

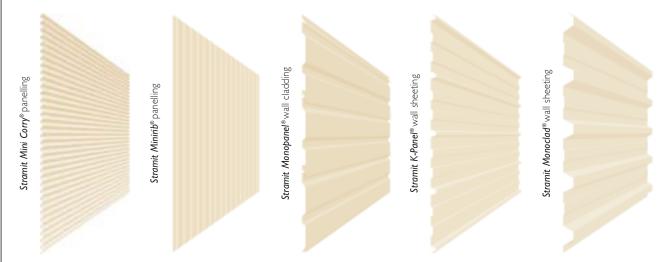


# STRAMIT® WALL SHEETING & CLADDING NEW SOUTH WALES

product technical manual

# INL V V JOOTI I V VALLS

# **Selection & Specification**



# **General Applications**

The visual appeal, strength, wide cover, light weight and weather resistance of **Stramit**® wall sheeting & cladding make it perfect for all commercial wall applications. Its excellent strength and ease of assembly allow for long, economical spans.

 $Stramit^{\otimes}$  wall sheeting & cladding may also be used for domestic applications.

#### **Materials**

**Stramit**® wall sheeting & cladding is manufactured from hi-tensile G550 COLORBOND® steel or ZINCALUME® steel. COLORBOND® steel coating is in accordance with AS2728. ZINCALUME® (AZ150) steel and coating, and COLORBOND® substrate and base steel are each in accordance with AS1397.

Stramit has a comprehensive range of COLORBOND® colours available as standard. Refer to the COLORBOND® colour chart available from Stramit, and ask your nearest Stramit location for colour availability on the profile of your choice.

**Stramit**® wall sheeting & cladding is also available in a range of six Premium Materials & Finishes. The range includes COLORBOND® Metallic steel, COLORBOND® Ultra steel, COLORBOND® Stainless steel, uncoated stainless steel, aluminium alloy and copper alloy. Before specifying **Stramit®** Premium Materials & Finishes, contact Stramit Technical Services for relevant design data. BHP Colorgrain is also available.

## **Dedicated Walling Products**

The following **Stramit**<sup>®</sup> wall sheeting & cladding is intended for use in walling applications:

- · Stramit Mini Corry® panelling
- Stramit Minirib® panelling
- Stramit Monopanel® wall cladding
- · Stramit K-Panel® wall sheeting
- 0.35mm bmt Stramit Monoclad® wall sheeting

Some profiles are also suitable for ceiling and soffit applications. Full details of these profiles are provided within this manual.

## **Roof and Wall Sheeting**

Several Stramit profiles are intended for use as either roofing or walling. Maximum wall spans for the following sheeting profiles are given on page 4 of this manual:

- 0.42mm bmt Stramit Monoclad® sheeting
- 0.42mm bmt Stramit Speed Deck Ultra® decking
- 0.42mm bmt **Stramit Longspan®** sheeting
- 0.42mm bmt **Stramit® Corrugated** sheeting
- 0.42mm bmt Stramit Megaclad® sheeting

For comprehensive details of these products, including specifications, alternative thicknesses and fastening, refer to the product technical manual for each profile.

## IMPORTANT NOTE

The information contained within this brochure is as far as possible accurate at the date of publication, however, before application in a particular situation, Stramit Building Products recommends that you obtain qualified expert advice confirming the suitability of product(s) and information in question for the application proposed. While Stramit accepts its legal obligations, be aware however that to the extent permitted by law, Stramit disclaims all liability (including liability for negligence) for all loss and damage resulting from the use of the information provided in this brochure.

#### **Adverse Conditions**

**Stramit**® wall sheeting & cladding will give excellent durability in almost all locations. It is however important to choose the correct coating for each application environment as shown in the table below.

suitability of	site exposure condition						
coating type	benign	moderate	severe	very severe			
ZINCALUME® AZI50	<b>V</b>	?	?	×			
Galvanised Z450	<b>✓</b>	?	X	×			
COLORBOND®	<b>✓</b>	<b>✓</b>	?	X			
colorbond® Ultra	N/A	N/A	<b>V</b>	?			

<sup>?</sup> Question marks indicate conditions where durability may be diminished, depending on the particular application.

The approximate site exposure conditions in the table above are defined below.

		distance of site from						
site exposure condition	rough active surf	calm, still salt water	industrial emission	fossil fuel combustion				
benign	1000m +	100m +	500m +	500m +				
moderate	400m-1000m	0-100m	250m-500m	250m-500m				
severe	100m-400m	N/A	100m-250m	100m-250m				
very severe	0-100m	N/A	0-100m	0-100m				

The suitability and exposure tables above are guidelines only; conditions will vary from site to site. If in any doubt about the choice of coating for a particular application contact your nearest Stramit office for advice.

## **Compatibility**

All products need to be checked for both direct contact between materials, and where water runs from one material to another. The following guidelines generally avoid material incompatibility:

- For ZINCALUME® and COLORBOND® steel and galvanised roofs avoid copper, lead, green or treated timber, stainless steel and mortar or concrete.
- In addition galvanised roofs or gutters should not receive drainage from aluminium or any inert materials, such as plastics, glass, glazed tiles, COLORBOND® and ZINCALUME® steel. Contact Stramit for more detailed information.

