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Metrospan®

Continuous trapezoidal roof and/or wall cladding
-2° Minimum Roof Pitch

Specification

REFERENCED AUSTRALIAN STANDARDS

AS 1170.2	SAA Loading Code - Wind Loads.
AS 1397	Sheet and Strip Hot-Dripped Zinc-Coated or Aluminium/Zinc Coated.
AS 1445	Hot-Dipped Zinc-Coated or Aluminium/Zinc Coated Steel Sheet - 76mm pitch corrugated.
AS 1526	One part polysulphide-based Sealing Compounds for the Building Industry.
AS 1562.1	Design and installation of Steel Roof and Wall Cladding. Part 1: Metal.
AS 2179	Rainwater Goods - Specification.
AS 2180	Rainwater Goods - Design and Installation.
AS 2728	Pre Painted and Organic Film/Laminate Products - Performance Requirements for Interior & Exterior Applications in Buildings
AS 3566	Screws Self-Drilling for the Building and Construction Industries.

Scope

Where indicated on the drawings, provide and fix continuous trapezoidal sheet roof and/or wall cladding all as specified herein complete with all necessary fasteners, accessories, trims and flashings. All such work shall be in accordance with AS 1562.1, AS 2179, AS 2180 and AS 3566.

Materials

ROOFING (AND/OR WALLING)

Roofing (and/or walling) shall be Metrospan continuous trapezoidal roof/wall cladding all as described below.

Number of Ribs:	1 Underlap, 1 Overlap, 7 Internal
Rib Height:	24mm ± 1.0mm
Anty-Capillary Feature:	Flute formed at junction of crest and flank of underlapping rib.
Cover Width:	700mm ± 4.0mm
Base Metal Thickness:	0.42mm or 0.48mm
Approximate total coated thickness:	0.47mm or 0.53mm
Steel base description:	AS 1397-G550 (550MPa minimum yield strength)
Metallic coating description:	AS 1397-AZ 150 (150g/sq. m minimum coating mass)
Organic coats (if used):	To AS 2728
Normal Environments:	Colorbond XRW
Severe Environments:	Colorbond ULTRA

Fastener Selection

	Fixing to Steel Batten Material 0.42 to 1.0mm	Fixing to Cold Formed Steel Purlin and Girt Material 1.2mm BMT to 4.5mm	Fixing to Hot Rolled Steel Purlin and Girt Material 4.5mm to 6.4mm (Non-Stocked Items)	Fixing to Timber Supports Type 17	Number of Fasteners Approx per sq. m.
Crest Fixed	SHS 12-11 x 50mm HiGrip® - Shank Guard Hex. Washer Hd. Self Drilling Batten Screws	SHS 12-14 x 50mm HiGrip® - Shank Guard Hex. Washer Hd. Self Drilling and Tapping Screws	SHS 14-20 x 45mm Hex. Washer Hd. Self Drilling and Tapping Screws	THS 12-11 x 65mm HiGrip® - Shank Guard Hex. Washer Hd. Self Drilling Screws	5 to 6
Valley Fixed	SHS 10-16 x 16mm Hex Washer Hd. Self Drilling Screws	SHS 10-16 x 16mm Hex. Washer Hd. Self Drilling and Tapping Screws	SHS 14-20 x 22mm Hex. Washer Hd. Self Drilling and Tapping Screws	THS 12-11 x 25mm Hex. Washer Hd. Self Drilling Screws	5
Side Lap & Accessories	SHS 10-12 x 20mm Needle or 's' point Hex. Washer Hd. Self Drilling Stitching Screws	SHS 10-12 x 20mm Needle or 's' point Hex. Washer Hd. Self Drilling Stitching Screws	SHS 10-12 x 20mm Needle or 's' point Hex. Washer Hd. Self Drilling Screws	THS 10-12 x 20mm Needle or 's' Point Hex. Washer Hd. Self Drilling Stitching Screws.	2

Notes

1. Coating of fasteners shall comply with AS 3566 class 3 for exterior applications. XRW - Climaseal, ULTRA - ZAC or 40 Microns Zinc, Colorbond Stainless - Stainless Steel.
2. Add a minimum on 10mm to the nominated fastener length, when fixing over insulation blanket.
3. All fasteners exposed to the weather shall be fitted with sealing washers to comply with ASTM. D 2000.
4. Any selection made from this table is to be checked against the latest version of BHP Coated Steel Australia Technical Bulletin TB-16, to ensure that the finish is appropriate for the service conditions.
5. Climaseal, HiGrip®, Shank Guard and ZAC are registered trademarks of ITW Buildex.

Workmanship

CARE STORAGE AND HANDLING:

Packs of sheets shall be kept dry in transit and on site to prevent water and or condensation being trapped between adjacent surfaces. Packs shall be safely and neatly stacked on site, clear of the ground and protected from the rain and moisture. Any sheets which become wet shall be separated, wiped clean, dried and re-stacked in a manner to allow free air circulation.

CUTTING:

Sheets shall be cut in a manner, and in a location, such that damage is avoided both to the subject sheet and to other nearby finished building products.

Installation

Sheets shall be laid with correct overlaps on battens or purlins spaced at centres not exceeding the manufacturer's maximum recommended span for the specific conditions pertaining at the site of the works, as determined by the building designer. Wherever practicable roof runs shall be covered with single-length sheets from crest to gutter. End laps and/or expansion joints shall be provided in longer roofs at the spacings, and the details set down by the manufacturer's installation manual, and purlin/batten spacings positions adjusted accordingly.

Sheets shall be handled carefully, in the interests of occupational health and safety and to avoid damage to nearby finished building products. Where sheets and/or accessories are provided with stripable plastic coatings, such material shall be removed at time of installation and be disposed of in a responsible manner. Fix sheeting with appropriate fasteners (from table herein) in all respects in accordance with the instructions given in the manufacturer's installation manual.

Turn high ends of sheets up, and gutter ends down to the extent, and using the tool, specified in the manufacturer's installation manual. All flashings, trims and closures to adjoining work shall be made from matching material, or from other approved compatible material and shall be formed, notched and fitted so as to present an effective, neat and workmanlike finished job. Where necessary, flashings shall be lapped and sealed at joints in accordance with the manufacturer's installation manual.

At the conclusion of each day's work, and at the completion of the roofing contract, roof all areas shall be swept clean, ensuring that all metal swarf and other debris is removed. A close inspection shall follow to make certain that no small, heavy items (eg. Unused fasteners or mandrels of concealed-fastening rivets) are lodged in places from which coating damage could be initiated.
