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smarttray™ Cladding Systems

Smart tray™ 510 standing seam batten cap

introduction

The **smart tray™** 510 standing seam profile is a popular choice to provide enhanced depth and dramatic shading effects as needed. All sheets/trays are roll-formed,

A sought after feature of standing seam cladding is the ability to adjust tray widths to suit project requirements. Its not uncommon to have designers mix various sizes of trays together to create something different.

However in order to keep costs in check we recomend tray widths of 510 or 530mm as these relate to standard coil widths supplied to the industry.

alternative solution

All **smart tray™** standing seam tray products are considered alternative solutions under the current building code. Please consult Architectural Metalformers who will assist you with the relevant required technical information to succesfully specify the product.

product overview

profile

The **smart tray™** 510 standing seam batten cap is a standard 50 x 38mm profile giving you the traditional board and batten look with the accentuated shadow lines.

smart tray™ 510 standing seam batten cap cladding can be laid horizontally or vertically, and can be used to cerate some very unique features to your project.

smart tray™ 510 standing seam batten cap cladding panels are formed to the exact measurements required and installed over a solid plywood base with approved roofing underlay.

materials Copper, zinc, aluminium and Colorcote™ Zinalume™

min pitch N/A for cladding

lengths roll formed -continuous lengths

width, seam 520mm effective cover with the 50mm batten cap fitted



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thickness	Copper	0.5mm, 0.55mm, 0.6mm, 0.7mm, .09mm	
	Zinc	0.7mm, 1.0mm, 1.5mm	
	Aluminium ARX	0.7mm, 0.9mm	
	Colorcote™ Zinalume™	ZRX 0.55mm ZR8 0.55mm	

> **design considerations**

When specifying **smart tray™** 510 standing seam batten cap cladding, consideration should be given to the following:

- > Material selection
- > Wind loading
- > Cladding orientation on the wall (vertical or horizontal)
- > Window and door positioning in relation to batten positions
- > Environmental factors, urban, rural or coastal

> **availability**

Selecting panel sizes that use standard coil widths ensures a faster cost effective solution and eliminates any delivery issues. Non standard coil sizes may require up to three months lead time from our overseas based suppliers.

Please contact Architectural Metalformers for specific stock information

> **flashing details**

Robust flashing design, manufacture and installation are the key to a total waterproof solution. All these crucial steps are controlled and overseen in-house.

We use flashing methodologies that are well proven in Europe and the USA for hundreds of years and our flashings comply and often surpass E2 regulations.

> **plywood substrate**

All **smart tray™** 510 standing seam batten cap cladding requires a solid plywood substrate. We recommend a minimum of 15mm H3 plywood installed.

For all torch on compatability requirements please refer to www.ecoply.co.nz

please refer to the installation category in the main menu for a thorough plywood installation specification.

> **underlay and fixings**

We install an approved roofing underlay between the plywood substrate and our **smart tray™** batten cap sheet. We fit all trays with concealed sliding clips that are fixed using 25mm 316 stainless steel flat head collated nails.



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Clips are fixed at 400-500mm centres and have a dual function: To allow the mechanical resistance of the roof and free expansion of the metal itself.

For copper and zinc we use marine grade 316 stainless steel clips

For aluminium and Colorcote™ we use Colorcote™ Zincalume™ clips.

Battens are fixed using proprietary marine grade 316 stainless steel batten cap receiving clips. The batten brackets are fixed to the ply substrate using 25mm x no12 timbertite screws @ 500mm centres.

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thermal expansion and contraction

By using the sliding clip system detailed above, we allow for expansion and contraction without the associated “oil canning” as seen in some tray roofs.

The following is the expansion rate of various metals over a 70°C temperature change for a 10m length of product.

Copper	11.9mm
Zinc	15.4mm
Aluminium	14.8mm
Zincalume™	7.7mm



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smart tray™ standing seam cladding - 350mm horizontal batten cap panels with matching rainwater goods in copper

smart tray™ standing seam 38 cladding - Quartz zinc