## **Architectural Specification**

It is important to ensure appropriate quality products are used in construction. One way to help ensure this is to use a comprehensive specification such as outlined below.

The wall sheeting shall be [select one of the following profiles]:

 0.42mm bmt G550 Stramit Mini Corry® panelling, in continuous lengths with sinusoidal ribs 6mm high, spaced at 24mm centres.

or

 0.42mm bmt G550 Stramit Minirib® panelling, in continuous lengths with trapezoidal ribs 4mm high, spaced at 60mm centres.

or

 0.48mm bmt G550 Stramit Monopanel® wall cladding, in continuous lengths with inverted ribs 2.5mm high.

or

 0.35 [or 0.42] mm bmt G550 Stramit K-Panel® wall sheeting, in continuous lengths with trapezoidal ribs 12mm high, spaced at 216mm centres.

or

0.35mm bmt G550 Stramit Monoclad®
 wall sheeting, in continuous lengths with trapezoidal
 ribs 29mm high, spaced at 190mm centres.

Sheeting material shall be protected steel sheet to AS1397 with a minimum steel grade of G550 and an AZI50 zinc-aluminium coating with [or without] an oven baked paint film of [your colour choice] COLORBOND® or approved equivalent. The sheeting shall be fixed vertically [or horizontally or diagonally] to the girts or framing at every support and side lap fasteners installed at mid span, in accordance with the manufacturer's recommendations using fixing screws in accordance with Australian Standard AS3566 Class 3. Sheets shall be laid in such a manner that the approved side lap faces away from the direction of the most severe weather or is on the lowest edge. Flashings shall be supplied in compatible material with a minimum sheet cover of 150mm. All sheeting shall be fixed in a workman like manner, leaving the job clean and weathertight. Repair minor blemishes with touch-up paint supplied by the roof manufacturer. All debris (nuts, screws, cuttings, filings etc.) shall be cleaned off daily.

For specification of the *Stramit*® Premium Materials and Finishes, such as COLORBOND® Metallic steel, COLORBOND® Ultra steel, COLORBOND® Stainless steel, uncoated stainless steel, aluminium alloy and copper alloy, refer to the *Stramit*® Premium Materials and Finishes Design Guide.

STRA	MIT® W#	ALL SHEE	TING &	CLADD	ING – FC	RM & FU	JNCTIO	N SELEC	TION	
	Stramit Mini Corry®	Stramit Minirib®	Stramit Monopanel®	Stramit K-Panel®	Stramit Monoclad®	Stramit Speed Deck Ultra®	Stramit Speed Deck® 500	Stramit Longsþan®	Stramit <sup>®</sup> Corrugated	Stramit Megaclad®
vertical use	***	***	**	***	***	***	***	***	***	***
horizontal use	*	*	***	** **	*	*	*	**	** **	*
internal use	***	***	** **	* **	* **	* **	* **	** **	** **	* **
external use	*	**	***	***	***	***	***	***	***	***
clean appearance	***	**	***	* **	**	** **	* **	** **	** **	**
fastener exposure	* **	*	***	**	* **	***	***	** **	** **	**
ceiling/soffit use	***	*** **	** **	** **	**	*	*	* **	* **	**
ease of fixing walls	** **	** **	***	***	***	** **	**	***	***	***
spring curving	** **	*** **	*	**	*	*	*	* **	** **	*
wind resistance	**	**	**	**	***	***	**	***	**	** **

## **Maximum Sheet Length**

Stramit are able to manufacture wall sheeting in lengths well in excess of that which is practical to install.

# **Horizontal Applications**

Designers should take into account the sheeting mass, method of fixing and the number of installers when nominating wall sheet length. As a guideline wall sheets should generally not exceed 6 metres unless special handling provisions have been made.

# **Vertical Applications**

The issue with vertical wall applications is getting the wall sheeting upright safely and without sustaining damage unless special mechanical handling provisions to support the sheet have been made. For manual lifting applications, provided care is taken it is possible to use **Stramit Mini Corry**® **Stramit Minirib**® panelling up to 3 metres high, **Stramit Lo-Clad**™ and **Stramit K-Panel**® wall sheeting up to 4 metres high and **Stramit Monoclad**® wall sheeting to 6 metres high.

#### **S**pans

The spans shown below take account of "normal" foot traffic and wind resistance including local pressure zone effects. Pressures are based on AS4055 or AS1170.2 section 2. Where the two standards differ, the worst case has been taken for each classification. Data should only be used for buildings 7m or less in height, 1000m² or less in area and unaffected by land topography.

#### **Testing**

Stramit has in-house, purpose built, testing equipment used to design, develop and improve products for the Australian market. In addition many Stramit products are tested or witnessed by independent organisations. These include Cyclone Structural Testing Station and The University of Sydney.

