

ARCHITECTURAL METALFORMERS

Written specification for:
Smarttray Lockseam roofing and cladding

Lockseam (no plywood substrate)

Specification in:

PCC ColorCote Magnaflow

GENERAL

This section deals with the supply and fixing of Architectural Metalformers Lockseam standing seam tray roofing panels complete with accessories.

MANUFACTURER'S DOCUMENTS

Manufacturer's and supplier's documents relating to work in this section are:

Architectural Metalformers technical literature. Copies are available from

Web: <http://www.archform.co.nz/>

Email: info@archform.co.nz

Telephone: 0800 501996

Facsimile: 09 2697279

ABBREVIATIONS

The following abbreviations are used throughout this part of the specification:

BMT: Base metal thickness

NZMRM: New Zealand Metal Roofing Manufacturers Inc.

LBP: Licensed Building Practitioner

QUALIFICATIONS

Installers to be ARCHITECTURAL METALFORMERS approved Installers.

WARRANTY

COLORCOTE ZINCALUME

Workmanship: 10 years

Perforate: 25 years (refer manufacturers warranty)

Coatings: 10 years (refer manufacturers warranty)

From: Date of practical completion

Provide warranties on standard Architectural Metalformers warranty form.

Provide a project specific PS 3 document after completion of the project

PERFORMANCE

FIXINGS, WIND

Design and use the fixings appropriate for the wind zone (R) and topographical classification (T) of this site and building height; as required by NZS 3604 and the wind loads on various wall areas as given by NZS 4203 or AS/NZS 1170.2. Allow for specific loadings at corners and the periphery of the roof, where localized pressure factors apply. Fixing pattern to also take into account fixing method and purlin spacings.

Install roofing materials in accordance with the [NZMRM COP](#) NZ metal roof and wall cladding Code of Practice, to form a weather-tight performance for the completed roofing system, including all penetrations.

PRODUCTS

UNDERLAY

Approved heavy weight roofing underlay with a minimum of 300mm overlap to all joints, applied to clean purlins in accordance with manufactures specifications.

METAL SELECTION

ColorCote Magnaflow

ColorCote Magnaflow hot-dipped zinc/aluminium/magnesium alloy coated steel.

A comprehensive colour range is available.

Conforms to AS/NZS2728:2013

Atmospheric Classifications C1-C4

ColorCote Magnaflow X

ColorCote Magnaflow X has a 70% PVF2 top coat steel substrate providing a more protective paint system for chemical and industrial applications. A limited colour range is available.

Conforms to AS/NZS2728:2013

Atmospheric Classifications C1-C4

LOCKSEAM PROFILE

Smarttray standing seam tray panels, Lockseam by Architectural Metalformers.

SMARTTRAY FLASHINGS

Formable grade flashings, material to match selected roofing or cladding, to the same standards as the profiled sheets.

COMPONENTS

FASTENERS

Durability of all fasteners not less than the roofing material being fixed.

FIXING CLIPS

Smarttray 316 or 304 stainless steel fixing clips fixed purlins at with 25mm x 2.5 annular grooved stainless steel flat head nails at maximum 400 - 500mm center purlins (depending on pitch and wind loading)

Custom sliding clips to be used for all sheets over 4m in length.

RIVETS

Minimum diameter 4.0mm sealed rivets.

ACCESSORIES

SEALANT

Neutral curing mastic sealant or polymer sealant.

EXECUTION

INSPECTION

Inspect the roof framing and supporting structure to ensure that it is complete and fully braced ready for purlins and roofing. Double purlins are required to the drip edge, ridge and hip lines.

HANDLING

Avoid distortion and contact with damaging substances, including cement. Do not drag sheets across each other and other materials. Protect edges and surface finishes from damage. Use soft, flat sole shoes when fixing and for all other work on the roof.

SEPARATION

Isolate dissimilar materials in close proximity as necessary by painting the surfaces or fitting separator strips of compatible materials.

Place isolators between metals and treated timber and cement based materials.

APPLICATION

SET-OUT

Carefully set out with side laps away from the prevailing wind, with the widths of end sheets the same, all sheets square and over sailing the gutter true to line. Check during fixing to eliminate creep or spread and string lines along purlin centers to keep fastenings in line.

FORMING

Form stop-ends and downturns to the roofing manufacturer's details and techniques using the required tools.

END LAPS

End laps are only permitted where specifically detailed and approved by Architectural Metalformers

THERMAL MOVEMENT

Roof fixing and jointing to conform with Architectural Metalformers requirements for thermal movement.

NZBC E2/AS1: 8.4.10 Allowance for expansion, notes specific design is required for lengths exceeding 18 metres.

Sliding clips to be used where roofing material exceeds 4 metres in length.

FIX UNDERLAY

Fit and lap approved roofing underlay over the roofing or cladding purlins, with 12mm stainless steel or nylon staples with a minimum 20 mm oversail into gutter. Underlay to be installed to manufacturers recommendations and specifications.

MARKING AND CUTTING

Cut only with shearing tools. Do not use black lead pencils for marking aluminium/zinc coated products.

FIX ROOF PANELS

Install and fix in accordance with the NZMRM NZ Metal roof and wall cladding Code of practice recommendations, and to Architectural Metalformers approved methodologies. Use only approved screws and collated nails as required by Architectural Metalformers. Fix sheets in place using the expansion clips as previously detailed.

SOLDERING

Where required, soldering of joints is permitted in accordance with best trade practice. Use approved soldering flux and 60/40 lead tin solder.

FLASH

Flash roof to parapets, walls and penetrations to approved details and in accordance with the NZMRM NZ Metal roof and wall cladding Code of practice recommendations, and to Architectural Metalformers approved methodologies. Cut accurately and fix using hidden sealant and rivets to the Architectural Metalformers approved methodologies to form a weatherproof cover. All flashings to comply with E2/AS1 and best trade practice.

FIX RIDGES AND HIPS

Cut accurately and fix using primary fasteners to the purlins. Join using sealant and rivets to detail and to the NZMRM NZ Metal roof & wall cladding - Code of practice. All laps 150 mm minimum. All flashings to comply with E2/AS1 requirements.

FIX VERGE AND CAP FLASHINGS

Cut accurately and fix using primary fasteners to the purlins. Join using sealant and rivet to detail and to the NZMRM NZ Metal roof & wall cladding - Code of practice. All laps 150 mm minimum. All flashings to comply with E2/AS1 requirements.

PENETRATIONS AND JUNCTIONS

Confirm that openings have been prepared ready for the installation of skylights and other penetrations through the roof. All flashings to comply with E2/AS1 requirements.

Flash and over flash all penetrations through the roofing or cladding. All flashings are to comply with E2/AS1 requirements.

SELECTIONS

PURLINS

Type: H3.1

Thickness: 90mm x 45mm minimum

Maximum Purlin Spacing: 450mm centres

CLADDING UNDERLAY

Brand: Thermakraft Covertex 407 or similar approved building paper for roofing and Thermakraft Covertex 403 or similar approved building paper for wall-cladding.

Type: Heavy duty breathable underlay

SMARTTRAY Lockseam tray roofing panel

Profile: Smarttray Lockseam seam tray roofing and cladding sheets

Seam profile: *Lockseam*

Seam height: *38mm*

Material: *ColorCote Magnaflow*

BMT : 0.55mm

Colour: *TBC*