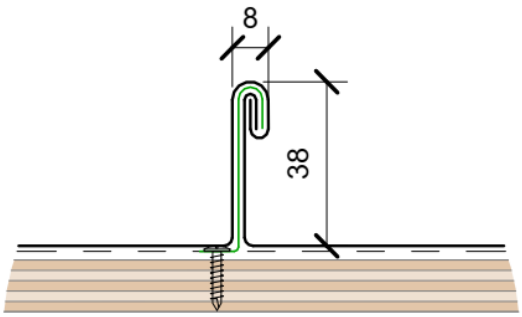
METAL DESIGN SOLUTIONS

Building Product Information Sheet

Product Name:

Euro Roof Double Standing Seam

Product Drawing:



Product Description:

Metal Design Solutions Double Standing Seam profile also known as standing seam, contributes a pleasing wide pan tray and is available in seam heights of 25mm or 38mm. The Double Standing Seam profile is fixed to a substrate with concealed clips. The Double Standing Seam may be manufactured in copper and zinc.

Place of Manufacture:

New Zealand

Legal and trading name of the manufacturer:

Metal Design Solutions Limited

Address for Service:

54 Rangi 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 53
- 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.

Materials:

- 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 a 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:

- 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

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

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	B, C, D, E	B, C, D, E
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