



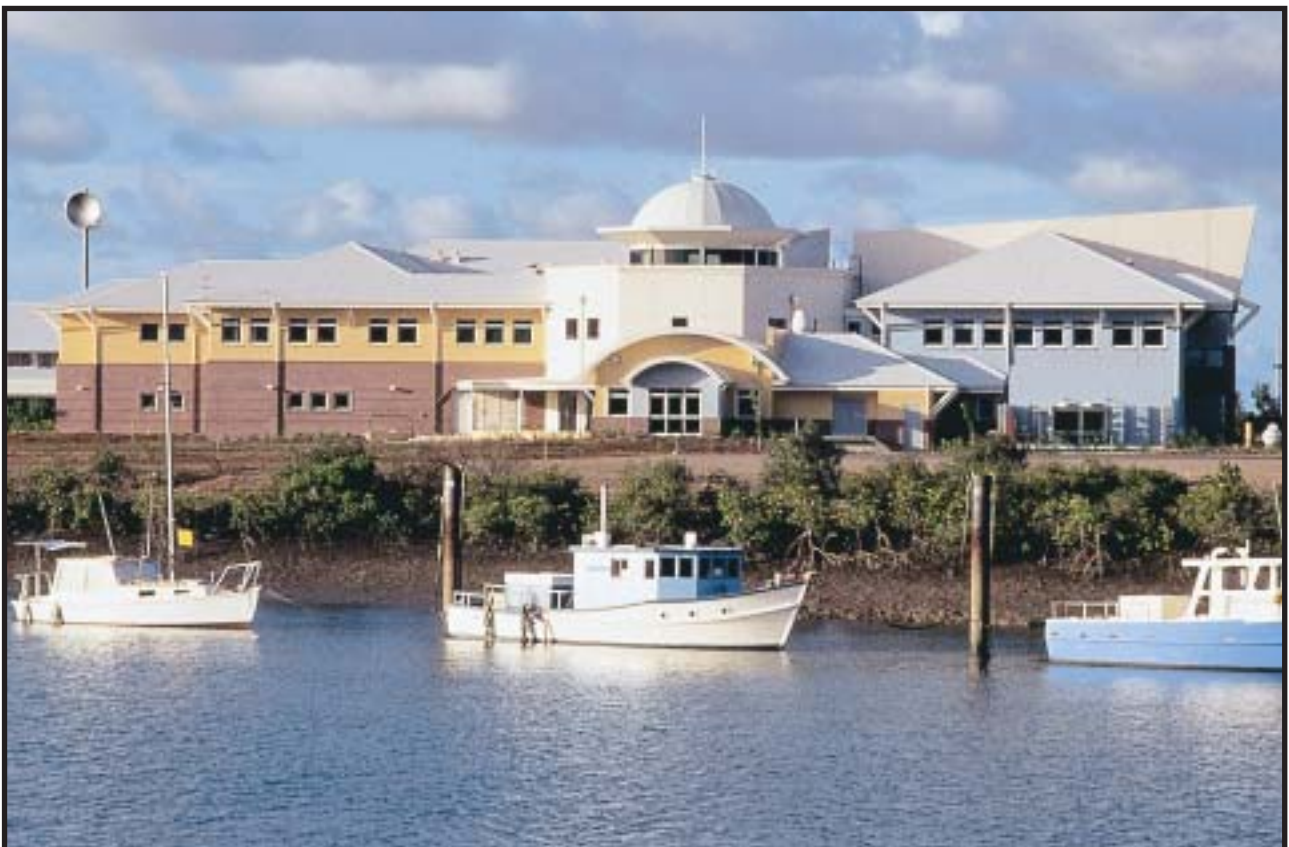
PREMIUM MATERIALS & FINISHES

D E S I G N G U I D E



PREMIUM MATERIALS & FINISHES

The range of premium materials and finishes readily available for roofing, walling and other external surfaces, and factors influencing their selection.



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.

Introduction

Stramit is in a unique position to offer a wide range of roll-formed materials and finishes intended primarily for external use in building construction. As a building products supplier Stramit is able to offer any suitable materials without corporate conflict. Further, as a leading roll-former, Stramit is ideally placed to provide profiles from the exclusive range of COLORBOND® Premium finished steel products. This enables Stramit to offer short-term availability on each of these products, for both large and small order sizes.

The COLORBOND® Premium finished steel product range comprises of three classes of product offering excellent options in appearance and durability. COLORBOND® Metallic pre-painted steel has performance characteristics similar to COLORBOND® steel but offers a range of six direction-oriented metallic lustres for a very special appearance. COLORBOND® Ultra pre-painted steel is suited to severe environments or can offer long lifetimes in everyday environments. COLORBOND® Stainless pre-painted stainless steel is suitable for extreme environments. Both COLORBOND® Ultra and COLORBOND® Stainless steel are available in a choice of six colours.

