

QUALITY

since 1946



Straightline 406

Mack Bros' Straightline 406

Mack Bros' Straightline 406 is a sleek and modern profile with a cover width of 406 mm. Its seamless profile uses concealed fixing clips which eliminate the need for the unsightly screws used on other profiles. Because of the high rib height of 48mm this profile has a good water run-off capacity and can be used on roofs with a pitch down to 1°. Straightline 406 provides strength, beauty and excellent wind pressure capability. Our panels can be manufactured in a variety of metals, zinc coatings and pre painted steels to suit your project. With all the material and colour choices you can be sure to find a solution that is aesthetically pleasing and suits the style of your building. Straightline 406 is the ideal choice for commercial, industrial and residential structures.

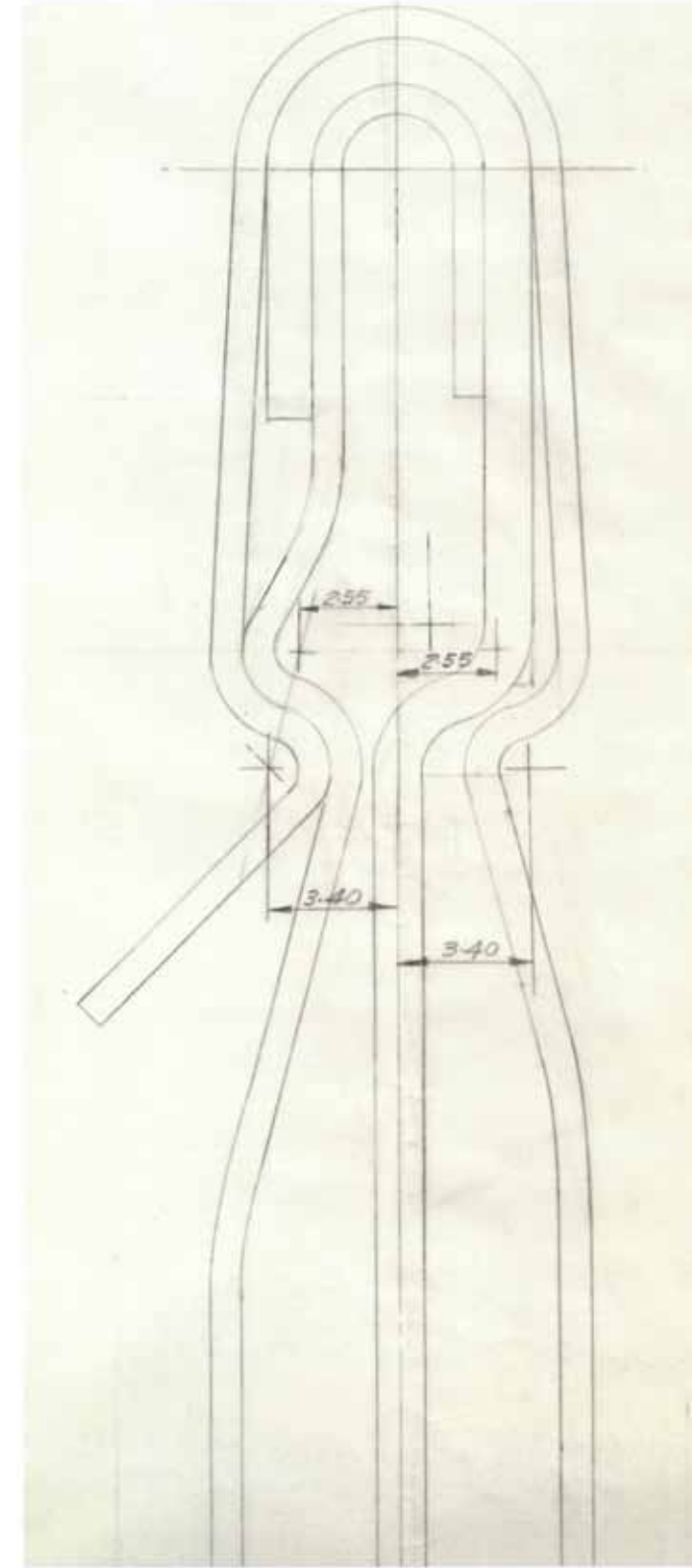
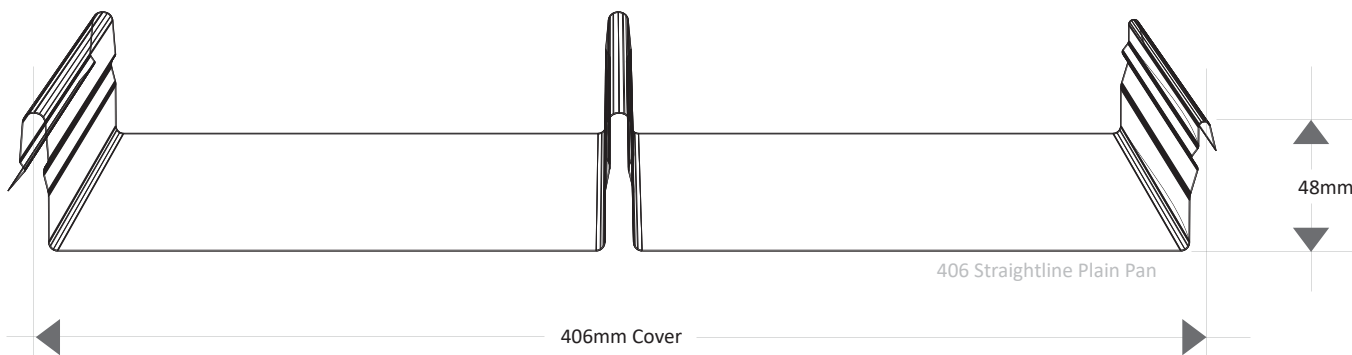
Fixing is easy using the Straight Line Clip which is exclusive to Mack Bros. All metal sheeting is subject to thermal expansion. This means the colour of the sheeting will effect the amount of thermal expansion. Together with the Straightline Fixing Clip, our 406 range has proven to have excellent resistance to the problems associated with thermal expansion..

