Tray roofing and wall cladding View miproducts listing



Level of assurance needed to demonstrate NZ Building Code Compliance

Supporting documentation should include technical information by manufacturer and either an independent assessment or reference to an industry-based scheme



Stratco confirms that this minimum level of assurance has been met or exceeded by the following:

NZ Metal Roofing Manufacturers Association Inc. NZ Metal Roof & Wall Cladding Code of Practice

BPIR

The following information has been provided by Stratco demonstrating how this product complies with the <u>Building Product Information Requirements</u>.

Technical Statement

Product Class

CLASS 1

Product Description

Hiland Tray[™] is a proprietary 460mm wide tray roofing and wall cladding system, that does not require a supporting substrate in most applications and is secret fixed or 'snap locked' to roof purlins and wall girts using a concealed clip system. It is available with the option of swages within the tray pan, or no swages for a more traditional look. The Hiland Tray[™] profile has a rib height of 44mm which provides greater water carrying capacity as well as strength for snow loading applications in alpine regions.

Hiland Tray[™] is usually manufactured at a Stratco facility and delivered to site. For larger projects or where there are long lengths required, an option for manufacturing onsite with a mobile roll forming facility is also available

Scope of use

Stratco Hiland Tray ™ is a self supporting Tray style metal roofing and wall cladding that has it's origins in Europe. It is outside the scope of E2/AS1 due to the pan width exceeding 210mm and is therefore an Alternative Solution.

It is a practical and versatile solution for roofing and wall cladding applications. Its timeless profile enables it to blend in with contemporary homes.

Oil canning (wave or ripple) in the pan of Hiland Tray™ occurs through thermal movement and is inherent in most wide, flat steel roofing and wall cladding products. This is visual only and does not affect the performance of the product.

New Zealand Building Code (NZBC)

The product will, if employed in accordance with the supplier's installation and maintenance requirements, assist with meeting the following provisions of the building code:

Clause B1 Structure: Performance B1.3.1, B1.3.2, B1.3.3, B1.3.3(b), B1.3.3(c), B1.3.3(f), B1.3.3(g), B1.3.3(h), B1.3.3(j), B1.3.4, B1.3.4(a), B1.3.4(b), B1.3.4(c), B1.3.4(d), B1.3.4(e)

Clause B1 Structure: B1.3.1, B1.3.2, B1.3.3 (b, c, f, g, h, j), B1.3.4

Span tables are in accordance with AS/NZS 1170.2:2002 and based on a maximum overall building height of ten metres and a 500 year design return period for strength limit state wind load assessment. Roofing spans specified are suitable for snow loading up to 2kPa in accordance with the New Zealand Metal Roof and Wall Cladding Code of Practice.

• Clause B2 Durability: Performance B2.3.1, B2.3.1(b)

Durability in accordance with Table 20 E2/AS1

Rain Washed Roofs

Colorsteel Endura / Colorcote Zinacore B, C, D

Colorsteel Maxx / Colorcote Magnaflow B, C, D, E

Colorsteel Altimate / Colorcote Alumiguard B, C, D, E

Walls and Unwashed Areas

Colorsteel Endura / Colorcote Zinacore B, C

Colorsteel Maxx / Colorcote Magnaflow C, D



masterspec partner

Company Contact Details



| Company: | Stratco |
|----------------------|--|
| Physical Address: | 55 Hands Road Middleton CHRISTCHURCH |
| Postal Address: | PO Box 8494 Riccarton CHRISTCHURCH |
| Telephone: | 64 03 3389063 |
| Fax: | 64 03 3382829 |
| Email: | technical@stratco.co.nz |
| Website: | www.stratco.co.nz |

Colorsteel Altimate / Colorcote Alumiguard B, C, D, E

- Clause C3 Fire affecting areas beyond the fire source: Performance C3.5, C3.6, C3.7 Zinc/alum coated steel, Colorsteel and Colorcote products are rated as a Group 1-S material when tested in accordance with ISO 5660:2002 Part 1 & Part 2
- Clause E1 Surface water: Performance E1.3.2

Hiland Tray™ carrying capacity - Refer Stratco BPIR www.stratco.co.nz/siteassets/pdfs/bpis/stratco-hiland-tray-building-product-informationsheet.pdf

Capacity Calculation in accordance with NZ Metal Roofing and Wall Cladding Code of Practice calculators

• Clause E2 External moisture: Performance E2.3.1, E2.3.2, E2.3.7

The versatility of Hiland Tray[™] lends itself to a wide range of details for any application. Standard design details can be accessed from the web: www.stratco.co.nz/nz/roofing-and-walling/cgi-corrugated-cladding/

Alternative details may comply with solutions for trough sections found in E2/AS1, or comply with the 4 "D's" Deflection, Draining, Drying and Durability.