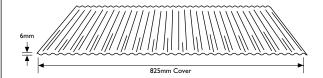
This ongoing research and development activity ensures that Stramit remains at the forefront of innovation, design and consumer information.

					wall	s		over	hangs
Wall cladding/sheeting	thickness bmt (mm)	fasteners per sheet at each support	pressu service -ability	re (kPa) strength	double spans	equal spans	internal (end) span combination	free edge	stiffene edge
NI or Region A (sheltered	l suburban)								
Stramit Mini Corry®	0.42	7	0.61	1.04	1200	1200	1200 (1000)	100	100
Stramit Mini Corry®	0.48	7	0.61	1.04	1300	1300	1300 (1050)	100	100
Stramit Minirib®	0.42	4	0.61	1.04	1500	1500	1500 (1250)	100	100
Stramit Monopanel®	0.48	I	0.61	1.04	3000	3000	3000 (2500)	100	200
Stramit K-Panel®	0.35	4	0.61	1.04	1200	1250	1500 (1250)	100	100
Stramit K-Panel®	0.42	4	0.61	1.04	1350	1450	1700 (1400)	100	100
Stramit Monoclad®	0.35	4	0.61	1.04	2300	2500	3000 (2500)	100	350
Stramit Monoclad®	0.42	4	0.61	1.04	2700	2850	3000 (2500)	150	400
Stramit Speed Deck Ultra®	0.42	3 + clip	0.61	1.04	3000	2850	3000 (2500)	200	500
Stramit Longspan®	0.42	3	0.61	1.04	2700	2700	3000 (2500)	200	500
Stramit® Corrugated	0.42	3	0.61	1.04	2050	2050	2650 (2200)	100	250
Stramit Megaclad®	0.42	3	0.61	1.04	2100	2300	2450 (2000)	100	350
N2 or Region B (sheltered	l suburban) a	and Region A (	exposed s	uburban)					
Stramit Mini Corry®	0.42	7	0.61	1.49	1200	1200	1200 (1000)	100	100
Stramit Mini Corry®	0.48	7	0.61	1.49	1300	1300	1300 (1050)	100	100
Stramit Minirib®	0.42	4	0.61	1.49	1200	1200	1200 (1000)	100	100
Stramit Monopanel®	0.48	I	0.61	1.49	2400	2400	2400 (2000)	100	200
Stramit K-Panel®	0.35	4	0.61	1.49	1200	1250	1500 (1250)	100	100
Stramit K-Panel®	0.42	4	0.61	1.49	1350	1450	1700 (1400)	100	100
Stramit Monoclad®	0.35	4	0.61	1.49	2300	2500	3000 (2500)	100	350
Stramit Monoclad®	0.42	4	0.61	1.49	2700	2850	3000 (2500)	150	400
Stramit Speed Deck Ultra®	0.42	3 + clip	0.61	1.49	3000	2850	3000 (2500)	150	450
Stramit Longspan®	0.42	3	0.61	1.49	2700	2700	3000 (2500)	150	450
Stramit® Corrugated	0.42	3	0.61	1.49	2050	2050	2650 (2200)	100	250
Stramit Megaclad®	0.42	3	0.61	1.49	2100	2300	2450 (2000)	100	300
N3 or Region A (rural) and	d Region B (	exposed subur	ban)						
Stramit Mini Corry®	0.42	7	0.92	2.25	1100	1100	1100 (900)	100	100
Stramit Mini Corry®	0.48	7	0.92	2.25	1100	1100	1100 (900)	100	100
Stramit Minirib®	0.42	4	0.92	2.25	1000	1000	1000 (800)	100	100
Stramit Monopanel®	0.48	ı	0.92	2.25	1650	1650	1650 (1350)	100	100
Stramit K-Panel®	0.35	4	0.92	2.25	1000	1050	1250 (1000)	100	100
Stramit K-Panel®	0.42	4	0.92	2.25	1100	1200	1450 (1200)	100	100
Stramit Monoclad®	0.35	4	0.92	2.25	1750	1950	2550 (2100)	100	250
Stramit Monoclad®	0.42	4	0.92	2.25	2050	2200	2800 (2300)	100	300
Stramit Speed Deck Ultra®	0.42	3 + clip	0.92	2.25	2600	2350	2900 (2400)	100	400
Stramit Longspan®	0.42	3	0.92	2.25	2050	2050	2350 (1950)	100	400
Stramit® Corrugated	0.42	3	0.92	2.25	1650	1650	2150 (1750)	100	200
Stramit Megaclad®	0.42	3	0.92	2.25	1700	1650	1900 (1500)	100	250

Tables are based on testing to AS1562 and AS4040 parts 0, 2 and 3. Internal spans must have both end spans 20% shorter. Values only valid for use with steel support members of 0.75mm or thicker.

For more specific applications sheeting must be designed to the pressure limitations given in this or the product technical manual for each product, or the Stramit CD-ROM 'Solutions in Steel'.

# STRAMIT MINI CORRY® PANELLING



# Design

## **Applications**

**Stramit Mini Corry®** panelling is an aesthetically pleasing lining for walls, and in particular for internal feature wall areas. The subtle corrugations also lend themselves to soffit and some ceiling applications.

