600mm	600mm	600mm	400mm
38mm	300mm	600mm	600mm	600mm	600mm
	400mm	600mm	600mm	600mm	600mm
	500mm	600mm	600mm	600mm	400mm

Clause B2 — Durability, Performance, B2.3.1 (b), B2.3.2

Acceptable Solution B2/AS1

- Materials in accordance with E2/AS1 And NZMRM Code of Practice (v23.09) which provides for profiled metal roofing and cladding solutions including durability attributes of the building
- System componentry materials in accordance with Table 20 of Acceptable Solution E2/AS1 and section 4 NZ 3604.2011 and Table 1 of Acceptable Solution B2/AS1

Durability in accordance with Table 20 E2/AS1		
Sea Spray Exposure B Low, C Medium, D High, E Severe Marine		
Product	Rain Washed Roofs	Walls and Unwashed Areas
Zinc / Aluminium	B, C, D, E	B, C, D, E
Colorsteel Endura/ Colorcote Alumiguard	B, C, D	B, C
Colorsteel Maxx/Colorcote MagnaFlow	B, C, D, E	B, C, D
Copper	B, C, D, E	B, C, D, E

Clause C3 — Fire, Performance C3.7 (a)

Acceptable Solution C/AS2 1st Edition, June 2019

Verification Method C/VM2

- Metal is defined in C/AS1 and C/AS2 as non-combustible

Clause E2 — External Moisture, Performance E2.3.1, E2.3.2, E2.3.5 and E2.3.7 (a), (b) + (c)

Alternative Solution

- Generally in accordance with NZMRM Code of Practice (V23.09)
- Evaluation of profiles demonstrates compliance with Clause E2 (TBB, 11/2023)

Clause F2 — Hazardous Building Materials, Performance, F2.3.1

Alternative Solution

- Use in accordance with the supplier’s safety information
- Coating system is inert once dry

The building product is not subject to a warning or ban under the Building Act 2004

Version

1.1

Date

11 December 2023