- Clause E3 Internal moisture: Performance E3.3.1
 When used with an absorbent, permeable underlay, complying with NZS 2295 2006, Hiland Tray[™] will contribute to compliance with NZBC E3.3.1. Ceiling spaces of sarked roofs, skillion roofs, barrel curved roofs, flat roofs and roofs over moisture laden environments must have provision for adequate ventilation.
- Clause F2 Hazardous building materials: Performance F2.3.1 Hiland Tray™ manufactured from Zinc/alum coated steel, Colorsteel, Colorcote or pre-painted aluminium will meet the performance requirement of F2.3.1.
- Clause G12 Water supplies: Performance G12.3.2, G12.3.2(a), G12.3.2(b), G12.3.2(c) Colorsteel and Colorcote tested in accordance with AS/NZS 4020:2005 passed the requirements for products in contact with drinking water.

Evidence

The product meets the requirements set out in the following documents, or relevant parts of cited standards within the documents:

NZ Metal Roofing Manufacturers Association Inc. (NZMRM Code of Practice) www.metalroofing.org.nz/cop

NZ Steel www.colorsteel.co.nz/resources/downloads-and-brochures/ Pacific Coilcoaters www.colorcote.co.nz/technical-information/

Supporting evidence provided where requested will apply to the product substrate supplied for the specific project.

The Wind Capacity Tables are based on testing in accordance with AS1562.1-1992 and AS4040.0, 1 & 2-1992. Span tables have been developed by determining wind pressures in accordance with AS4055-2006 for domestic applications and AS/NZS 1170.2:2002 for all other applications.

Supporting Evidence

The product has and can make available the following additional evidence to support the above statements:

NZ Metal Roofing Manufacturers Association Inc. NZ Metal Roof & Wall Cladding Code of Practice

Use in Service History

Test data is available for coil supplied by NZ Steel (COLORSTEEL) and Pacific Coilcoaters (COLORCOTE). Supporting evidence provided where requested will apply to the product substrate supplied for the specific project.

Both Colorsteel and Colorcote have past history of in-service use of metal long run roof and wall cladding within New Zealand.

Product Criteria

Design requirements

Roof pitch minimum 3°

Effective cover 460mm

Specify material coating to suit building location/environment

Unpainted metallic coated steel, COLORSTEEL®, including Matte, and ColorCote standard colour ranges - availability and minimum quantities may apply

Stratco flashing details for roofing and wall cladding to be used to meet NZ Building Code, E2/AS1 and NZ Metal Roofing Manufacturers Code of Practice

Allow for thermal expansion of Hiland Tray™ particularly in darker colours

Purlin spacing not to exceed maximum spans as per Hiland Tray™ span tables

Hiland Tray™ wall cladding to use drainage cavity batten

Ensure compatibility when using Hiland Tray™ roofing/wall cladding with other metal products such as copper to prevent accelerated corrosion

For full design considerations refer: www.stratco.co.nz/siteassets/pdfs/bpis/stratco-hiland-tray-buildingproduct-information-sheet.pdf

Installation requirements

Packs of Hiland Tray™d sheeting should always be kept dry and stored above ground level on site. If the sheets have become wet, they should be separated, wiped and placed in the open to dry.

Hiland Tray™ sheets should be laid lapping to sit neatly on the preceding roof sheet.

Cut pre-painted steel material by shear only - use nibblers or hand shears. Friction blades and highspeed saw blades must not be used on metal cladding.

Black lead pencils must never be used for marking aluminium/zinc, and unpainted or pre-painted steel products. Use a pencil of any colour other than black, a marker pen, or crayon.

Refer www.stratco.co.nz/siteassets/pdfs/bpis/stratco-hiland-tray-building-product-information-sheet.pdf for full details

Maintenance requirements

All roofing and cladding products are subject to the cumulative effects of weather, dust and other deposits so the performance and durability of Hiland Tray™ roofing and wall cladding over time depends on its correct maintenance. For roofing, normal rain washing will remove most accumulated atmospheric contaminants from the top side of roofs.

Areas that do not receive adequate rain washing (known as unwashed areas) require more extensive manual washing.

Roofing and cladding products should be manually washed by either water and a sponge or a soft nylon-bristled brush or by water blasting at pressures of no more than 20MPa. Never use abrasive or solvent based cleaners such as turps, petrol or kerosene.

Warrantees

Colorsteel Warranty

Colorcote Warranty

Company Product Information

Environmental

Stratco has Toitu Enviromark Gold Certification. Stratco sites recycle all steel and aluminium scrap and offcuts which can then be remelted for use in other steel products.

Steel and aluminium are infinitely recyclable so at the end of its useful life the product can be recycled and remelted for other products.

Relationships



Environmental Choice New Zealand

Building Product Information Requirements

Manufacturer

Legal Trading Name: Stratco

Business Email: technical@stratco.co.nz

Company Website: www.stratco.co.nz

Contact Number/s: +64 03 -3389063 0800 787282

Product Identifier HILAND TRAY™

Warnings

This product has no warnings associated with it.



Date last validated: 17 June 2024

Date last updated: 17 June 2024

Disclaimer: The Product Technical Statement (PTS) template is copyright to Construction Information Limited. However the content of this PTS is the responsibility of the product manufacturer/supplier. Refer to the miproducts Terms and Conditions

1