Stramit has also made arrangements to offer both Aluminium and Copper in commercially practical lead-times and for both large and small order sizes. Aluminium has good corrosion qualities and is also ideal for some industrial situations. Copper, as well as having excellent corrosion resistance, has a unique visual appeal.

This guide sets out to provide comprehensive selection information to enable the optimum choice of **Stramit® Premium Materials and Finishes** for each set of design circumstances.

NOTE. All references to thickness in this guide refer to the base metal thickness (bmt), and are given in millimetres (mm).

Selection

The choice of materials and finishes in design is influenced by a number of factors. These embody all elements of the physical and social environment in which a building is to be constructed and used.

Product Range

Stramit® Premium Materials and Finishes are available in a wide range of products. The table below shows those readily available. Other products may be available. Contact your nearest Stramit location to discuss your particular requirements.

STRAMIT® PREMIUM MATERIALS & FINISHES – Profiles and sheet mass (kg/m²)			
Stramit® sheeting	material	thickness*	nominal mass
Speed Deck Ultra®	steel#	0.42	4.7
		0.48	5.4
Longspan®	steel#	0.42	4.7
		0.48	5.4
Megaclad®	steel#	0.42	4.1
		0.48	4.7
Monoclad®	steel#	0.42	4.4
		0.48	4.9
Corrugated	steel#	0.42	4.4
		0.48	4.9
K-Panel®	steel#	0.42	3.8
Mini Corry®	steel#	0.42	4.0
Minirib®	steel#	0.42	3.7
Xtraspan™	aluminium	0.55	2.0
		0.70	2.5
Speed Deck® 500	aluminium	0.70	2.6
	copper	0.70	8.5

Steel refers to COLORBOND® Metallic, COLORBOND® Ultra and COLORBOND® Stainless Steel.

* Not all thicknesses available in all materials.

STRAMIT® PREMIUM MATERIALS & FINISHES – Range

Premium Product	base material	grade	thickness	finish	available as
COLORBOND® Metallic	Steel	G550	0.48	Paint	Walling, roofing
		G300	0.55		Flashings
COLORBOND® Ultra	Steel	G550	0.42	Paint	Roofing, walling, fascia, gutter
		G550	0.48		Roofing, walling
		G300	0.55		Flashings
COLORBOND® Stainless	SS	430SS	0.42	Paint	Roofing, walling, flashings, gutter
Aluminium	Aluminium	see page 8	0.55	Natural	Roofing, walling
	Aluminium		0.70		Roofing, walling
Copper	Copper	see page 8	0.70	Natural	Roofing, walling

Availability

Stramit® Premium Materials and Finishes are offered throughout Australia. Quantities of COLORBOND® Metallic, COLORBOND® Ultra and COLORBOND® Stainless are available at short notice for both small and large projects. Minimum quantities and slightly longer lead times do apply to both aluminium and copper. Please contact Stramit if you are considering aluminium or copper for up-to-date availability.

Quick select

Whilst each aspect of design is discussed in more detail below, a simplified guide to material and finish selection is expressed in the table below.

STRAMIT® PREMIUM MATERIALS & FINISHES – Quick Selection

Criterion	COLORBOND®	COLORBOND® Metallic	COLORBOND® Ultra	COLORBOND® Stainless	Aluminium	Copper
Durability	good	good	very good	excellent	very good	excellent
Strength	excellent	excellent	excellent	excellent	average	poor
Appearance	good	excellent	good	good	average	excellent
Economy	excellent	good	good	average	average*	poor*

*The cost of aluminium and copper is highly volatile, being sensitive to world commodity prices.

Durability

A number of factors influence durability of external cladding materials, most notably the physical environment. It is convenient to classify the extent of adversity and the proximity to potentially corrosive environments in tabular form.

Site exposure conditions

Site exposure type	Distance from –			
	– 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 Site Exposure Condition is the **worse** case from the four columns

The suitability of different materials and finishes for each environment is shown in the table below. It must however be recognized that these recommendations are based on an average durability, and each may further be influenced by very localized factors such as accessory choice, unwashed areas and water run-off paths.

Material suitability for site exposure types

material type	Site exposure condition			
	benign	moderate	severe	very severe
ZINCALUME® AZ150	✓	✗	✗	✗
Galvanised Z450	✓	✗	✗	✗
COLORBOND® Metallic	✓✓	✓	✗	✗
COLORBOND® Ultra	✓✓	✓✓	✓	✗
COLORBOND® Stainless	✓✓	✓✓	✓✓	✓
Aluminium	✓✓	✓	✓	✓
Copper	✓✓	✓✓	✓✓	✓

Material compatibility

It is imperative that the choice of materials includes consideration of the effects of, or upon, adjacent materials such as fastenings, flashings, gutters etc. Each cladding material choice should be checked for compatibility in two ways.

