

SUPER SEAMTM

Architectural Roofing and Cladding



 **The Roofing Store**

About Super Seam™

Super Seam™ is our latest tray system for roofing & cladding providing sleek lines and wider pans giving off an elegant European look without the additional cost of a substrate thus reducing costs.

Super Seam™ is a wide tray roofing system roll formed in single length trays, hidden fixed to purlin. Trays are snapped together using the hidden clips and the specially designed over and under of the tray.

Super Seam™ allows a much greater flexibility in design than other standard long run profiles. Tray sizes may vary depending on design requirements.

Super Seam™ is an ideal cladding for roof, facade, soffit and fascia areas. Using traditional European techniques Super seam will enhance the style or type of building. Because of super seams flexibility with complex designs and shapes it can be handled relatively with ease.



The KiwiColour® range of pre-painted steel products have been developed specifically to withstand the higher levels of UV and salt air in the New Zealand environment.

- Combines form, function and durability to meet your design and project requirements from roofing products and rainwater systems through to building cladding and interior.
- Opens a vast world of design possibilities for architects, product designers and manufacturers in an extensive range of colours available on our colour charts.
- Ensures a superior, longer lasting finish to steel products and is available in three paint finishes; VITOR+, VITOR+ZX or LUX, depending on your environmental and aesthetic requirements.

VITOR⁺ **VITOR^{+ZX}**
LUX[™]





APPLICATION

Super Seam™ is ideal for use on new homes, reroofing, and existing buildings where a stylish versatile cladding system is desirable.

Areas of application could include:

- + Roof
- + Facade
- + Turrets
- + Soffits
- + Fascias

Super Seam™ is also ideal for creating features as:

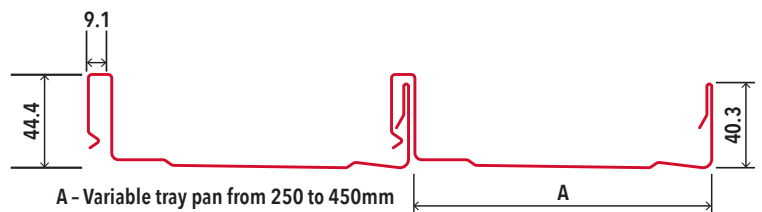
- + Chimney cladding
- + Flashings
- + Interior feature walls
- + Pillar & column surrounds
- + Gable and infill
- + Gothic style homes
- + Entrance canopies

PROFILE INFORMATION

Super Seam™ is available in a variety of widths. We can offer 250 & 450 Wide pans as our most cost effective widths for manufacture and installation. Please consult with The Roofing Store for alternative tray sizing.

SUPER SEAM™ DIMENSIONS

- Optional swages in centre of pan to reduce canning
- Suitable for wall cladding and roofs with a minimum pitch of 3°
- Variable pan from 250 to 450 mm
- Seam height – 45mm overall Height
- Can be manufactured in full range of materials:
 - VITOR+, VITOR+ZX or LUX - 0.55g Steel
 - Aluminum 0.80g
 - Copper (Plywood Substrate required)



Minimum pitches are dependent on factors like tray lengths, local conditions like snow zones, wind and rainfall intensities. Please consult with us for recommendations.

A maximum tray length depends on the material used, roof pitch and local conditions. Please consult with The Roofing Store.

DESIGN CONSIDERATIONS

When using Super Seam™ consideration should be given to the following:

- Material type
- Rib centers
- Roof shape
- Roof pitch
- Oil canning
- Wind loads
- Colour / Reflective Value
- Snow and rainfall zone
- Roof noise

PURLINS / ROOF STRUCTURE

As per details to support under flashings. 600 centers max Purlin Spacing.

The size of purlin shall generally be taken from NZS 3604 Section 10, using spacing as determined by the span/load graphs and also the spanning capabilities of the roofing/cladding panels.

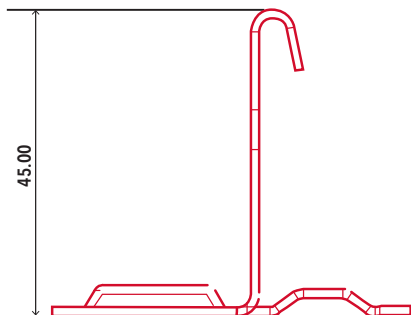
FIXINGS

We recommend use of 2 Screws per clip minimum. Allowance for 3 Screws per clip in High wind zones. Class 4/5 Screws to be used.