#### **Features**

- 825mm Cover to maximise efficiency and reduce costs.
- Easy Fixing conventional through-fixed screws or pop rivets for quick installation and good appearance.
- Small Rib Size small scale version of normal corrugated.
- New Roll Formed Profile with consistent profile and longer lengths to enhance the appearance of any project.
- High Tensile Material to improve handling and performance.
- New Architectural Features curved and perforated acoustic products are also available.

#### **Material**

**Stramit Mini Corry**® panelling is a cold roll formed steel product in G550 base material (550 MPa minimum yield stress) with ZINCALUME® (AZ150) coating in accordance with AS1397 or COLORBOND® steel available in a range of colours.

# STRAMIT MINI CORRY® PANELLING – SHEETING MASS (kg/m² of roof area)

thickness BMT	ZINCALUME <sup>®</sup>	COLORBOND®
0.42mm	3.95	4.02
0.48mm	4.49	4.56

## **Pressures**

# STRAMIT MINI CORRY® PANELLING – SERVICEABILITY LIMIT STATE CAPACITY

thickness	fasteners	span	pressure (kPa) at the spans (mm) shown				
BMT	MT /sheet	type	600	900	1200	1500	
		internal	5.03	1.58	0.63	0.32	
0.42	0.42 7	equal	5.03	1.58	0.63	0.32	
		double	5.03	1.58	0.63	0.32	
		internal	5.05	1.64	0.74	0.45	
0.48	7	equal	5.05	1.64	0.74	0.45	
		double	5.05	1.64	0.74	0.45	

# STRAMIT MINI CORRY® PANELLING – STRENGTH LIMIT STATE CAPACITY (Non-cyclonic)

thickness	fasteners	span	pressure (kPa) at the spans (mm) shown				
BMT	/sheet	type	600	900	1200	1500	
		internal	9.93	5.71	3.86	2.84	
0.42	).42 7	equal	9.93	5.71	3.86	2.84	
		double	9.93	5.71	3.86	2.84	
		internal	10.2	6.61	4.51	3.15	
0.48 7	7	equal	10.2	6.61	4.51	3.15	
		double	10.2	6.61	4.51	3.15	

Tables are based on testing to AS1562 and AS4040 parts 0, 2 and 3. Internal spans must have both end spans 20% shorter. Values only valid for use with steel support members of 0.75mm or thicker.

#### **Impact**

For wall areas likely to be subject to human impact, sheeting spans should be reduced. Impact loads will vary considerably and these are not prescribed in Australian Standards. A span of 900mm is suggested for such areas, but this should be adjusted dependant upon the exposure and importance of the application.

#### **Spring Curving**

**Stramit Mini Corry®** panelling is able to be spring curved to a radius as tight as 2000mm for additional architectural versatility. However, at radii of 6000mm or less the support spacing must be reduced to no greater than 1000mm.

## Stramit Mini Corry® Fasteners

All self-drilling fasteners should conform to AS3566 - Class 3 and be completely compatible with the cladding material used.



#### For steel

 No. 10 x 16mm wafer head or 'Rippletek' self-drilling, self-tapping screws.



In internal applications and for side laps, plain or pre-painted 3.2mm diameter sealed aluminium pop rivets can be used.



#### For timber

- No. 10 x 25mm wafer head self-drilling type 17 screws.

#### Stramit Mini Corry® Fastener Positions

Exposed applications require valley fixing as shown in the diagram to ensure an anti-capillary space aids in weather protection. **Stramit Mini Corry®** panelling is usually fixed with 7 fasteners per sheet as shown.

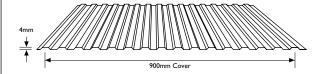
For internal applications **Stramit Mini Corry**® panelling with spaces of 1000mm or more requires the side lap to be stitched at mid-span.



For installation information see the section later in this manual.

NOTE - additional fasteners do not allow greater spans.

# STRAMIT MINIRIB® PANELLING



## **Applications**

**Stramit Minirib**® panelling has a near flat profile for discreet panel areas. Widely used as a transport siding, portable buildings and internal shed wall lining **Stramit Minirib**® panelling also finds use for narrow soffits.

#### **Features**

- 900mm Cover for maximum use of material whenever applications permit.
- Easy Fixing conventional through fixed screws maximise performance and installation.
- Low Rib Height to allow flexibility in the sheet for architectural treatments.
- Versatility suitable for a variety of applications in both architectural and industrial markets
- Hi-tensile Steel for greater damage resistance and performance.

#### **Materials**

**Stramit Minirib®** panelling is a cold roll formed steel product in G550 base material (550 MPa minimum yield stress), with a ZINCALUME® (AZ150) coating in accordance with A1397, and COLORBOND® steel available in a range of colours.

# STRAMIT MINIRIB® PANELLING – SHEETING MASS (kg/m² of roof area)

		•
thickness BMT	ZINCALUME®	COLORBOND®
0.42mm	3.62	3.68

Note – **Stramit Minirib**® panelling is also available in 0.35mm BMT for non-structural/non load-bearing internal applications.