Mack Bros has been manufacturing Straightline 406 roofing and cladding for over 40 years. Our experience in roll forming and knowledge of materials makes us a market leader. Please feel free to contact us on those specialised projects.

MACK BROS.

Designed with experience

Experts in Roofing Mack Bros has been manufacturing 406 roofing & cladding for over 40 years. Our experience in roll forming and knowledge of materials makes us a market leader. Please feel free to contact us on those specialised projects. **Thermal Expansion** All metal sheeting is subject to thermal expansion. This means the colour of the sheeting will effect the amount of thermal expansion. Together with the Straightline Fixing Clip, our 406 range has proven to have excellent resistance to the problems associated with thermal expansion. **Insulation** Blanket up to 55mm in thickness can be used. **Roof Pitch** The recommended minimum pitch is a low 1 degree. **Fixing** Fixing is easy using the our Straight Line Clip which is exclusive to Mack Bros.





Project
Melbourne University

Product
406 Straightline
Flat Pan

Architectural profiles



406 Decking

A traditional deck profile with flutes making it the ideal solution for roofs requiring a 1 degree pitch.



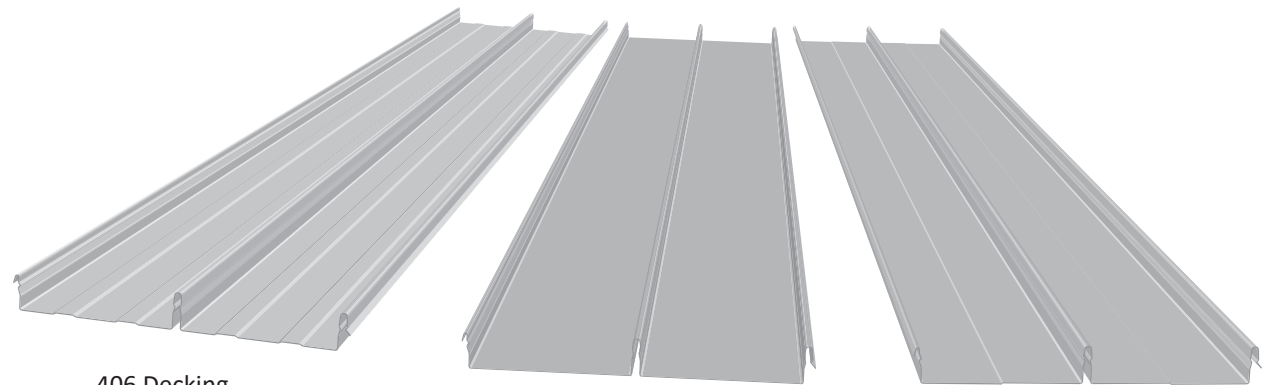
406 Straightline Plain Pan

A sleek and modern profile perfect for roofing and cladding. Together with concealed fixing clips.



406 Straightline Single Groove

Mack Bros, through innovation, has developed the single groove that Plain Pan deck can have a loose centre in pan which can vary. This profile will reduce this anomaly in pans.



