

# Roofing Roofing

# METALCRAFT BEVELBACK WEATHERBOARD

# PURPOSE

Metalcraft supply Bevelback Weatherboard profiled metal sheet as a horizontally laid wall cladding.

# EXPLANATION

Metalcraft fabricates Bevelback Weatherboard from steel manufactured by NZ Steel. The steel is supplied in a range of protective coatings to meet NZ's exposure zones. Metalcraft Bevelback Weatherboard is available in the full Colorsteel® range.

The sheets are available in the following NZ Steel branded products:

- Colorsteel<sup>®</sup> Endura<sup>®</sup>
- > Colorsteel® Maxx®
- > Galvsteel®
- > Zincalume®

Bevelback Weatherboard sheets are available in the following sizes:

- > Thickness (mm): 0.40 and 0.55
- > Width (mm): Cover 812, Sheet 842.

# **SCOPE AND LIMITATIONS OF USE**



Figure 1: Profile Dimensions. Note: Dimensions are nominal.

Scope	Limitations
Location	
In all wind zones as defined in NZS 3604:2011 and in all calculated design loads.	> Metalcraft Bevelback Weatherboard load span tables apply in wind zones up to, and including, extra high.
	> Where the calculated design loads are greater than 2.5kPa the engineer must satisfy themselves that the product, pitch and fixings will meet the conditions.
In all exposure zones defined by NZS 3604:2011.	> In exposure Zone D only Colorsteel <sup>®</sup> Endura <sup>®</sup> or Colorsteel <sup>®</sup> Maxx <sup>®</sup> may be used.
	> For use in microclimatic considerations (as defined in paragraph 4.2.4) refer to Metalcraft Roofing for technical advice.
	> For more information on the specific exposure zones refer to www.colorsteel.co.nz.
On buildings located any proximity to a relevant boundary.	Fixings to be in accordance with E2/AS1 or specific engineering, where applicable.
Building	
On timber or steel structural framing.	A thermal break is required where Metalcraft Bevelback Weatherboard is used in conjunction with steel framing.
In conjunction with a primary structure that complies with the NZ Building Code or where the designer has established that the existing structure is suitable for the intended building work.	> Building height is limited by the Metalcraft Bevelback Weatherboard design load span tables (refer to: www.metalcraftgroup.co.nz) unless specifically engineered.
As a wall cladding.	A drained and ventilated cavity is always required unless the building is unlined or importance level 1, in which case the Metalcraft Bevelback Weatherboard may be direct fixed as per E2/AS1.
	> Flashings, flexible and rigid building underlays and fixings to be in accordance with E2/AS1 and NZMRM: <i>Code of Practice (V3.0)</i> .
	> Contact with other materials must be in accordance with E2/AS1 and NZMRM: <i>Code of Practice (V3.0).</i>

#### NZ STEEL ASSURANCE

Australasian registered Environmental Protection Declaration (EPD); compliant with EN 15804.

#### > ISO 9001:2015. Telarc No.82

> ISO 14001:2015. Telarc No. 63.

# **PERFORMANCE CLAIMS**

If designed, installed and maintained in accordance with all Metalcraft Roofing requirements, the Bevelback Weatherboard will comply with or contribute to compliance with the following performance claims:

NZ Building		BASIS OF COMPLIANCE
Code clauses	Compliance pathway	Demonstrated by
<b>B1 Structure</b> B1.3.1, B1.3.2 B1.3.3 (a, b, c, d, g, i)	ACCEPTABLE SOLUTION B1/AS1	Steel in accordance with AS 1397:2021, which is equivalent to AS 1397:2011 for the NZ Steel steel. AS 1397 is cited in NASH Standard Part 1:2016 and NASH Standard Part 2:2019 (BlueScope, 2016).
		> Metalcraft span tables in accordance with AS/NZS 1170.
B2 DurabilityVERIFICATION METHOB2.3.1 (b)B2/VM1B2.3.2 (b)	VERIFICATION METHOD B2/VM1	Steel in accordance with AS 1397:2021, which is equivalent to AS 1397:2011 for the NZ Steel steel. AS 1397 is cited in NASH Standard Part 1:2016 and NASH Standard Part 2:2019 (BlueScope, 2016).
		> Coating to AS 2728, which is cited in E2/AS1. (BlueScope, 2013)
		> NZ Steel and their parent company BlueScope provides assurance that when correctly installed and maintained, their products will meet or exceed NZ Building Code B2: Durability.
C3 Fire Affecting AreasACCEPTABLE SOLUTIONBeyond the Fire SourceC/AS1C3.4 (a), C3.7 (a)C/AS2	ACCEPTABLE SOLUTION	> Steel is defined in C/AS1 and C/AS2 as non-combustible.
	,	> Non-combustible products achieve a material group number 1.
<b>E2 External Moisture</b> E2.3.1, E2.3.2, E2.3.7 (a, b, c)	ALTERNATIVE SOLUTION	E2 comparison (TBB, 2022).
		Largely in accordance with E2/AS1
F2 HazardousALTERNATIVE SOLUTIONBuilding MaterialsColorsteel® safety data sheetF2.3.1F2.3.1	ALTERNATIVE SOLUTION Colorsteel® safety data sheet	Steel in accordance with AS 1397:2021, which is equivalent to AS 1397:2011 for the NZ Steel steel. (BlueScope, 2016).
	> Use in accordance with manufacturer's safety requirements.	