Firstly account must be taken of the effect of rainwater running from, or onto, a roof under consideration to, or from, another building element. Suitability is shown in the following table.

Drainage from one material to another

Lower roof cladding, flashing or rainwater product material	Upper roof cladding, flashing or rainwater product material											
	Aluminium	Copper	COLORBOND® Stainless	Zinc/galvanised	ZINCALUME®	Lead	COLORBOND® Metallic	COLORBOND® Ultra	Glazed tiles	Unglazed tiles	Plastic	Glass
ZINCALUME®	✓	✗	!	✓	✓	✗	✓	✓	✓	✓	✓	✓
Galvanised/zinc	✗	✗	✗	✓	✗	!	✗	✗	✗	✓	✗	✗
COLORBOND® Metallic	✓	✗	!	✓	✓	✗	✓	✓	✓	✓	✓	✓
COLORBOND® Ultra	✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
COLORBOND® Stainless	!	!	✓	!	!	✓	!	!	✓	✓	✓	✓
Aluminium	✓	✗	!	✓	✓	!	✓	✓	✓	✓	✓	✓
Copper	!	✓	!	!	!	✓	!	!	✓	✓	✓	✓

Combinations marked ✓ are satisfactory

Combinations marked ✗ are not satisfactory and will corrode prematurely

Combinations marked ! are satisfactory provided direct contact is avoided

Secondly direct contact between materials, such as between cladding and fasteners or flashings, must be considered. Suitability is shown in the table below.

Direct contact between materials

Roof sheeting material	Accessory, flashing material															
	Aluminium		Copper		COLORBOND® Stainless		Zinc/galvanised		ZINCALUME®		Lead		COLORBOND® Metallic		COLORBOND® Ultra	
	Benign	Severe	Benign	Severe	Benign	Severe	Benign	Severe	Benign	Severe	Benign	Severe	Benign	Severe	Benign	Severe
ZINCALUME®	✓	✗	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓
Galvanised	✓	✗	✗	✗	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
COLORBOND® Metallic	✓	✗	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓
COLORBOND® Ultra	✓	✓	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓
COLORBOND® Stainless	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Aluminium	✓	✓	✗	✗	✗	✗	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓
Copper	✗	✗	✓	✓	✗	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗	✗

Roof drainage

Regardless of material choice a reasonable roof slope (say 5° or more) will be beneficial. The steeper the roof the more unwanted dirt and debris will be washed away by rainwater. For minimum slopes, and maximum roof run lengths, for **Stramit® Roofing Profiles** refer to the Stramit Design Guide – Roof Slopes.

Rainwater running from one material to a different material must be checked for potential corrosion. See the material compatibility section.

Aesthetics

Beauty is in the eye of the beholder. There are a number of factors to consider in choosing cladding materials, finishes and profiles. Some criteria potentially relevant to the different material types are presented below.

Thermal Expansion

All external cladding materials are subjected to a considerable temperature range. This can be a particular issue with roofing, where exposure to direct sunlight is greatest and sheeting lengths are usually longest. The temperature on a metal roof can be as much as 30°C or more greater than ambient. Temperature variation causes expansion/contraction in all materials and this must be accounted for in roof design. The table below gives maximum recommended lengths for different combinations of material, profile type and colour. Roofs with longer lengths require expansion joints.

STRAMIT® PREMIUM MATERIALS & FINISHES – Thermal expansion – maximum sheet lengths (m)					
		concealed fixed decks		through fixed sheeting	
Premium product	colour	flat	sprung-curved	flat	sprung-curved
COLORBOND® Metallic/ Ultra	light dark	35 25	30 20	25 17	20 15
COLORBOND® Stainless	light dark	25 20	20 15	17 12	15 10
Aluminium	N/A	15	12	12	10
Copper	N/A	15	12	N/A	N/A

STRAMIT® PREMIUM MATERIALS & FINISHES – Aesthetic issues/considerations*

Material/Finish	short term (0-2 years)	medium term (2-20 years)	long term (20-50 years)
All materials/finishes	user expectations sheet profile fastener appearance oil-canning of wide pans	dust/debris build up stains from smoke, runoff etc dirtier in unwashed areas	surrounding building changes surrounding vegetation changes change of building usage
COLORBOND® Metallic	potential swarf marks sheet orientation paint colour		localised gradual oxidation gradual paint chalking possible lichen/fungus in shaded areas
COLORBOND® Ultra	potential swarf marks paint colour		possible localised gradual oxidation very gradual paint chalking possible lichen/fungus in shaded areas
COLORBOND® Stainless	paint colour		very gradual paint chalking possible lichen/fungus in shaded areas
Aluminium	glare	white/grey oxidation possible rib damage	oxidation pitting possible lichen/fungus in shaded areas
Copper	finger marks	brown patina formation possible rib damage	gradual green patina formation

* Actual performance may vary considerably depending on environment, useage and location. Some of the considerations shown may not occur at all.