406 Decking

Straightline
406 Plain Pan

Straightline
406 Single Groove

The Clip! *Exclusive to Mack Bros*



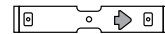
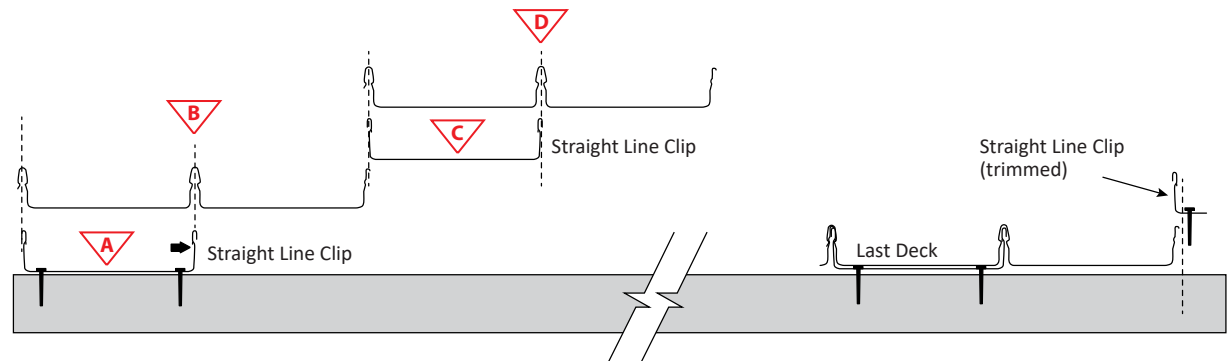
Our Famous Straightline Clip

Easy to Install

Fixing is easy using the our Straightline Clip which is exclusive to Mack Bros. All metal sheeting is subject to thermal expansion. This means the colour of the sheeting will effect the amount of thermal expansion. Together with the Straight Line Fixing Clip, our 406 range has proven to have excellent resistance to the problems associated with thermal expansion.

Installation

1. Before commencing, check the alignment of the purlins. This can help reduce loose centre in the pans of the deck.
2. Create stop-ends and down turn pans of decks (if applicable.)
3. Fix a Straight Line Clip at each purlin **A** with its punched arrow pointing in the direction in which fixing will progress.
4. Lay the first deck **B** over the Straight Line Clips ensuring that centre rib and female rib are fully 'snapped' in place.
5. Fix the next run of Straight Line Clips **C** then the next deck **D**.
6. Repeat steps 5 until roof is complete.
7. During fixing, check total cover every 3 or 4 decks near each end to keep decks traking parallel.
8. Install the required flashings or cappings from a range of stock and custom made flashings and cappings.
9. Clean roof of all rubbish, fillings etc. and clean out all gutters.

