



# TRS STANDING SEAM

Standing Seam system is a wide tray roofing system roll formed on-site if necessary, in single length trays, hidden fixed to solid substrate such as plywood or timber sarking. Trays are seamed together using variety of seam and cap methods, depending on functional and aesthetical requirements.

Standing seam allows a much greater flexibility in design than any other metal cladding. Shapes can vary from the standard parallel tray to a conical tray with straight or curved sheets. It is possible (when using appropriate material) to produce complex design to enhance the profile appearance of any particular building envelope.

Standing seam is an ideal cladding for roof, façade, soffit and fascia areas. Using traditional European techniques standing seam will enhance style or type of building. Due to standing seams flexibility, complex designs and shapes can be handled with relative ease. For example turrets, curved roofs and facades. It is a unique system, in combination with the designer it will create a lasting visual impression.

## **APPLICATION**

Areas of application could include:

✓ Roof

Façade

Turrets

✓ Domes

Soffits

Fascias

Standing seam is also ideal for creating

features as:

Chimney cladding

Flashings

Interior feature walls

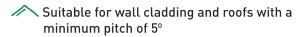
Pillar and column surrounds

Gable canopies

#### **SEAM OPTIONS**

Standing seam is available in variety of profiles. We offer four of the most popular, flexible in design, and cost effective for manufacture and installation.

## 1. ANGLE SEAM

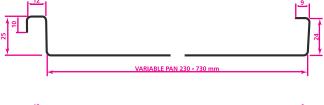


- Variable pan A from 200 to 730 mm
- Seam height 25.4 mm (1 inch) or 38.1mm (1 ½ inch)
- Can be manufactured in following materials only:
  - Copper

• Aluminum

• Zinc

- VITOR+, ZENEX+ or LUX
- Stainless Steel

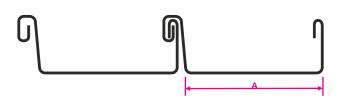




### 2. DOUBLE STANDING SEAM

- Suitable for wall cladding and roofs with a minimum pitch of 3°
- Variable pan A from 230 to 730 mm
- Seam height -25.4 mm (1 inch) or 38.1mm (1 ½ inch)
- Can be manufactured in the following materials only:
  - Copper
  - Zinc

- Aluminum –
   ONLY selected brands. Please
- Stainless Steel consult with us.



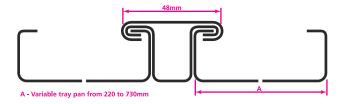
# 3. ROLL SEAM

- Suitable for wall cladding and roofs with a minimum pitch of 5°
- Seam height -25.4 mm (1 inch) or 38.1mm (1  $\frac{1}{2}$  inch)
- Can be manufactured in the following materials only:
  - Copper

• Aluminium

• Zinc

- VITOR+, ZENEX+ or LUX
- Stainless Steel
- Titanium

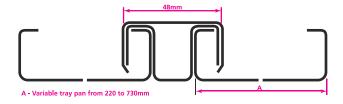


### 4. ROLL CAP

- Can be manufactured in the following materials:
  - only: Copper
- Aluminium

• Zinc

- VITOR+, ZENEX+ or LUX
- Stainless Steel
- Titanium



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

#### **DIMENSIONS**

We can offer to our clients choice of Classic 25.4 mm (1 inch) or 38.1mm (1 ½ inch) options. The maximum tray length depends on the material used, roof pitch and local conditions.

## **DESIGN CONSIDERATIONS**

When using standing seam consideration should be give to the following:

Preferred profiles
Radius of curved roof

Rib centres Wind loads

Roof shape Snow and rainfall zones

### SOLID SARKING

Standing seam requires either solid timber or plywood sarking for total support. We recommend plywood minimum 17 mm thick or solid timber sarking 25 mm thick, eliminating the need of purlins. Please consult with the local authorities for treatment requirements. Please note to prevent damages to your roof oil based treatments must be avoided.

### **UNDERLAYS**

We recommend the use of anti-abrasive breathable type underlay over solid sarking. Refer to the local range of products available from us.

### FIXING ON PLYWOOD OR TIMBER SARKING

Plywood or the solid timber sarking should be fixed with screws to the rafters. No nails, staples or other type of fixings should be used as consideration should be given to the possibility of nail popping. Screws should be at 150 mm spacing around the edges and 250 mm spacings on the intermediate support. Plywood should be fixed with 3mm spacing between the sheets to allow for expansion and 10-20 mm between the timber planks for the solid sarking allowing for ventilation.

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

### **UNDERLAYS**

With the standing seam profile is being fixed to solid sarking. It is protected from any wind loads from underneath (apart from structural) standing seam profile is only subject to wind suction load.

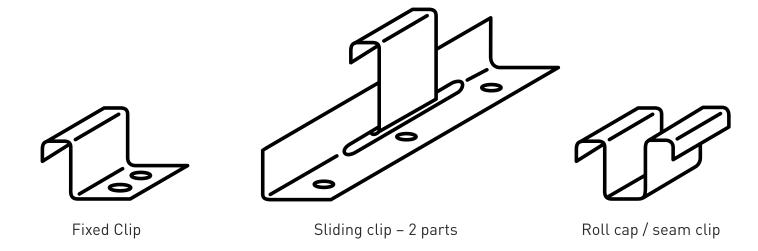
For wall cladding and high wind load areas thicker gauge materials and / or narrower tray widths should be used. We can recommend suitable materials and sizes. Please consult with us.

#### **FIXINGS**

Standing seam profiles are fixed to the substrate with concealed metal clips. The clips are screwed or nailed with special roofing nails straight into the sarking. Roll Cap and Roll Seam are fixed with self-drilling screws.

We recommend use of stainless steel nails only and galvanized screws due to contact with treated timber.

### **FIXING CLIPS**



# THERMAL EXPANSION AND CONTRACTION

The rate of thermal expansion and contraction varies between metals and color of the product. To accommodate this standing seam trays are fixed with combination of fixed and sliding clips.

MATERIAL	EXPANSION (mm/m-C)	CHANGE OVER 10m TRAY at 70°C [mm]
Steel	0.011	7.7
Aluminum	0.023	16.1
Zinc	0.022	15.4
Copper	0.017	11.9

Factors which can affect the lengths of the trays are:

Manufacturing location

Access to work area

Design and detailing

Choice of profile

Please consult with us for technical advice.

If you have any enquiries or wish to place an order, please contact us.



For all your roofing needs call or visit us at:

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