Foot traffic resistance

Profiles manufactured from high-tensile (G550) steel are fundamentally stronger than the other materials. Accordingly it is common practice for roofs made from aluminium or copper to be deemed “non-trafficable”. In these circumstances warning signs are required at all roof access points and walkways must be provided. This can be overcome by provision of a solid substrate (e.g. plastic covered plywood) beneath the sheeting. It should be noted that all roofs requiring routine access require walkways.

Wind resistance

Profiles manufactured from high-tensile (G550) steel are fundamentally stronger than other materials. Using these products (COLORBOND® Metallic, COLORBOND® Ultra and COLORBOND® Stainless steel) wind performance data can be used directly from **Stramit®** Roofing or Walling technical manuals.

Simplified tables of profile/product spans are provided below.

STRAMIT® PREMIUM MATERIALS & FINISHES – Foot traffic – maximum roof spans (mm)

Stramit® sheeting	material	thickness	foot traffic type*		
			heavy	normal	controlled**
Speed Deck Ultra®	steel#	0.42	1100	2100	2700
		0.48	1400	2700	3600
Longspan®	steel#	0.42	N/A	2100	2400
		0.48	800	2700	3000
Megaclad®	steel#	0.42	N/A	1500	1800
		0.48	800	1800	2100
Monoclad®	steel#	0.42	N/A	1700	2100
		0.48	1000	2300	2700
Corrugated	steel#	0.42	N/A	1200	1500
		0.48	750	1600	1800
Xtraspan™	aluminium	0.55	N/A	N/A	N/A
		0.70	N/A	N/A	N/A
Speed Deck® 500	aluminium	0.70	N/A	1000	1200
	copper	0.70	N/A	1000	1200

* See the Stramit Foot Traffic Design Guide for a full explanation of foot traffic types.

Internal spans shown. End spans must be reduced by 20%.

** Wind resistance must be checked for controlled foot traffic spans.

STRAMIT® PREMIUM MATERIALS & FINISHES – Wind resistance – maximum** roof and wall spans (mm)

Stramit® sheeting	material	thickness	ROOFS			WALLS			overhang	
			All conditions up to N3 or Region A (rural) and Region B (exposed suburban)			N1, N2 or Region B (sheltered suburban) and Region A (sheltered & exposed suburban)		N3 or Region A (rural) and Region B (exposed suburban)		
			internal#	end/equal	overhang	internal#	end/equal	internal#		end/equal
Speed Deck Ultra®	steel#	0.42	2100	1700	150	3000	2500	2900	2350	150
		0.48	2550	2150	200	3000	2500	2950	2450	200
Longspan®	steel#	0.42	1900	1550	100	3000	2500	2350	1950	100
		0.48	2350	1950	150	3000	2500	2800	2300	150
Megaclad®	steel#	0.42	1450	1200	100	2450	2000	1900	1550	100
		0.48	1800	1500	150	2600	2150	2300	1900	150
Monoclad®	steel#	0.42	1700	1350	100	3000	2500	2800	2200	100
		0.48	2300	1700	150	3000	2500	3000	2500	150
Corrugated	steel#	0.42	1200	900	100	2650	2050	2150	1650	100
		0.48	1600	1200	100	2850	2300	2250	1750	100
K-Panel®	steel#	0.42		N/A		1700	1400	1450	1200	100
Mini Corry®	steel#	0.42		N/A		1200	1000	1100	900	100
Minirib®	steel#	0.42		N/A		1200	1000	1000	800	100
Xtraspan™ △	aluminium	0.55	800	600	100	1700	1300	1400	1000	100
		0.70	1000	800	150	2500	1900	2000	1500	150
Speed Deck® 500	aluminium	0.70	1200	1200	100	1500	1500	1200	1200	100
	copper	0.70	700	700	150	1400	1400	900	900	150

Steel refers to COLORBOND® Metallic, COLORBOND® Ultra and COLORBOND® Stainless Steel. (Some thicknesses may not be available in all products/materials).

* Internal span values can only be used in conjunction with the reduced end span indicated.

** This table is a safe simplification of more comprehensive data available in the Product Technical Manual for the particular profile.

△ Values shown require fixing at every rib.