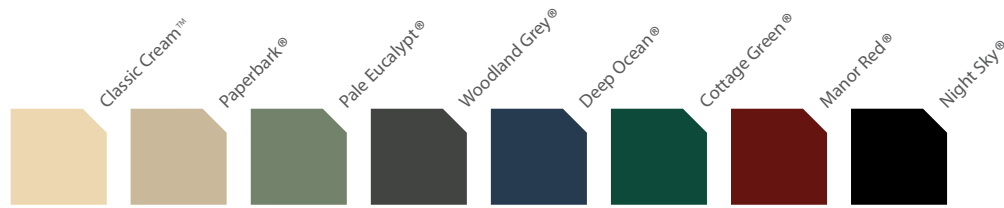


Plain view of clip showing arrow direction of lay

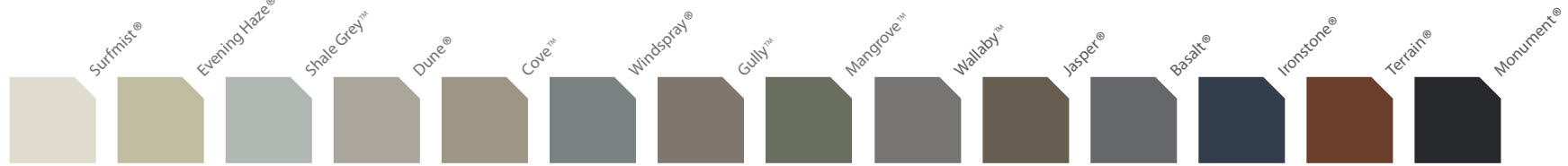


Every Colour

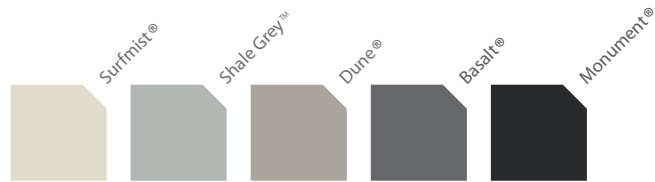
Colorbond®
Classic



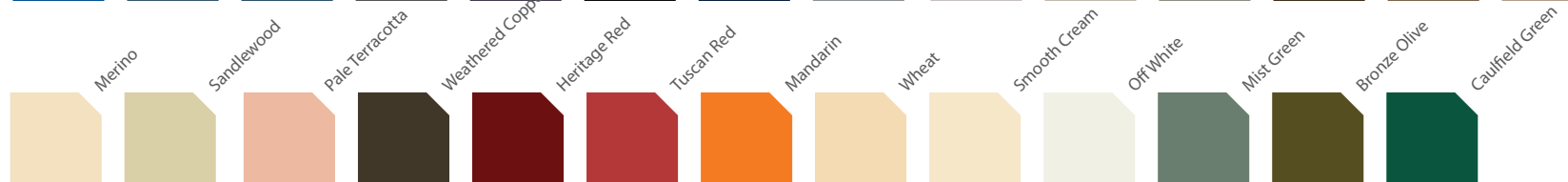
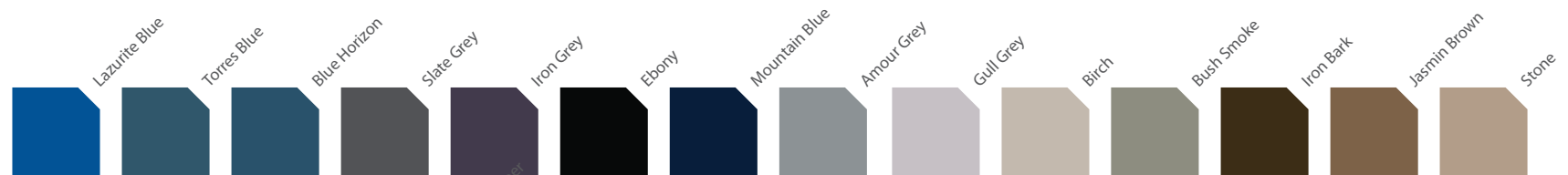
Colorbond®
Contemporary



Colorbond®
MATT



ColorGaurd™



Custom Order



In a Range of Materials

Mack Bros' Straightline 406 is available in a wide variety of materials. For budget conscious builders, unpainted Zincalume and Galvanised materials can be used. For long lasting strength, durability and beauty, our roofing and guttering are also available in Copper, Stainless Steel and Aluminium.



Product
406 Straightline Decking
Stainless Steel



Guidelines

These guidelines address the most common questions we get. Please feel free to call us anytime should you need more information.

Thermal Expansion

All metal sheeting is subject to thermal expansion. This means the colour of the sheeting will affect the amount of thermal expansion. Straightline 406 Decking has proven to have excellent resistance to the problems associated with thermal expansion.

Oil Canning

A Plain Pan Deck can have a loose centre in pans which can vary from coil to coil.

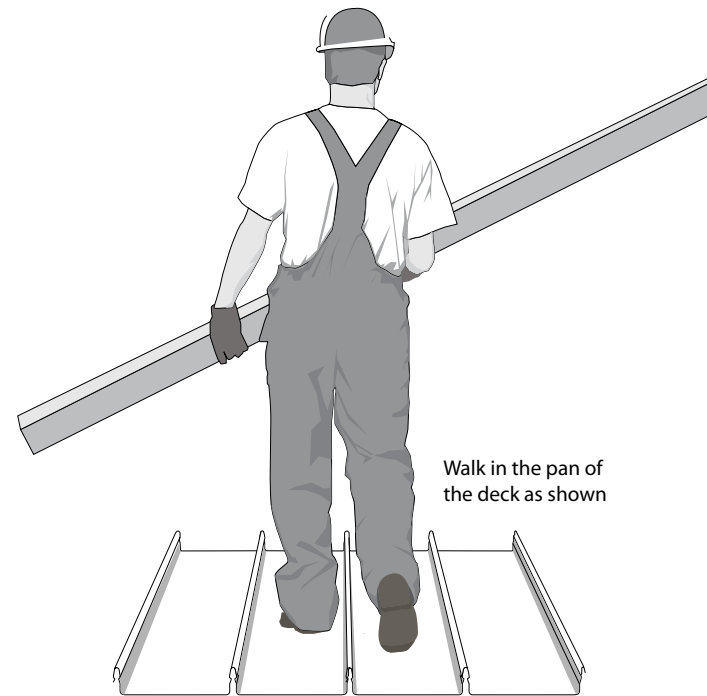
Span Chart

Span Chart G5500 1.5kpa

Thickness	End Span	Intermediate
0.42mm bmt	1.15 m	1.68 m
0.48mm bmt	1.40m	1.90 m

Insulation

Clanket up to 55mm in thickness can be used.