#### **Pressures**

ST SERVIC	RAMIT I EABILIT				
span	þres	ssure (kPa)	at the spar	ıs (mm) sho	own
type	600	900	1200	1500	1800
internal	3.41	2.39	1.84	1.49	1.25
equal	3.41	2.39	1.84	1.49	1.25
double	3.41	2.39	1.84	1.49	1.25

# STRAMIT MINIRIB® PANELLING – STRENGTH LIMIT STATE CAPACITY (Non-cyclonic)

span	þres	pressure (kPa) at the spans (mm) shown									
type	600	900	1200	1500	1800						
internal	5.79	2.67	1.56	1.04	0.74						
equal	5.79	2.67	1.56	1.04	0.74						
double	5.79	2.67	1.56	1.04	0.74						

Tables are based on testing to AS1562 and AS4040 parts 0, 2 and 3. Internal spans must have both end spans 20% shorter. Values only valid for use with steel support members of 0.75mm or thicker. Data shown is for 0.42mm **Stramit Minirib**® panelling.

#### **Impact**

For wall areas likely to be subject to human impact, sheeting spans should be reduced. Impact loads will vary considerably and these are not prescribed in Australian Standards. A span of 1000mm is suggested for such areas, but this should be adjusted dependent upon the exposure and importance of the application.

#### **Spring Curving**

**Stramit Minirib**® panelling is able to be spring curved to a radius as tight as 2000mm for additional architectural versatility. However, at radii of 6000mm or less the support spacing must be reduced to no greater than 600mm.

#### Stramit Minirib® Fasteners

All fasteners should conform with AS3566 - Class 3 and be compatible with the cladding material used.



#### For steel

- No. 12 x 20mm hex head self-drilling, self-tapping screws.



In internal applications, 3.2mm aluminium pop rivets.



#### For timber

 No. 12 x 25mm hex head self-drilling type 17 screws. Add 10mm to screw length for softwood applications.



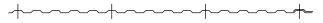
#### Side laps

- No. 8 x 12mm 'S' point screws or 3.2mm sealed aluminium pop rivets.

#### Stramit Minirib® Fastener Position

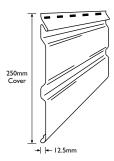
For external applications, side lap fasteners are required at 200-300mm centres. At all supports, 4 equally spaced fasteners are required across the sheet including one fastener through or adjacent to the overlap.

For internal applications **Stramit Minirib**® panelling with spaces of 1000mm or more requires the side lap to be stitched at mid-span.



For further installation information see the section later in this manual.

# STRAMIT MONOPANEL® WALL CLADDING



## **Applications**

**Stramit Monopanel**® wall cladding has an appealing smooth faced finish with concealed fixings, designed for feature walling and is effective in both horizontal and diagonal applications.

#### **Features**

- 250mm Cover allows for quick installation.
- Simple Installation "fix, hinge and cover and fix again" procedure.
- Versatility can be used in either vertical, diagonal or horizontal applications.
- Secret Fixing fasteners are concealed from view to give a smooth appearance.
- Trims a complete range of trims and accessories are available.
- Continuous Interlock to weatherseal all joints.
- High Tensile Steel for greater damage resistance and performance.

#### **Material**

**Stramit Monopanel®** wall cladding is a cold roll formed steel product in G550 base material (550 MPa minimum yield stress) with ZINCALUME® substrate in accordance with AS1397 and COLORBOND® coating, available in a range of colours.

# STRAMIT MONOPANEL® WALL CLADDING – SHEETING MASS (kg/m² of roof area)

thickness BMT	ZINCALUME <sup>®</sup>	COLORBOND <sup>®</sup>
0.48mm	4.51	4.58

#### **Pressures**

# STRAMIT MONOPANEL® WALL CLADDING SERVICEABILITY LIMIT STATE CAPACITY

span	pressure (kPa) at the spans (mm) shown							
type	600	900	1200	1500	1800	2100	2400	2700
internal	4.57	3.06	2.30	1.84	1.54	1.32	1.15	1.02
equal	4.57	3.06	2.30	1.84	1.54	1.32	1.15	1.02
double	5.19	3.47	2.61	2.09	1.74	1.49	1.31	1.16

# STRAMIT MONOPANEL® WALL CLADDING – STRENGTH LIMIT STATE CAPACITY (Non-cyclonic)

span		pressure (kPa) at the spans (mm) shown								
type	600	900	1200	1500	1800	2100	2400	2700		
internal	7.29	4.46	3.19	2.48	2.03	1.72	1.49	1.31		
equal	7.29	4.46	3.19	2.48	2.03	1.72	1.49	1.31		
double	8.17	5.00	3.58	2.78	2.28	1.92	1.67	1.47		

Tables are based on testing to AS1562 and AS4040 parts 0, 2 and 3. Internal spans must have both end spans 20% shorter. Values only valid for use with steel support members of 0.75mm or thicker.

#### **Impact**

For wall areas likely to be subject to human impact, sheeting spans should be reduced. Impact loads will vary considerably and these are not prescribed in Australian Standards. A span of 1000mm is suggested for such areas, but this should be adjusted dependent upon the exposure and importance of the application.

#### Stramit Monopanel® Fasteners

All fasteners should conform to AS3566 – Class 3 and be completely compatible with the cladding material used.



#### For steel

 No. 10 x 16mm wafer head self-drilling, self-tapping screws.