- Steel - 10g x 16-22mm Wafer Head
- Timber - 10-12g x 35-45mm Wafer Head

FIXING CLIPS

Fixing Clips to have min 2 Screws per clip. Clips to be made of appropriate material to match chosen Super Seam™ materials and fixings.



FLASHINGS

Flashing system for Super Seam™ are generally in accordance with E2/AS1 (Third Edition) or the Roofing Code of Practice. Use only self-sealing rivets as per the code of practice.

Please consult with The Roofing Store for system details.

UNDERLAYS

We recommend the use of anti-abrasive & Self Supporting breathable type Synthetic underlay. Refer to the local range of products availability such as Thermakraft - 407 or DRI-STUD FRU 38.

Ventilation for the roof space is strongly recommended to avoid condensation beneath the roofing trays.

Purlin tapes may be used to reduce oil canning or purlin showing through in high foot traffic areas.

OIL CANNING

Oil Canning can be defined as visible waviness in the flat areas of metal roofing and wall panels. It can occur in any type of metal panels: steel, aluminum, zinc, or copper. The degree of waviness can be difficult to measure, but may be apparent, especially under specific lighting conditions. Also it is very important that the supporting structure is completely aligned (flat) as to not stress the panels and cause oil canning.

To reduce oil canning we can provide a double swage to each pan of the Super Seam™ to strengthen the pan.

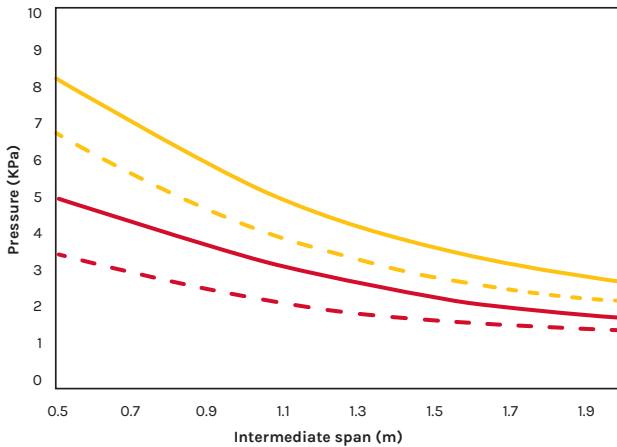
Also lighter colours will help reduce the effect of oil canning.



WINDLOADS

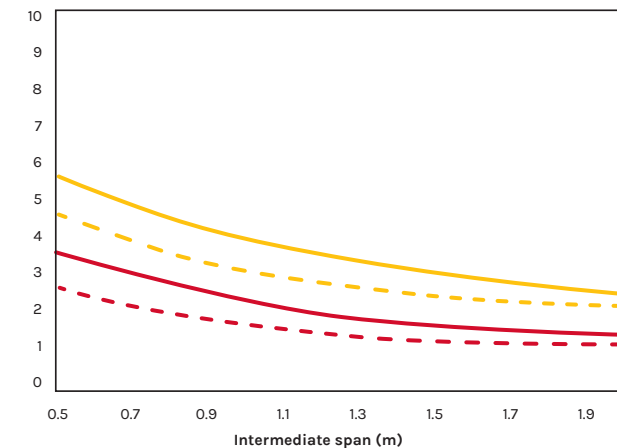
Wind Loads to be determined by designer for each project. For wall cladding and high wind load areas narrower tray widths should be used. We can recommend suitable materials and sizes. Please consult with The Roofing Store.

Static uplift wind pressure Load - span for 0.55mm thick, G300 grade steel.



450mm pan Super Seam **250mm pan Super Seam**
 — Ultimate limit state — Ultimate limit state
 - - - Serviceability limit state - - - Serviceability limit state

Cyclic wind pressure Load - span for 0.55mm thick, G300 grade steel.