Foot Traffic

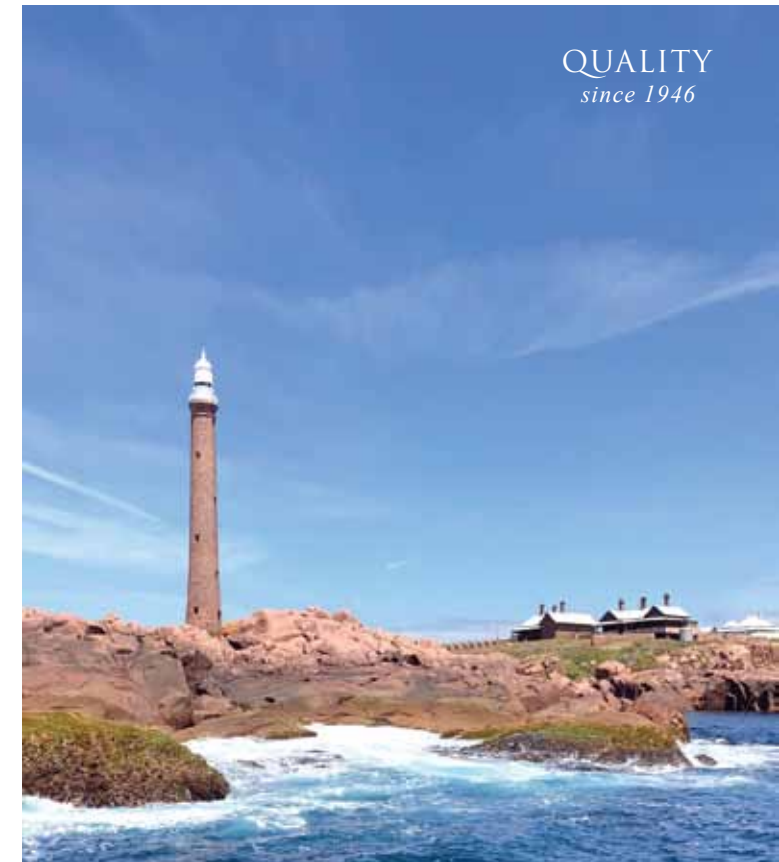
As with all roofing products we recommend extra caution be taken when walking on the roof. When walking on the Straightline Deck always wear flat soled rubber shoes and place feet only in pans, taking care to avoid the last pans on the edges of the metal roof area. However for high maintenance applications walkways are suggested.

Straightline 406 Aluminium

Installation Guidelines for Severe Conditions

While the installation of Straightline 406 Aluminium will vary from project to project, the following guidelines must be observed when fixing the panels in severe conditions such as near salt water:

- It is very important when fixing panels that they are not in direct contact with other metals such as carbon steel, galvanised or zincalume steel, copper, monel, lead or brass. Also ensure water can not drain from these metals onto the aluminium panels or form a bridge to the aluminium.
- A suitable membrane that acts as a barrier between dissimilar metals must be used. The most common situation being galvanised purlins or battens where a chromate based primer or good quality adhesive PVC tape may be considered as a barrier for example.
- A suitable membrane for unseasoned or chemically treated timber to prevent contact must be used.
- Use only stainless steel Straightline 406 Clips with stainless steel low profile wafer self drilling 10 X 22 screws for steel and for timber stainless steel counter sunk 10 X 40 screws. It is important that screws are put in square and to ensure they do not protrude above the recess pocket.
- When fitting flashings or like, use aluminium sealed rivets and 316 stainless steel stitching screws with either a non-conductive washer (e.g. high quality EPDM), or, an aluminium or stainless steel non-conductive bonded washer (ensuring there is rubber isolating the washer from under the head of the screw).
- Neutral cure silicone sealants can be used for roofs and gutters. Do not use an acidic silicone .
- Panels are not to come in contact with the ground and are to be kept clean of concrete and sand. Wash any splashes etc. off immediately.
- In design, consider that the thermal expansion of aluminium is about twice that of steel.





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Roofing, Cladding & Gutter Manufacturers

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