Hail

Certain temperate conditions are required for the formation of extreme hail, conditions that can occur in a belt that includes Sydney, Adelaide and Perth. In these regions many buildings could expect to be typically subjected to one or two damaging hailstorms (e.g. Sydney 1999) in say a 50 year period. During the same timeframe perhaps four or five severe hailstorms may be encountered. Other regions may encounter such events but they are less likely.

Profiles manufactured from high-tensile (G550) steel (COLORBOND® Metallic, COLORBOND® Ultra and COLORBOND® Stainless Steel) are typically twice as hail-resistant as other materials (aluminium and copper) offered in this guide. G550 materials can be expected to withstand severe hail without adverse effect, and extreme hail with superficial damage only (that is they should remain fully functional). Aluminium and copper may sustain superficial damage in severe hail but, dependant upon the structure, could be penetrated and suffer considerable damage in extreme hail.

Personnel impact

External building elements can be subjected to various forms of impact and loads from human activity. These can include foot traffic (caring and uncaring) and falls on roofs, body impact on walls in pedestrian areas, ladder damage and even projectiles. As with hail resistance the most susceptible materials are aluminium and copper.

STRAMIT® PREMIUM MATERIALS & FINISHES – Wall impact zone – suggested maximum spans (mm)			
Stramit® sheeting	material	thickness*	span
Speed Deck Ultra®	steel#	0.42	1800
		0.48	2200
Longspan®	steel#	0.42	1100
		0.48	1300
Megaclad®	steel#	0.42	1100
		0.48	1300
Monoclad®	steel#	0.42	1400
		0.48	1600
Corrugated	steel#	0.42	1000
		0.48	1200
K-Panel®	steel#	0.42	1000
Mini Corry®	steel#	0.42	900
Minirib®	steel#	0.42	900
Xtraspan™	aluminium	0.55	700
		0.70	1000
Speed Deck® 500	aluminium	0.70	1000
	copper	0.70	800

Steel refers to COLORBOND® Metallic, COLORBOND® Ultra and COLORBOND® Stainless Steel.

* Not all thicknesses available in all materials.

Special environments

- Swimming pools – use COLORBOND® Stainless steel
- Horse stables – use COLORBOND® Ultra/Stainless steel
- Other special environments – contact Stramit
- Piggeries – use COLORBOND® Stainless steel
- Chicken sheds – use COLORBOND® Stainless steel
- Other animal buildings – contact Stramit

Cost

Costs can, and do, vary with time and therefore this publication does not attempt to give actual prices. Cost of a building element, such as the external cladding, can be considered in two ways. First is the installed cost and second the lifetime cost.

Installed cost must include the cladding material, fastener, accessory and fixing costs, and include any impact the material choice has on the rest of the building (such as support structure).

As an approximate guide a scale of relative costs is given below. On this scale a roof using ZINCALUME® coated steel has been used as a convenient reference with a value of unity.

- | | |
|------------------------------|---------------|
| • ZINCALUME® steel | 1.0 |
| • COLORBOND® steel | 1.2 to 1.3 |
| • COLORBOND® Metallic steel | 1.8 to 2.0 |
| • COLORBOND® Ultra steel | 1.8 to 2.0 |
| • COLORBOND® Stainless steel | 4.0 to 6.0 |
| • Aluminium | 2.5* to 4.5* |
| • Copper | 8.0* to 10.0* |

* Copper and aluminium are affected by international commodity prices and the indicators shown above may vary considerably.

The cost indicators above should also be considered in the context of its proportion to the total building cost. External cladding costs can be anywhere between 3% and 30% of a building's cost. In contrast external cladding represents up to 95% of the observed building and provides perhaps as much as a 75% contribution to the internal environment.

Lifetime cost-indicators are beyond the scope of this guide. Such costs must take into account the expected life of the building, any anticipated change of usage or localized environment, and ongoing costs such as thermal control and maintenance. In this regard it should be noted that COLORBOND® Metallic, COLORBOND® Ultra steel (as well as COLORBOND® steel) and aluminium each require regular washing of unwashed areas to maximize durability.

Specifying

Careful specification is imperative in ensuring that designer's intentions are realised in the finished building. Below is a suggested architectural specification format. To obtain a precise specification select relevant sections from the bullet-point and square bracket items.