#### For timber

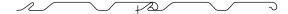
- No. 10 x 25mm wafer head self-drilling type 17 screws. Add 10mm to screw length for softwood applications.



Alternatively, use 3.2mm pop rivets or 40mm flat head galvanised clouts for steel or timber respectively.

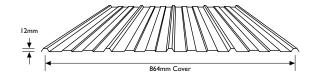
# Stramit Monopanel® Fastener Positions

Use one fastener per sheet at each support placed in the pre-punched slots.



For further installation information see the section later in this manual.

# STRAMIT K-PANEL® WALL SHEETING



## **Applications**

**Stramit K-Panel®** wall sheeting is an economical and neat profile used widely in small sheds and light industrial buildings as well as soffits and fascias.

#### **Features**

- 864mm to maximise efficiency and reduce costs.
- Easy Fixing conventional through fixed screws maximise performance and installation.
- Low Rib Height for smart neat appearance used effectively in minimal dust zones.
- Fast Erection a quick covering profile with simple fastening.

#### **Materials**

**Stramit K-Panel®** wall sheeting is a cold roll formed steel product in G550 base material with a ZINCALUME® (AZ150) coating in accordance with AS1397, and COLORBOND® steel available in a range of colours.

# STRAMIT K-PANEL® WALL SHEETING – SHEETING MASS (kg/m² of roof area)

thickness BMT	ZINCALUME <sup>®</sup>	COLORBOND®		
0.35mm	3.11	3.17		
0.42mm	3.77	3.84		

#### **Pressures**

#### STRAMIT K-PANEL® WALL SHEETING -SERVICEABILITY LIMIT STATE CAPACITY

thickness	fastener	s span	pressure (kPa) at the spans (mm) shown						
BMT	BMT /sheet		600	900	1200	1500	1800		
0.35 4		internal	4.23	1.87	1.03	0.64	0.42		
	4	equal	2.94	1.29	0.70	0.42	0.26		
		double	2.55	1.12	0.61	0.36	0.23		
0.42		internal	5.60	2.48	1.37	0.84	0.55		
	4	equal	3.89	1.70	0.92	0.55	0.35		
		double	3.38	1.48	0.80	0.48	0.30		

# STRAMIT MINIRIB® WALL SHEETING – STRENGTH LIMIT STATE CAPACITY (Non-cyclonic)

thickness	fastener	s span	pressure (kPa) at the spans (mm) shown						
BMT	BMT /sheet		600	900	1200	1500	1800		
0.35		internal	12.5	7.75	5.28	3.77	2.75		
	4	equal	10.1	6.11	4.02	2.75	1.89		
		double	9.87	5.93	3.90	2.67	1.84		
0.42	4	internal	15.3	9.48	6.45	4.61	3.36		
		equal	12.4	7.47	4.91	3.36	2.32		
		double	12.1	7.24	4.77	3.26	2.25		

Tables are based on testing to AS1562 and AS4040 parts 0, 2 and 3. Internal spans must have both end spans 20% shorter. Values only valid for use with steel support members of 0.75mm or thicker.

#### **Impact**

For wall areas likely to be subject to human impact, sheeting spans should be reduced. Impact loads will vary considerably and these are not prescribed in Australian Standards. A span of 1000mm is suggested for such areas, but this should be adjusted dependent upon the exposure and importance of the application.

#### Stramit K-Panel® Fasteners

All fasteners should conform with AS3566 - Class 3 and be compatible with the cladding material used.



#### For steel

 No. 10 x 16mm hex head self-drilling, self-tapping screws.





 No. 12 x 25mm hex head self-drilling type 17 screws. Add 10mm to screw length for softwood applications.

## Side laps



- No. 8 x 12mm 'S' point screws or



3.2mm diameter sealed aluminium pop rivets.

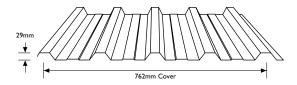
# Stramit K-Panel® Fastener Position

Fix adjacent to the overlap and each subsequent rib (4 fasteners per sheet) at every support. Spans over 900mm require the sidelaps to be stitched at mid-span.



For further installation information see the section later in this manual.

# STRAMIT MONOCLAD® WALL SHEETING



## **Applications**

Stramit Monoclad® wall sheeting is a strong and efficient profile ideal for economical applications such as industrial and agricultural buildings. Used horizontally in discreet lengths with separating flashing Stramit Monoclad® wall sheeting can be an extremely effective finish for commercial buildings.

#### **Features**

- · Simple Installation through fixing for ease of assembly.
- 762mm Cover quick installation and easy handling.
- · Hi-tensile Steel lightweight and high strength.
- · Deep Ribs provide excellent spanning capability.
- Fully Tested a full range of load performance tables to suit almost any application.

#### **Material**

Stramit Monoclad® wall sheeting is manufactured from G300 COLORBOND® or ZINCALUME® steel.

COLORBOND® Ultra steel is in accordance with AS2728 -Category 3 and for the substrate with AS1397. ZINCALUME® AZI50 conforms to ASI397.

