DESIGN SHEETMETAL

DESIGNER PANEL SYSTEMS

RIBBON STRIP



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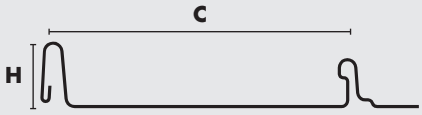
RIBBON STRIP



Ribbon Strip from Design Sheetmetal commands strong street presence that reflects a sophisticated aesthetic. This architectural cladding comes with a beautiful rolled rib, available in two heights. Ribbon Strip is a sure-fire way to create a delicate aesthetic and soft shadows, enhancing the architectural shape and façade of a building.

RIBBON STRIP **FEATURES**

RIBBON STRIP is a concealed fix, architecturally appealing roof & wall cladding. The panels are easy to handle and installation is speedy. RIBBON STRIP features excellent water carrying capacity.



RIB HEIGHT (H) mm	COVER WIDTH (C) mm	MASS COLORBOND® kg/m2	BMT mm	STEEL BASE MPa	MIN. PITCH °
25	195	6.92	0.55	G300	3
	295	4.47			
	495	5.78			
38	165	8.18			
	265	6.75			
	465	5.78			

RIBBON STRIP **FASTENERS**

RIBBON STRIP uses concealed fasteners and does not require specialised fixing tools.

TIMBER SUPPORTS & 19mm STRUCTURAL PLYWOOD

#10 x 25mm Wafer Head Type 17 Fasteners OR
M5.4 x 28mm Ultra Low Head Fasteners

STEEL SUPPORTS ≤ 1.9mm

M5.4 x 28mm Ultra Low Head Fasteners

STEEL SUPPORTS TO METAL BATTENS 0.55mm - 1.0mm

#10 x 16mm Wafer Head Fasteners

RIBBON STRIP **MATERIALS**

COLORBOND® steel | COLORBOND® ultra | COLORBOND® matt

RIBBON STRIP **LIMIT STATE CAPACITY TABLE**

Tables must be used in conjunction with Design Notes.

PROFILE	LIMIT STATE	SPAN TYPE	PRESSURE FOR SPAN (KPa)			
			450mm	600mm	900mm	1200mm
25mm Rib Cover from 190 to 295mm	SERVICEABILITY	INTERNAL	0.80	0.80	0.80	0.80
		END	0.80	0.80	0.74	0.65
	STRENGTH	INTERNAL	4.02	3.35	2.30	1.59
		END	3.22	2.68	1.95	1.28
38mm Rib Cover from 260 to 270mm	SERVICEABILITY	INTERNAL	0.78	0.78	0.78	0.78
		END	0.78	0.78	0.78	0.78
	STRENGTH	INTERNAL	3.75	3.04	2.25	1.46
		END	3.01	2.44	1.81	1.18

DESIGN NOTES

1. Metal supports are produced from minimum G550 high tensile steel.
2. For most economic results use longer internal spans than end spans (in a ratio of 10:8).
3. Equal span systems must be designed using end span values.

RIBBON STRIP **SPAN CHART**

Tables must be used in conjunction with Design Notes.

PROFILE	SPAN TYPE	450mm	INTERNAL SPAN mm	END SPAN mm
25mm Rib Cover from 190 to 295mm	ROOF	N1	900	600
		N2	900	600
	WALLS	N1	1200	1000
		N2	1200	1000
38mm Rib Cover from 260 to 270mm	ROOF	N1	900	600
		N2	900	600
	WALLS	N1	1200	1000
		N2	1200	1000

DESIGN NOTES

1. Spans shown reflect the minimum value of the Serviceability, Strength and Foot Traffic values of the Limit State Capacity Table.
2. Wind Category is based on AS 4055. Results include an allowance for local pressure factors.
3. If the roof pitch is less than 10°, increase the Wind Category upwards by 1 and apply the higher load to an area not less than 1.2m from all corners.
4. Table based on 0.55mm hi tensile steel battens or 19mm structural plywood.
5. For most economic results use longer internal spans than end spans (in a ratio of 10:8).
6. Equal span systems must be designed using end span values.

RIBBON STRIP **OVERHANGS**

Overhangs are limited to the values in the table. Overhangs have a minimum length of 50mm. Stiffened overhangs incorporate an angle or gutter attached to the sheet end.

