

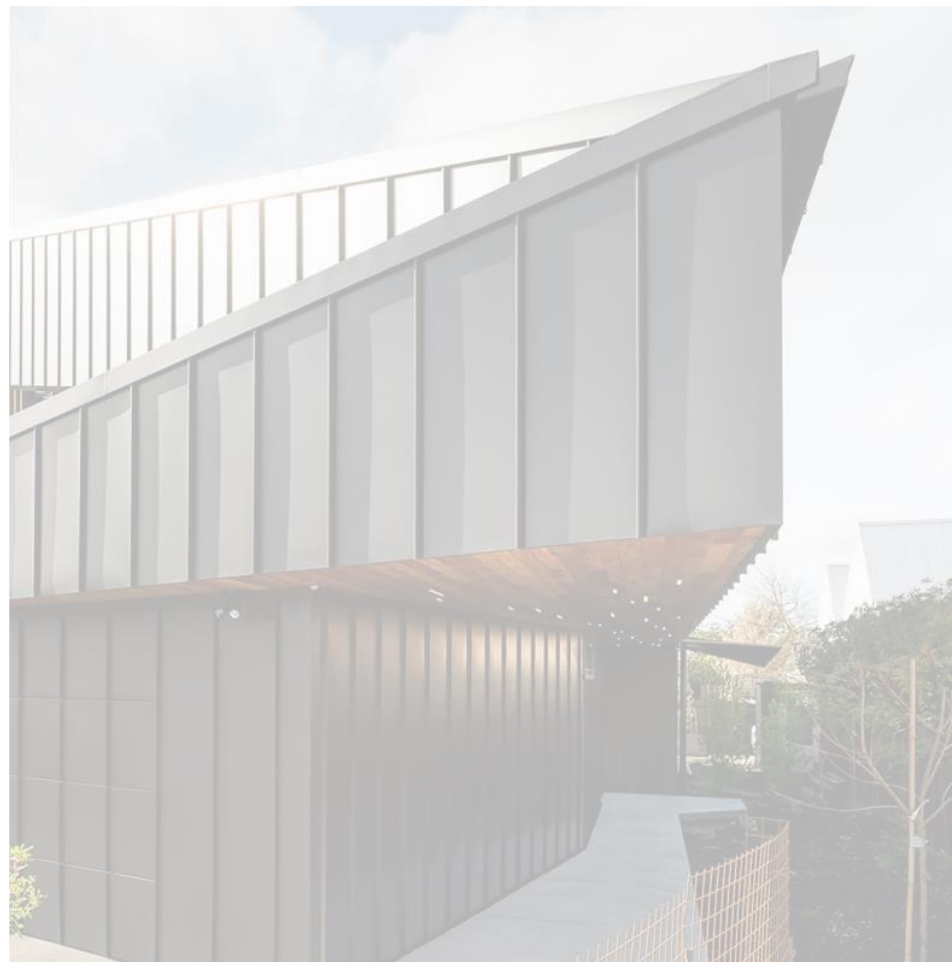
TARC Single Lock (TARC SL)

Product Technical Statement

The architectural world is continuously evolving and searching for the latest designs and innovations, we here at The Architectural Roofing Company pride ourselves in providing architects with the latest roofing and cladding trends within a very niche architectural market.

We are pleased to introduce a revolutionary series of internationally inspired roofing and wall cladding products, all manufactured using the very latest technology and machinery that Europe and the US offers.

TARC Single Lock (TARC SL) is an elegant roofing and wall cladding system that offers building designers style, design flexibility, sustainability and durability. Our roofing system is predicted to be at the forefront of the architectural building, design and construction industry.



Profile



Applications

- Residential Roofing & Cladding
- Commercial Roofing & Cladding
- Heritage Buildings
- Public Buildings
- Sporting Arenas

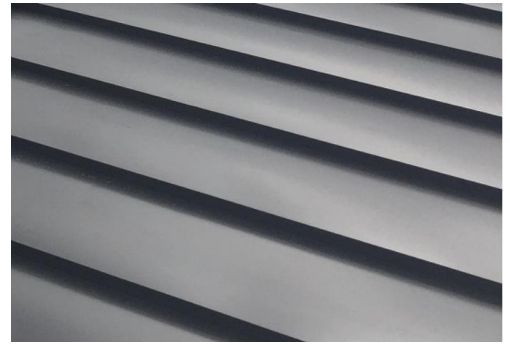
Installation

TARC Single Lock (TARC SL) is installed over a solid substructure which uses a secret fixing clip, for timber framed buildings designed and constructed in accordance with B1/AS1, NZS3604 and E2/AS1, designed steel framed buildings to NASH 3405, and specifically designed buildings in accordance with B1/VM1 and AS/NZS 1170. Panels are joined by clipping and seaming and do not have any external through fixings.