# STRAMIT MONOCLAD® WALL SHEETING -SHEETING MASS (kg/m<sup>2</sup> of roof area)

thickness BMT	ZINCALUME <sup>®</sup>	COLORBOND®		
0.35mm	3.53	3.59		

#### **Pressures**

## STRAMIT MONOCLAD® WALL SHEETING -SERVICEABILITY LIMIT STATE CAPACITY

span		pressure (kPa) at the spans (mm) shown									
type	600	900	1200	1500	1800	2100	2400	2700			
internal	4.33	4.33	3.00	2.21	1.68	1.31	1.03	18.0			
equal	4.00	4.00	2.29	1.50	1.07	0.82	0.65	0.53			
double	3.25	3.25	1.87	1.24	0.90	0.70	0.57	0.48			

# STRAMIT MONOCLAD® WALL SHEETING – STRENGTH LIMIT STATE CAPACITY (Non-cyclonic)

span		pressure (kPa) at the spans (mm) shown									
type	600	900	1200	1500	1800	2100	2400	2700			
internal	6.70	6.70	6.03	4.50	3.57	2.98	2.54	2.21			
equal	6.70	6.70	4.69	3.57	2.87	2.38	2.03	1.76			
double	6.70	6.70	4.69	3.57	2.87	2.38	2.03	1.76			

Tables are based on testing to AS1562 and AS4040 parts 0, 2 and 3. Internal spans must have both end spans 20% shorter. Values only valid for use with steel support members of 0.75mm or thicker.

## **Impact**

For wall areas likely to be subject to human impact, sheeting spans should be reduced. Impact loads will vary considerably and these are not prescribed in Australian Standards. A span of 1500mm is suggested for such areas, but this should be adjusted dependant upon the exposure and importance of the application.

#### Stramit Monoclad® Fasteners

All fastening screws must conform to AS3566 - Class 3. They are to be hexagon headed and must be used with neoprene washers. For connecting to purlins or top hats use:



**For steel** (0.75bmt or greater)

No. 10 x 16mm self-drilling and threading screws for pan fixing to walls.



For timber (FII or better)

- No. 10 x 25mm type 17 screws for pan fixing to walls.



– No. 8 x I2mm 'S' point screws or

pop rivets.

#### Stramit Monoclad® Fastener Positions

Fix adjacent to the overlap and each subsequent rib (4 fasteners per sheet) at every support. Spans over 1200mm require the sidelaps to be stitched at mid-span.



For further installation information see the section later in this manual.

# **STRAMIT®** WALL SHEETING & CLADDING

#### **Procurement**

#### **Related Products**



**Stramit® Flashings** – a range of standard and custom flashings for covers and capping

#### Length

**Stramit**® wall sheeting & cladding is supplied cut-to-length. The manufacturing tolerance on the length of product supplied is +0, -15mm.

## **Delivery/Unloading**

Delivery is subject to the delivery location, quantity and material availability, or can be at a pre-arranged date and time. Please ensure that suitable arrangements have been made for truck unloading, as this is the responsibility of the receiver. Pack mass may be up to one tonne. When lifting **Stramit**® wall sheeting & cladding, care should be taken to ensure that the load is spread to prevent damage.

#### Handling/Storage

**Stramit®** wall sheeting & cladding should be handled with care at all times to preserve the product capabilities and quality of the finish. Packs should always be kept dry and stored above ground level while on site. If the sheets have become wet, they should be separated, wiped and placed in the open to promote drying.

# Installation

#### Installation

Do not over-tighten screws and ensure they are kept perpendicular to the sheet during installation.

For maximum protection from weather intrusion vertical sheets should be laid with the exposed edge of the overlaps away from the direction of the prevailing weather.

Horizontal or diagonal sheets must be laid with the exposed edge of the overlap at the bottom of each sheet. Horizontal or diagonal sheets will also require a suitable under flashing as some rainwater may run or be blown to the sheet ends.

WARNING - Do not use Stramit® wall sheeting & cladding as a roof sheet.

Installation of **Stramit**® walling is a straightforward procedure using the following fixing sequence:

- I. Ensure all girts or wall frame studs are in line, correctly installed and that lining materials (if specified) are in place.
- 2. Position and fix the first sheet ensuring the correct sheet overhangs (minimum 50mm from the edge fastener).
- 3. Continue to fix subsequent sheets checking that sheet ends at the lower edge are exactly aligned, and that sheets sit correctly so that the integral anti-capillary space is effective.

- 4. Measure the overall cover width at top and bottom of the sheets from time to time to avoid 'fanning'.
- Stitch the sidelaps at midspan for wall spans exceeding that specified for each product.
- 6. Install flashings.
- Clean up after each days work, removing all screws, cutting, swarf etc, and leave clean and watertight.

# **Exposed Edges**

To avoid the risk of cuts, wall applications accessible to personnel should be designed to avoid exposed edges. Sheet ends should be well recessed or covered by flashings with folded edges. Profiles with exposed sheet overlaps, when sidelap fasteners are correctly installed, fit snugly and are generally satisfactory.

#### **Good Practice**

Stramit recommends that good trade practice be followed when using these products, such as that found in Australian Standards Handbook HB39.