PROFILE	PLAIN	STIFFENED
ROOFING	125mm	300mm
WALLING	200mm	400mm

NOTE

- Plain overhangs are limited to 20% of the adjacent end span.
- Stiffened overhangs are limited to 33% of the adjacent end span.

RIBBON STRIP **FOOT TRAFFIC**

RIBBON STRIP can be walked on. Extra care, however, is required to prevent stretching or buckling in the material. To reduce the possibility of marks from foot traffic, or to increase the foot traffic limit, RIBBON STRIP can be installed over 19mm structural plywood.

RIB HEIGHT	INTERNAL SPAN	END SPAN
25mm	900mm	600mm
38mm		

NOTE:
- Foot Traffic Limits are based on AS/NZS 11700.1 for R2 - Other roofs.
- All traffic must use the designated foot traffic path and follow safe practices.
- When walking on RIBBON STRIP always wear flat rubber soled shoes.
- Walk only in roof pans and above supports where possible.

RIBBON STRIP **PANEL LENGTH**

Minimum Panel Length: 800mm

Recommended Maximum Panel Length: 8000mm

Longer panel lengths may be available, transport restrictions may apply. Extra care is required for lengths greater than 6000mm to reduce the possibility of Oil Canning. RIBBON STRIP is made to order.

RIBBON STRIP **CUSTOM SIZES**

RIBBON STRIP can be produced to almost any width from 180mm to approx. 500mm, in both rib heights. Additional care is required as wider trays are more susceptible to Oil Canning. Wider trays may require the mandatory use of structural plywood beneath the roof sheet to carry foot traffic.

RIBBON STRIP **MANUFACTURING TOLERANCES**

Length: +0mm, -15mm

Width: ± 4mm

RIBBON STRIP **DRAINAGE & OVERFLOW**

When installed to the correct minimum pitch, RIBBON STRIP can drain up to 40m in panel length for rainfall intensities up to 400mm/hr. For roof pitches below 7.5° or roof runs exceeding 5m, side laps should be sealed.

RIBBON STRIP **THERMAL EXPANSION**

Change in temperature will cause all metals to expand and contract. There is minimal effect with steel roofing and walling, however care must be taken when long sheets are used and high temperature variations exist.

Recommended max. runs:

DARK COLOURS up to 17m. LIGHT COLOURS up to 24m.

RIBBON STRIP **OIL CANNING**

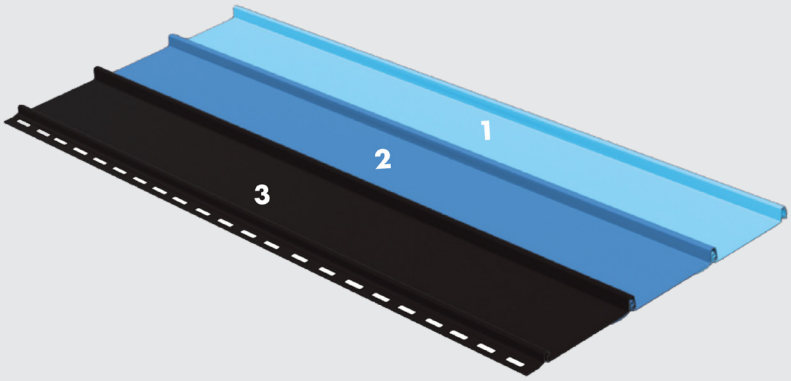
Oil Canning appears as waviness in the flat areas of metal panels. It is a characteristic of light gauge, cold-rolled metal roofing and cladding products. It can occur on all types of metal sheeting and is not considered a defect. It is a cosmetic issue and does not affect the structural integrity of a product. Oil Canning may occur due to installation methods, thermal expansion and contraction and material colour. Avoid twisting or bending sheets when handling to minimise the risk of Oil Canning.

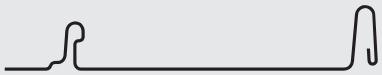
RIBBON STRIP **FLAMMABILITY**

Bluescope materials used in the production of RIBBON STRIP have been tested in accordance with AS 1530.3 Spread of Flame Index is 1.
This is considered non-combustible by the NCC.

RIBBON STRIP **INSTALLATION**

The use of heavy duty sarking behind the sheets is recommended for the control of condensation and to ensure weather tightness.

