

**PRODUCT TECHNICAL STATEMENT v2018.1**

**MANUFACTURER**

New Zealand Steel Ltd, 131 Mission Bush Rd Glenbrook 2681, www.nzsteel.co.nz

**DESCRIPTION**

COLORSTEEL® 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

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

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

**SCOPE**

COLORSTEEL® 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 COLORSTEEL® Endura® depends on the profiles it is formed into. In turn, this will determine how COLORSTEEL® Endura® applies to the building code. Structural capacity of the finished members should be obtained from the roofing manufacturer.

• **B2 Durability**

COLORSTEEL® 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**

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

• **G12 Drinking Water**

COLORSTEEL® Endura® samples tested in accordance with AS/NZS 4020:2005 passed the requirements for products in contact with drinking water.

**INSTALLATION**

COLORSTEEL® 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.**

For more information about COLORSTEEL® products call **0800 697 833** or visit **www.colorsteel.co.nz**

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