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smart tray™ Roofing 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 and supplied in continuous lengths.

A sought after feature of standing seam roofing is the ability to adjust tray widths to suit project requirements. Its also 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™ 510** 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

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

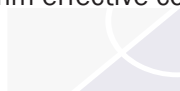
The **smart tray™ 510** standing seam batten cap profile incorporates a standard 50 x 38mm profiled batten to each seam connection. This gives you a more traditional board and batten look with accentuated shadow lines that the batten creates on the tray..

materials Copper, Zinc, Colorcote™ Aluminium and , Colorcote™ Zinalume™

min pitch 5 degeree





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 roofing, consideration should be given to the following:

- > Material selection
- > Wind loading
- > Roof pitch
- > Overall roof design
- > Venting of plywood substrate
- > 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 roofing requires a solid plywood substrate. We recommend a minimum of 15mm H3 plywood to be installed.

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

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

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underlay and fixings

We install an approved roofing underlay between the plywood substrate and our **smart tray™** 510 standing seam batten cap sheet. We fit all trays with concealed sliding clips that are fixed using 25mm 316 stainless steel flat head collated nails.

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.

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

The profiled batten snaps into position over these receiving clips, providing required watertight seals.

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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 38 - Colorcote ZMX metal



smart tray™ standing seam 25, matching spouting, cappings and chimney cowling - Anthra zinc



smart tray™ standing seam batten cap - copper



smart tray™ standing seam 25 - Anthra zinc



smart tray™ standing seam batten cap - copper

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smart tray™ standing seam 38 - copper



smart tray™ standing seam 38 - ARX aluminium



smart tray™ standing seam 25 - copper



smart tray™ standing seam 38 - copper

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smart tray™ standing seam 38 with matching cappings and smartrain rainwater goods – copper



smart tray™ standing seam batten cap – copper



smart tray™ standing seam 38 – Colorcote ARX aluminium



smart tray™ standing seam 38 – copper

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smart tray™ standing seam batten cap – Quartz Zinc®



smart tray™ standing seam 38 – copper



smart tray™ standing seam 25 – Quartz Zinc®



smart tray™ standing seam batten cap – Colorcote ZM8 metal