

Product Technical Statement v2022.1

MANUFACTURER

New Zealand Steel Ltd, 131 Mission Bush Rd Glenbrook 2681,
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DESCRIPTION

Endura® is metallic coated steel with an organic coating applied to both surfaces. It is available in a range of thicknesses, tensile strengths and widths. Thicknesses are typically quoted as the base steel thickness rather than the total coated thickness.

APPEARANCE

COLORSTEEL® is available in various top coat colours. The standard backer is Perpetual Grey®, or double-sided coating to customer's choice.

Colour retention (CIE Lab units Delta E) is 8 units maximum after 10 years exposure, and 10 units maximum after 15 years exposure. Chalk rating (AS 1580:481.1.11:1998) is no more than 4 after 10 years exposure.

Solar reflectance and light reflectance values vary with colour, refer to COLORSTEEL® Light Reflectance brochure for details.

STANDARDS

Steel substrate may be either G300 or G550 consistent with AS 1397:2011.

Metallic coating is AZ 150 consistent with AS 1397:2011

Endura® is Product Type 4 consistent with AS/NZS 2728:2013.

Tolerances are consistent with the requirements of AS/NZS 1365:1996.

SCOPE

Endura® is suitable to be manufactured into roofing, wall cladding, rainwater goods and accessories within the constraints detailed by manufacturers literature and NZBC requirements.

RELEVANCE TO THE NEW ZEALAND BUILDING CODE

• B1 Structure

The strength of products manufactured from Endura® depends on the profiles it is formed into. In turn, this will determine how Endura® applies to the building code.

Structural capacity of the finished members should be obtained from the roofing manufacturer.

• B2 Durability

Endura® is a Type 4 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. Warranty information is available in the Environmental Categories, Warranty & Product Maintenance recommendations brochure.

• C Fire

Endura® is rated as a Group 1-S material and has an average specific extinction area of 132.2 m²/kg, a peak heat release rate of 16.0 kW/m² and total heat released of 0.54 MJ/m² when tested in accordance with ISO 5660:2002 Part 1 and Part 2.

INSTALLATION

Endura® must be installed by a suitably qualified building practitioner in accordance with NZ Steel literature, the New Zealand Metal Roof and Wall Cladding Code of Practice and good trade practice.

MAINTENANCE

Roofs exposed to the washing effects of rain should be inspected annually and any build-up of debris or other corrosive substances removed. Wall cladding and sheltered roofs and other high-risk areas must be maintained regularly in accordance with NZ Steel Maintenance Recommendations.

QUALITY ASSURANCE: ISO 9001:2015.



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