#### **Cutting**

**Stramit**® wall sheeting & cladding can be easily cut, where required, using a power saw with a steel cutting blade or a power nibbler and, for localised cutting, tin snips. Avoid the use of abrasive discs as these can cause burred edges and coating damage. Please dispose of any off-cuts carefully.

#### **Painting**

**Stramit**® wall sheeting & cladding are available in COLORBOND® steel colours. However should painting of ZINCALUME® products be required, contact your nearest Stramit location for details.

#### Additional Information

## **Maintenance**

Exterior surfaces of metal products unwashed by rain can benefit from occasional washing to remove build-up of corrosive salts. Walls beneath eaves or awnings, and soffits or eaves linings are such a situation.

#### **Cleaning**

Should it become necessary to wash **Stramit**® wall cladding or sheeting (COLORBOND® or ZINCALUME® steel) follow the procedure below:

- I. Wash the surface with a mild solution of pure soap or non-abrasive, non-toxic, kitchen detergent in warm water using a sponge, soft cloth or soft bristle nylon brush.
- Thoroughly rinse with clean water immediately after cleaning.

WARNING - Never use abrasive or solvent type cleaners (e.g. turps, petrol, thinners or kerosene) on COLORBOND® steel.



# The Stramit web page can be found at:

#### www.stramit.com.au

Details of many  $\textbf{Stramit}^{\otimes}$  products can also be seen on the RAIA site 'Product Selector' at: www.selector.com.au

<b>Building Products</b>		prices	availability	general	technical
contact numbers for information			products coating colours	other	advice product data
SYDNEY 33-83 Quarry Road, Erskine Park NSW 2759	phone fax	` '	<b>34 0909</b> 34 0988	(02) 9834 0900 (02) 9834 0988	
CANBERRA 4 Bass Street, Queanbeyan NSW 2620	phone fax		<b>(02) 6297 3533</b> (02) 6297 8089		
COFFS HARBOUR 6 Mansbridge Drive, Coffs Harbour NSW 2450	phone fax		( <b>02</b> ) <b>6652 6333</b> ( <b>02</b> ) <b>6651 3395</b>		(02) 4954 5033 (02) 4954 5856
NEWCASTLE 17 Nelson Road, Cardiff NSW 2285	phone fax		<b>(02) 4954 5033</b> (02) 4954 5856		
ORANGE 51 Leewood Drive, Orange NSW 2800	phone fax		<b>(02) 6361 0444</b> (02) 6361 9814		
MELBOURNE 2/1464 Ferntree Gully Road, Knoxfield VIC 3180	phone fax	` '	<b>37 6300</b> 37 6399	(03) 9237 6200 (03) 9237 6299	
ALBURY 18 Ariel Drive, Albury NSW 2640	phone fax		<b>(02) 6041 7600</b> (02) 6041 7666		
<b>BENDIGO</b> Ramsay Court, Kangaroo Flat VIC 3555	phone fax		<b>(03) 5447 8455</b> (03) 5447 9677		
HOBART 57 Crooked Billett Drive, Brighton TAS 7030	phone fax		<b>(03) 6263 5536</b> (03) 6263 6950		(03) 6263 5536
<b>LAUNCESTON</b> 9 Richard Street, Western Junction TAS 7212	phone fax		(03) 6391 9293 (03) 6391 8774		(03) 6263 6950
ADELAIDE II Stock Road, Cavan SA 5094	phone fax		<b>(08) 8262 4444</b> (08) 8262 6333		(08) 8262 4444 (08) 8262 6333
BRISBANE 57-71 Platinum Street, Crestmead QLD 4132	phone fax		(07) 3803 9999 (07) 3803 1499		
<b>TOWNSVILLE</b> 402-408 Bayswater Road, Garbutt QLD 4814	phone fax		(07) 4779 0844 (07) 4775 7155		
CAIRNS Vickers Street, Edmonton QLD 4869	phone fax		(07) 4045 3069 (07) 4045 4762		
MACKAY Brickworks Court, Glenella QLD 4740	phone fax		<b>(07) 4942 3488</b> (07) 4942 2343		(07) 3803 9999 (07) 3803 1499
MARYBOROUGH 10 Activity St, Maryborough QLD 4650	phone fax		(07) 4121 2433 (07) 4123 3139		
ROCKHAMPTON 41 Johnson St, Parkhurst QLD 4702	phone fax		<b>(07) 4936 2577</b> (07) 4936 4603		
SUNSHINE COAST Unit 1, 5 Kerryl St, Kunda Park QLD 4556	phone fax		(07) 5456 4083 (07) 5456 4862		
MURWILLUMBAH 6 Kay Street, Murwillumbah NSW 2484	phone fax		<b>(02) 6672 8542</b> (02) 6672 6798		
<b>DARWIN</b> 55 Albatross Street, Winnellie NT 0820	phone fax		(08) 8947 0780 (08) 8947 1577		
PERTH 605-615 Bickley Road, Maddington WA 6109	phone fax		` '	9 <b>3 8800</b> 93 8899	
<b>BUNBURY</b> 25 Proffit Street, Bunbury WA 6230	phone fax		` ,	<b>21 8046</b> 21 8017	

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