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

- **Stramit Speed Deck Ultra**[®] concealed fixed decking in continuous lengths with ribs 43mm high, spaced at 233mm centres.
- **Stramit Longspan**[®] close-rib trapezoidal sheeting in continuous lengths with ribs 27mm high, spaced at 100mm centres.
- **Stramit Megaclad**[®] wide-pan trapezoidal sheeting in continuous lengths with ribs 27mm high, spaced at 267mm centres.
- **Stramit Monoclad**[®] wide-pan trapezoidal sheeting in continuous lengths with ribs 27mm high, spaced at 190mm centres.
- **Stramit[®] Corrugated** close-pitch sinusoidal sheeting in continuous lengths with ribs 17mm high, spaced at 75mm centres.
- **Stramit K-Panel**[®] wide-pan trapezoidal sheeting in continuous lengths with ribs 12mm high, spaced at 216mm centres.
- **Stramit Mini Corry**[®] close-pitch sinusoidal panelling in continuous lengths with ribs 6mm high, spaced at 24mm centres.
- **Stramit Minirib**[®] close-pitch ribbed panelling in continuous lengths with ribs 4mm high, spaced at 60mm centres.
- **Stramit Xtraspan**[™] close-rib trapezoidal sheeting in continuous lengths with ribs 38mm high, spaced at 127mm centres.
- **Stramit Speed Deck[®] 500** concealed fixed decking in continuous lengths with ribs 42mm high, spaced at 250mm centres.

Sheeting material shall be [select one of the following materials]:

- **COLORBOND**[®] Metallic direction-oriented painted steel with a minimum grade of G550 (in accordance with AS1397 and AS2728) and AZ150 substrate or specifier approved equivalent.
- **COLORBOND**[®] Ultra painted steel with a minimum grade of G550 (in accordance with AS1397 and AS2728) and AZ200 substrate or specifier approved equivalent.
- **COLORBOND**[®] Stainless painted stainless steel with a minimum grade of G550 (in accordance with AS1449 and AS2728) or specifier approved equivalent.
- Cold-rolled aluminium of alloy [3004 temper H34, 5152 temper H39, 5052 temper H38] in accordance with AS2848 and AS1734 or specifier approved equivalent.
- Cold-rolled half-hard copper in accordance with AS1566 and AS2738 or specifier approved equivalent.

The sheeting shall be fixed to the immediate supporting members [purlins/girts/top hats/battens] strictly in accordance with the manufacturers' recommendations for the materials and profile. Suitable fixing [clips and screws] for the materials and exposure conditions, in accordance with relevant Australian Standards [AS3566, Class 3/4], shall be used at every support with side lap fasteners installed at mid-span if required.

Sheets shall be laid in such a manner that the approved side lap faces away from the prevailing weather. A minimum of 50mm shall be provided for projection into gutters. Flashings shall be supplied in fully compatible materials. Minimum cover of flashing shall be 150mm. All sheeting shall be fixed in a workman like manner, leaving the job clean and weather-tight. Repair minor blemishes with touch-up paint supplied by the roof manufacturer. All debris [nuts, screws, cuttings, filings etc.] shall be cleaned off daily.

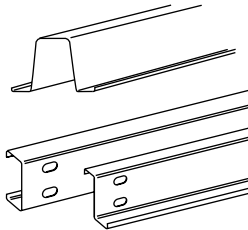
If you require assistance with the specification of **Stramit[®] Roofing and Walling** profiles made from **Stramit[®] Premium Materials and Finishes** please contact your nearest Stramit location. An appropriate specification can be prepared and sent to you by email or fax.

Procurement

Prices

For prices of **Stramit® Roofing and Walling** profiles made from **Stramit® Premium Materials and Finishes** please contact your nearest Stramit location.

Related Products

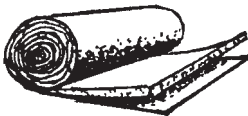


Stramit® Structural Components –

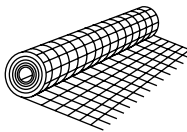
a comprehensive range of purlins, girts, top hats and battens.



Stramit® Flashings – standard or custom shapes made from **Stramit® Premium Materials and Finishes**.



Insulating Products – a wide range of plain and foil backed insulation blanket and roofing mesh.



Length

Stramit® Roof and Wall sheeting is supplied cut-to-length. When designing, or transporting, long products ensure that the length is within the limit of the local Transport Authority regulations. The manufacturing tolerance on the length of sheeting product supplied is +0, -15mm.

Ordering

Stramit® Roofing and Wall profiles made from **Stramit® Premium Materials and Finishes** can be ordered directly from Stramit branches, through distributors or supplied and fixed from a roofing/walling contractor.

When single large visible areas of COLORBOND® Metallic are required it is recommended that orders of these sheets be made at one time to ensure product is from a single production batch. Talk to your Stramit representative in each relevant case.

Delivery/Unloading

Delivery can normally be made within 48 hours, subject to the delivery location, quantity and specific 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 roof and wall sheeting care should be taken to ensure that the load is spread to avoid damage.

Handling/Storage

Products made from **Stramit® Premium Materials and Finishes** must be handled with care at all times to preserve the product performance and the quality finish. Packs should always be kept dry, clean and stored above ground level while on site.

If steel-based sheets have become wet they should be separated, wiped and placed in the open to promote drying.