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 [for the relevant physical conditions of (a) self-weight, (b) imposed gravity loads arising from use, (c) temperature, (d) earthquake, (e) snow, and (g) wind] and B1.3.4
- Clause B2 Durability: Performance B2.3.1(b); B2.3.2
- Clause C3 Fire Affecting Areas Beyond the Fire Source: Performance C3.7. TARC Single Lock is non-combustible and contributes to C3.7(a)
- Clause E2 External moisture: Performance E2.3.1, E2.3.2. TARC Single Lock falls outside the scope of E2/AS1 and is to be specifically designed and installed to the manufacturers' recommendations
- Clause F2 Hazardous Building Material: Performance F2.3.1



When used as a roof cladding

TARC Single Lock (TARC SL) may be used with a minimum roof gradient of 5 degrees.



When used as a wall cladding

TARC Single Lock (TARC SL) must be fixed over a solid substructure over a nominal 20mm drained cavity.



Evidence

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

- Verification Method for Structure B1/VM1
- Acceptable Solution B1/AS1
- Verification Method C/VM2
- AS/NZS 2728: 2013
- NZ Metal Roof and Wall Cladding Code of Practice Version 2.2/2012 (MRM Code of Practice)
- AS/NZS 4020: 2005 Testing of products for use in contact with drinking water
- AS/NZS 1734: 1997 Aluminium and aluminium alloys – Flat sheet, coiled sheet and plate
- AS/NZS 4534: 2006 Zinc and zinc/aluminium alloy coatings on steel wire
- AS/NZS 4680: 2006 Hot-dip galvanized (zinc) coatings on fabricated ferrous articles
- AS 1397: 2011 Continuous hot-dip metallic coated steel sheet and strip – Coatings of zinc and zinc alloyed with aluminium and magnesium BS EN 988: 1997 Zinc and zinc alloys. Specification for rolled products for building
- ISO 9223: 1992 Corrosion of metals and alloys; corrosivity of atmospheres; classification
- Tested for wind loads to AS4040.3: 1992 Methods of testing sheet roof and wall cladding Resistance to wind pressures for cyclone regions AS4040.2: 1992 Methods of testing sheet roof and wall cladding. Resistance to wind pressures for non-cyclone regions

Supporting evidence

The product has and can make available the following additional evidence to support the above statements: New Zealand Metal Roofing Manufacturers Association Inc (NZMRM) Code of Practice.

Use in service history

TARC Single Lock (TARC SL) coil is supplied by NZ Steel and Pacific Coil coaters, and history of in-service use of metal long run roof and wall cladding within New Zealand tests to in-service use.



Design requirements

Refer to The Architectural Roofing Company Ltd. for material recommendations and standard pan widths to minimize waste and generally shorten lead times.

Refer to MRM Code of Practice, Section 11 for Secret Fixed Cladding. TARC Single Lock (TARC SL) is secretly fixed with a clip system. Panels are mechanically fixed together without any external through fixings. (For fixings and fixing patterns please refer to The Architectural Roofing Company Ltd. Installation Manual).

A breather type underlay is recommended over substructure.

Available in a range of materials & sizes

Gauges: 0.55 mm BMT in plain and pre-painted steel, and 0.7mm BMT zinc, copper and aluminum.

Tray width sizes ranging: 300mm to 510mm.

Maintenance requirements

Regular maintenance will extend the life of TARC Single Lock (TARC SL) and associated accessories. Maintenance guides are available from The Architectural Roofing Company Ltd. or can be downloaded from either NZ Steel or Pacific Coil coaters website.

Guide to regular maintenance

Inspect the roof, including fasteners, and repair any damage every 6 months. Wash areas not receiving regular rain washing with fresh water at least every 3 - 6 months.

- Remove debris from gutters every 3 - 6 months.
- Remove any noticeable buildup of salt deposits and/or other contaminants when identified.
- Please consult with your local distributor when considering over painting to ensure correct procedures are undertaken.

Warranties

Please refer to The Architectural Roofing Company Ltd., for warranty periods, product recommendations, maintenance requirements and product usage restrictions

Environmental

Colorsteel and ColorCote pre-painted steel has been extensively tested and proven in some of New Zealand's most extreme UV, wind, rain, snow and ice environments. All Colorsteel and ColorCote materials are factory painted at either NZ Steel's Glenbrook mill, or at Pacific Coil Coaters' Penrose mill.

Environmental literature available by request by contacting the TARC technical helpline at 0800 50 2004.