# SOURCES OF INFORMATION

- BlueScope (2016). Specification clauses for steel to ensure compliance with relevant Australian standards/regulations. Refer http://www.steel. com.au/library. [Accessed 27/02/2022].
- BlueScope (2013). New Colorbond® steel. Refer http://www.steel.com. au/articles/article-44--new-colorbond-steel. [Accessed 27/02/2022].
- BRANZ. (20/05/2020). Harvesting rainwater. Refer https://www.level. org.nz/water/water-supply/mains-or-rainwater/harvesting-rainwater/. [Accessed 27/02/2022].
- ➢ EPD Australasia. (23/10/2018). Colorsteel®, Endure®, Colorsteel Maxx<sup>®</sup> Environmental Product Declaration. Refer https://epd-australasia.com/ epd/colorsteel-endura-and-colorsteel-maxx/. [Accessed 27/02/2022].
- NZ Steel. (10/2018). Maintenance recommendations brochure V4.0. Refer https://www.colorsteel.co.nz/resources/downloads-and-brochures/. [Accessed 27/02/2022].
- > NZ Steel. (2022). *Zincalume® steel features*. Refer https://www.nzsteel. co.nz/products/zincalume/features/. [Accessed 27/02/2022].
- 1. Where a standard is referenced it is to be read as amended by the acceptable solution or verification method as applicable.
- Sources of information also include the Building Act 2004 and its regulations, including the Building Code (Schedule 1 of the Building Regulations 1992), Acceptable Solutions and Verification Methods, and relevant cited standards.
- 3. The quality and assurance that the supplied products meet the performance claims stated in this pass<sup>™</sup> are the responsibility of the company that is the holder
- of this pass™ 4. Where E2/AS1 is referenced it is to be read as including E2/AS4.
  - Metalcraft Roofing confirms that if Metalcraft Bevelback weatherboards are used in accordance with the requirements of this pass™ the product will comply with the NZ Building Code and other performance claims set out in this pass™ and the company has met all of its obligations under s14 G of the Building Act.

Date of first issue:	29/11/2019
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NZBN:	9429032461152

- NZ Metal Roof Manufacturer's (NZMRM) (06/2018, Amend 12/2021). Code of Practice V3.0. Refer https://www.metalroofing.org.nz/ codeonline. [Accessed 27/02/2022].
- Telarc (14/08/2019). ISO 9001:2015 The design, manufacture and supply of hot and cold rolled steel plate, sheet and strip, and coated, steel coil and flat sheet. No 82. Refer https://www.nzsteel.co.nz/new-zealand-steel/ responsibilities/certificates-and-memberships/ [Accessed 28/02/2022].
- Telarc (24/07/2003). ISO 14001:2015 The management of environmental aspects associated with the operation of: the Glenbrook Mill Site; the Waikato North Head Iron Sand Quarry; Pacific Steel NZ Ltd – Wire Mill; Pacific Steel NZ Ltd – Rolling Mill. No. 63. Refer https://www.nzsteel.co.nz/new-zealand-steel/ responsibilities/certificates-and-memberships/ [Accessed 28/02/2022].
- **TBB** (02/2022). *E2* comparison V1.0.

Scan or click this QR code for a full download of Compliance Documentation for this pass™.



www.metalcraftgroup.co.nz

# Kevin Brunton

Kevin Brunton, Technical Director, TBB confirms that this pass has been prepared on behalf of Metalcraft Roofing and in accordance with MBIE PTS guidelines and in accordance with the TBB pass™ process which is within the scope of TBB's ISO 9001 certification.

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#### For more information visit www.metalcraftgroup.co.nz.

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