Installation

Fasteners

All fastening clips and/or screws must be compatible with the selected sheeting material and suitable for the location. The table below shows the required fastenings for fixing to steel purlins.

STRAMIT® PREMIUM MATERIALS & FINISHES – Fastener sizes		
Stramit® sheeting	fastener size	
	roofs	walls
Speed Deck Ultra®	clips + No12x30 hex-head screws	
Longspan®	No12x45 hex-head screws	No10x16 hex-head screws
Megaclad®	No12x45 hex-head screws	No10x16 hex-head screws
Monoclad®	No12x45 hex-head screws	No10x16 hex-head screws
Corrugated	No12x35 hex-head screws	No10x16 hex-head screws
K-Panel®	N/A	No10x16 hex-head screws
Mini Corry®	N/A	No10x16 “Rippletek” screws
Minirib®	N/A	No12x20 hex-head screws
Xtraspan™	No14x60 hex-head screws	No14x20 hex-head screws
Speed Deck® 500	clips + No10x16 wafer-head screws	

STRAMIT® PREMIUM MATERIALS & FINISHES – Fastener material		
Sheeting material	clip/screw fixed	through fixed
benign conditions		
COLORBOND® Metallic/ COLORBOND® Ultra	Galvanised steel & AS3566 Class 3	AS3566 Class 3
COLORBOND® Stainless	N/A	AS3566 Class 3
Aluminium	Aluminium & AS3566 Class 3	AS3566 Class 3
Copper	Brass & AS3566 Class 3 or Stainless steel	N/A
severe conditions		
COLORBOND® Metallic/ COLORBOND® Ultra	Galvanised steel & AS3566 Class 3**	“Class 4”
COLORBOND® Stainless	N/A	Stainless steel
Aluminium	Aluminium & Stainless steel	Stainless steel*
Copper	Brass & Stainless steel	N/A

* Requires separating washers.

** In very severe conditions exposed sheet ends may need flashing against intrusion of salt etc.

Site Induction

Consideration should be given to handling and installation issues as part of site induction safety procedures. Specific consideration should be given to pack handling, avoidance of cuts, trips, slips and falls, long sheet handling particularly in windy conditions, sheet cutting procedures and surface temperature on sunny days. Personal Protection Equipment (PPE) should always be used.

Installation

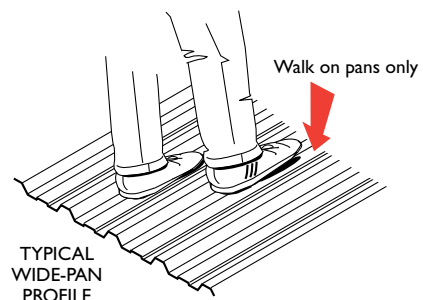
Specific fixing instructions are provided in the relevant Stramit Product Technical Manual for each profile. In addition a few material/finish specific instructions are set out below.

- COLORBOND® Metallic steel – has a direction-oriented finish that can also vary between coils. It may be necessary on large visible surfaces to ensure that adjacent sheets match.
- COLORBOND® Ultra steel – has no additional requirements.
- COLORBOND® Stainless steel – has no additional requirements.
- Aluminium – has very limited foot traffic and impact resistance. Particular care is needed on roofs to avoid rib damage.
- Copper – has very limited foot traffic and impact resistance. Particular care is needed on roofs to avoid rib damage. Attention is also drawn to the susceptibility of copper to localized marking from skin contact. Copper sheets are both heavy and ductile and hence require careful handling to avoid sheet damage.

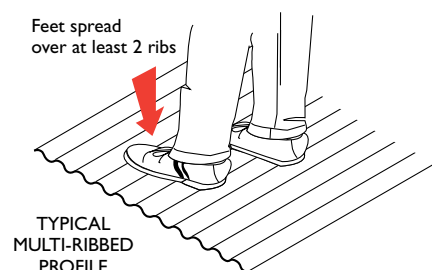
Walking

When walking on metal roofs walk only in the pan of wide-pan profiles or on at least two ribs concurrently of close-pitched rib profiles. In other words, if the pan is wide enough to walk in do so and never walk on a single rib.

WALK ONLY IN PANS



WALK ON TWO RIBS



Insulation

All **Stramit® Roofing and Wall** profiles can be readily used with insulation blanket up to 50mm thick. Increased blanket thickness requires longer fasteners and greater care in installation to avoid “bulging”.

Good Practice

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

Sheet Handling

Cut resistant or leather gloves should be worn when handling product. Foot protection should be worn when handling and transporting product.

Cutting

For all steel products use power snips or an abrasive disc. When using abrasive discs turn sheets over to reduce risk of damage to painted surface from hot particles. Always clear surfaces of swarf. Always remove burs but avoid removal of substrate and paint coatings at the cut edges.