450mm pan Super Seam **250mm pan Super Seam**
 — Ultimate limit state — Ultimate limit state
 - - - Serviceability limit state - - - Serviceability limit state

Intermediate span in metres. End spans to be 2/3 of intermediate span. Intermediate span of 600mm can also use end spans of 600mm.

THERMAL EXPANSION AND CONTRACTION

The rate of thermal expansion and contraction varies between the metals and also the colour of the product. To accommodate this Super Seam trays are fixed with a clip system that allows movement/expansion. Ventilation of the roof space is recommended.

MATERIAL EXPANSION (mm/m-C) 70°C CHANGE OVER 10M TRAY (mm)

Steel	0.011	7.7
Aluminum	0.023	16.1
Copper	0.017	11.9

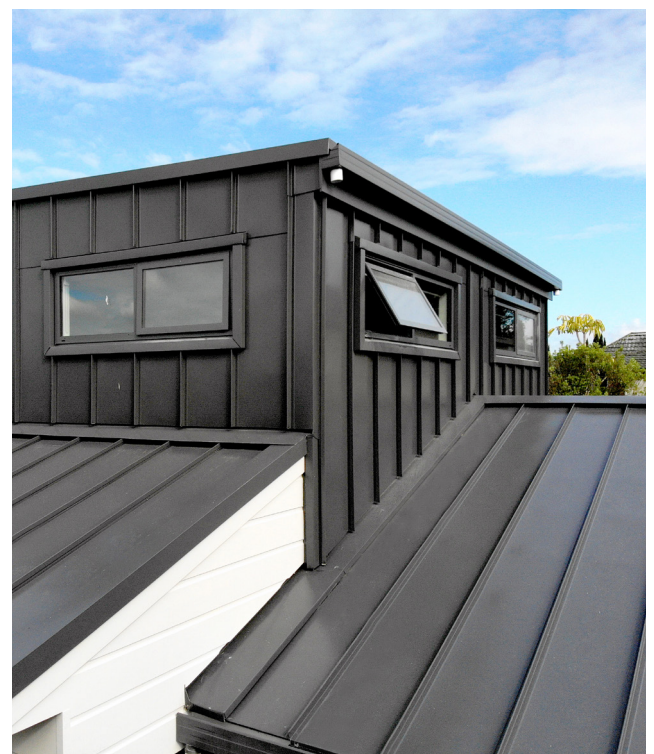
Factors which can affect the lengths of the trays are:

- Manufacturing location
- Supporting structure
- Design and detailing
- Profile Width
- Material used
- Purlin materials
- Colour

Please consult with The Roofing Store for advice on maximum tray lengths.

SYSTEM DETAILS

Super Seam™ details available on request. Details to comply with E2/AS1 & the NZ Building code. The building architect/designer is ultimately responsible for details to comply with the NZ Building code & E2/AS1.



INDEPENDENTLY TESTED

To meet the requirements of B2 Durability an independent laboratory was employed to ensure KiwiColour complies with the AS/NZS 2728:2013 performance requirements. The laboratory had the following findings: "KiwiColour Vitor+ and Vitor+ZX products are manufactured overseas** and distributed in New Zealand by Kiwi Steel.

Kiwi Steel engaged an independent laboratory to assess KiwiColour Vitor+ and Vitor+ZX products against the corrosion resistance performance requirements of AS/NZS 2728:2013." "In accordance to AS/NZS 2728:2013 Product Type 4 is suggested for use in corrosive environments up to and including ISO 9223 Category 4 'High' (coastal/ low salinity).

Most populated areas of New Zealand fall within this category and only off-shore installations, geothermal areas, specific industrial environments, direct beach

fronts and beach fronts with high wind and surf exceed this corrosivity category in New Zealand." "From the results available KiwiColour Vitor+ and Vitor+ZX products conform to the performance requirements of Product Type 4 in all aspects of salt spray performance and humidity resistance. Other product specific properties such as coating thickness, gloss and cross hatch adhesion also fall within the requirements of Product Type 4 (Gloss Category 2)." ** Steel manufactured overseas and roll-formed in New Zealand.

For further information or if you have any enquiries please contact kiwisteel on the below:

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For further information regarding Super Seam™ or other products within our range please visit or contact your local branch.

VITOR⁺ VITOR^{+ZX} LUX**The Roofing Store**

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