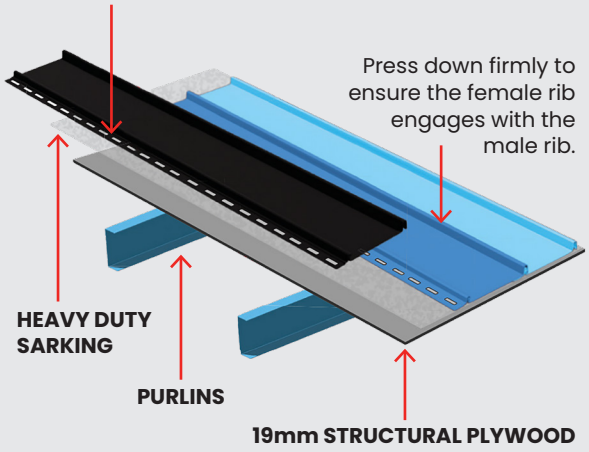




MALE RIB **FEMALE RIB**

FIXING TO PLYWOOD

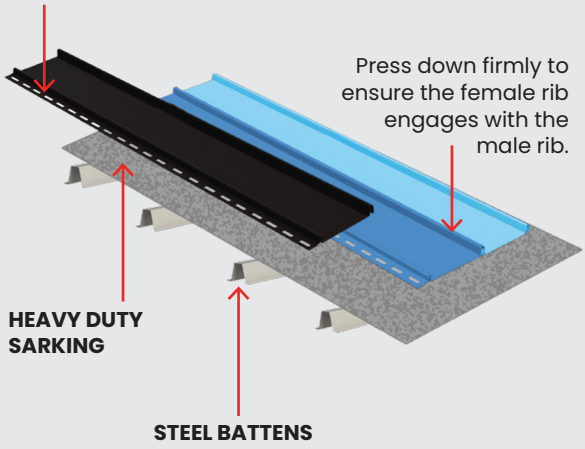
Fix through slots to 19mm structural plywood with #10 x 25mm Wafer Head Wood Fasteners or M5.4 x 25mm Ultra Low Fasteners



FIXING TO STEEL BATTENS

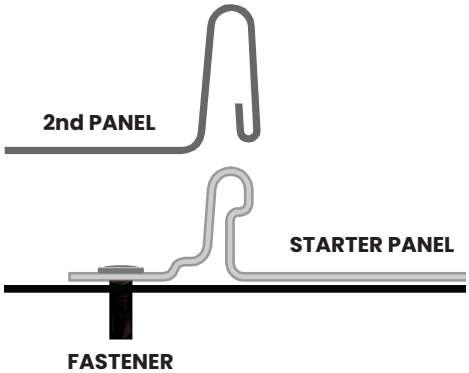
NON-CYCLONIC

Fix through slots to steel battens with #10 x 16mm Wafer Head Fasteners



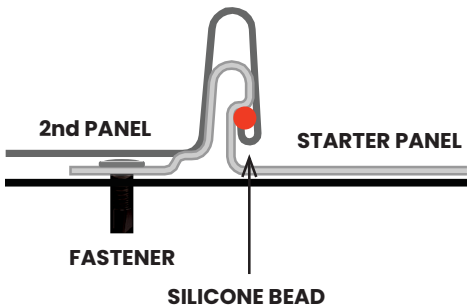
RIBBON STRIP **LAP TYPES**

STANDARD LAP



OTHER LAP

Use this lap fixing when roof pitch is below 7° or combined panel length is over 5m.



SILICONE BEAD

Apply under bend on male rib before engaging female rib.

DESIGN SHEETMETAL

WHAT WE DO

At Design Sheetmetal Australia, we specialise in the manufacture of premium architectural roof and wall cladding systems. Focused entirely on sheet metal, we create tailored façade solutions that are lightweight, high-performing, and built to meet the demands of modern design.

Operating from our Bayswater and Laverton facilities, we support projects across both metro and regional areas, as well as interstate. We utilise a combination of locally produced materials, Australian-supplied products, and select international sources to ensure consistent quality and flexibility across every project.

While we focus purely on manufacturing, we work alongside a trusted network of skilled trades and roof plumbing professionals. This ensures every system is installed correctly, meets industry standards, and aligns with the requirements of the Building Code of Australia (BCA), while also keeping projects commercially competitive.

Backed by a team of experienced fabricators, operators, and technical specialists, Design Sheetmetal Australia offers reliable, end-to-end support, from early design stages through to final delivery.