For aluminium and copper use power or hand snips or a fine-tooth hand saw. With copper remember to avoid hand or finger contact with the surface or marking will occur.

Other

Maintenance

It is suggested that all external surfaces made using **Stramit® Premium Materials and Finishes** are regularly cleaned (with the exception of copper). As well as ensuring good looks suitable cleaning will extend the life of most products.

In particular all painted surfaces should be gently washed with mild detergent and then thoroughly rinsed with fresh water at least once per year to maximize durability. For COLORBOND® Metallic and COLORBOND® Ultra steel this is particularly beneficial in areas unwashed by rainwater. Aluminium should also be washed each year for optimum durability.

Areas of roofing that are subjected to deposition of leaves or similar debris should be cleared regularly, at least quarterly for all materials. Aluminium in particular can deteriorate if covered in moist leaves or dirt.

Warranties

Warranties on most applications using COLORBOND® Metallic, COLORBOND® Ultra and COLORBOND® Stainless steel are available from Stramit.

Warranties for aluminium and copper may be available, and are assessed on a case-by-case basis by Stramit.

Further Information

As well as our standard range of Technical Manuals, Installation Leaflets, Case Studies and other promotional literature Stramit has a series of Guides to aid design. These include:

- Concealed Fixed Decking
- Roof Slope Guide
- Foot Traffic Guide
- Roof System Selection Guide
- Bullnosing, Curving and Crimping
- Acoustic Panels
- Cyclonic Areas
- Spring Curving Guide

Please contact your nearest Stramit location for any of these guides, or other literature.

References

In preparing this document reference has been made to:

- Standards Australia Handbook – HB39 (Installation code for metal roof and wall cladding)
- BlueScope Steel – Technical Bulletin TB-4 (Maintenance of prepainted steel roofing)
- BlueScope Steel – Technical Bulletin TB-1 (Steel roofing and walling products – selection guide)
- BlueScope Steel – Technical Bulletin TB-22 (Special Service Environments – Intensive Animal Farming)



The Stramit web page can be found at:

www.stramit.com.au

Details of many **Stramit**® products can also be seen on the RAIA site 'Product Selector' at:
www.selector.com.au

Building Products

		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	(02) 9834 0909 (02) 9834 0988		(02) 9834 0900 (02) 9834 0988	
CANBERRA 4 Bass Street, Queanbeyan NSW 2620	phone fax		(02) 6297 3533 (02) 6297 8089		
COFFS HARBOUR 6 Mansbridge Drive, Coffs Harbour NSW 2450	phone fax		(02) 6652 6333 (02) 6651 3395		(02) 4954 5033 (02) 4954 5856
NEWCASTLE 17 Nelson Road, Cardiff NSW 2285	phone fax		(02) 4954 5033 (02) 4954 5856		
ORANGE 51 Leewood Drive, Orange NSW 2800	phone fax		(02) 6361 0444 (02) 6361 9814		
MELBOURNE 2/1464 Ferntree Gully Road, Knoxfield VIC 3180	phone fax	(03) 9237 6300 (03) 9237 6399		(03) 9237 6200 (03) 9237 6299	
ALBURY 18 Ariel Drive, Albury NSW 2640	phone fax		(02) 6041 7600 (02) 6041 7666		
BENDIGO Ramsay Court, Kangaroo Flat VIC 3555	phone fax		(03) 5447 8455 (03) 5447 9677		
HOBART 57 Crooked Billett Drive, Brighton TAS 7030	phone fax		(03) 6263 5536 (03) 6263 6950		(03) 6263 5536 (03) 6263 6950
LAUNCESTON 9 Richard Street, Western Junction TAS 7212	phone fax		(03) 6391 9293 (03) 6391 8774		
ADELAIDE 11 Stock Road, Cavan SA 5094	phone fax		(08) 8262 4444 (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		
TOWNSVILLE 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		(07) 4942 3488 (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		(07) 4936 2577 (07) 4936 4603		
SUNSHINE COAST Unit 1, 5 Kerry St, Kunda Park QLD 4556	phone fax		(07) 5456 4083 (07) 5456 4862		
MURWILLUMBAH 6 Kay Street, Murwillumbah NSW 2484	phone fax		(02) 6672 8542 (02) 6672 6798		
DARWIN 55 Albatross Street, Winnellie NT 0820	phone fax		(08) 8947 0780 (08) 8947 1577		
PERTH 605-615 Bickley Road, Maddington WA 6109	phone fax		(08) 9493 8800 (08) 9493 8899		
BUNBURY 25 Proffit Street, Bunbury WA 6230	phone fax		(08) 9721 8046 (08) 9721 8017		

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