ARCHITECTURAL CLADDING PRODUCT RANGE

RIBBON STRIP	The true art of modern finesse, our Ribbon Strip cladding system commands strong street presence that reflects a sophisticated aesthetic.
STANDING SEAM	Bold and polished, the contemporary look and feel of Standing Seam walls and roofs are matched only by its extreme durability.
DIVERSACLAD®	Looking for a clean, seamless aesthetic with a simple application? Diversaclad® Interlocking Panels are an ideal choice.
TRAYLINE	Trayline allows for an easy and cost effective installation. Achieve the most out of your architectural cladding façade without complication.
FLATLOCK	Flatlock cladding is reminiscent of beautiful tiles or scales, with a virtually flat, overlapping application.
CASSETTE	An attractive and cost-effective alternative to traditional aluminium panels, our open joint Cassette panels are custom drawn and custom made.





CERTIFICATE OF COMPLIANCE
NATIONAL CONSTRUCTION CODE OF AUSTRALIA (NCC)
ROOFING & CLADDING

It is important that building products comply with the National Construction Code of Australia (NCC). The use of non-conforming products may leave builders, designers and installers at risk of future claims and damages. Each participant in the building process including the installer, builder, designer and supplier is responsible for ensuring products used, a) comply with relevant Australian Standards and NCC provisions and b) are suitable for the intended use. This is referred to as the Chain of Responsibility.

Design Sheetmetal can confirm that the following roofing & cladding products meet the minimum requirements of relevant Australian Standards and the NCC, and are included in this specification:

Ribbon Strip
Diversaclad®
Trayline
Standing Seam
Snap On 45

MATERIALS & FINISHES: The following materials and finishes are included in this specification:

MATERIALS	COLORBOND® steel COLORBOND® steel Matt COLORBOND® steel Ultra	COLORBOND® steel Metallic ZINCALUME® steel Galvanised steel	SUPERDURA® stainless steel
BASE METAL THICKNESS (BMT)	0.55mm		
MINIMUM YIELD STRENGTH (MPa)	G300		

COMBUSTIBILITY

Design Sheetmetal products manufactured from COLORBOND® and ZINCALUME® steels are suitable for use where a non-combustible material is required as per the NCC.

IGNITABILITY INDEX (0 - 20): 0
HEAT EVOLVED INDEX (0 -10): 0
SPREAD OF FLAME INDEX (0 -10): 0
SMOKE DEVELOPED INDEX (0 -10): 2

SCOPE OF USE - INSTALLATION - ACCEPTABLE CONSTRUCTION

All products listed may be used as roofing and/or wall cladding when designed and installed using the product specific design manuals.

AUSTRALIAN STANDARD COMPLIANCE

Information published for Design Sheetmetal products has been determined from testing at NATA accredited facilities. Design Sheetmetal products and information are compliant to the following standards:

Design Information, Product Capacities, Installation/Construction, Materials, Testing

AS 1562.1 - 2018 Design and installation of sheet roof and wall cladding. Part 1: Metal

AS 4040.0 - 1992 Methods of testing sheet roof and wall cladding. Method 0: Introduction, list of methods and general requirements

AS 4040.I - 1992 Methods of testing sheet roof and wall cladding. Method 1: Resistance to concentrated loads

AS 4040.2 - 1992 Methods of testing sheet roof and wall cladding. Method 2: Resistance to wind pressures for noncyclonic regions

AS/NZS 1170.0:2002 Structural design actions, Part 0: General principles

AS/NZS 1170.1:2002 (Reconfirmed 2016) Structural design actions, Part 1: Permanent, imposed and other actions

AS/NZS 1170.2- 2021 Structural Design Actions, Part 2: Wind actions

AS/NZS 1170.3:2011 (Reconfirmed 2016) Structural design actions, Part 3: Snow and ice actions

AS 4055 - 2021 Wind loads for housing

AS 3959 - 2018 Construction of buildings in bushfire prone areas

AS 1397 - 2021 Continuous hot-dip metallic coated sheet steel and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium

AS/NZS 2725:2013 Prefinished/prepainted sheet metal products for interior/exterior building applications - Performance requirements

SA HB 39:2015 Installation code for metal roof and wall cladding

DEEMED TO SATISFY COMPLIANCE

NCC 2022 Volume I - For class 2 to 9 Buildings (Non-Residential). Section B1.4 Structural Resistance, Section FI.0 Deemed-to-Satisfy Provisions, Section FI.5 Roof coverings.
NCC 2022 Volume 2 - For class I and 10 Buildings (Housing Provisions). Section 3.5.I Roof cladding

DESIGN SHEETMETAL

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