



MODWOOD decking

The Sustainable Alternative

Fixing ModWood to steel

As steel substructures tend to undergo quite a degree of movement – caused by thermal expansion and contraction, along with in-built stresses in the steel, considerably more care must be taken with your decking installation. Using the KlevaKlip concealed fixing system will greatly assist in 'de-stressing' your deck.

- 1 Use only ModWood solid section boards when fixing ModWood to steel joists.
- 2 Always stagger the joins on the deck to ensure there is nothing resembling a 'seam' of joins.
- 3 Do not leave boards sitting in the sun (especially on hot days) for any length of time before fixing them down (see info on thermal expansion properties).

Storage

Store ModWood in a flat, dry area, under roof and off the ground. Always carry ModWood on edge

Ventilation

Good ventilation for your deck is essential. Check our chart for ground clearance information. Do not seal off deck ends, preventing airflow.

Installation

Fixings should be no closer than 15mm from the end of the board, or 20mm from the outside edge of the board.

With the 88mm decking board, you can fasten the boards using one screw per joist in a zig zag pattern – see diagram (you will still need to fasten two screws at the ends of each board). When butt joining top fix boards it is recommended to have 45mm joists.

Screw fixing

Only use screws that are recommended for use with steel – these will generally be 'self-drilling' 10 gauge 'tek' screws. ModWood strongly prefers 'tek' screws to 'wing-tek' screws.

Pre-drilling and countersinking is always essential when fixing ModWood to steel. The hole drilled should be slightly greater than the 'outside diameter' of the screw thread – do not penetrate the joist.

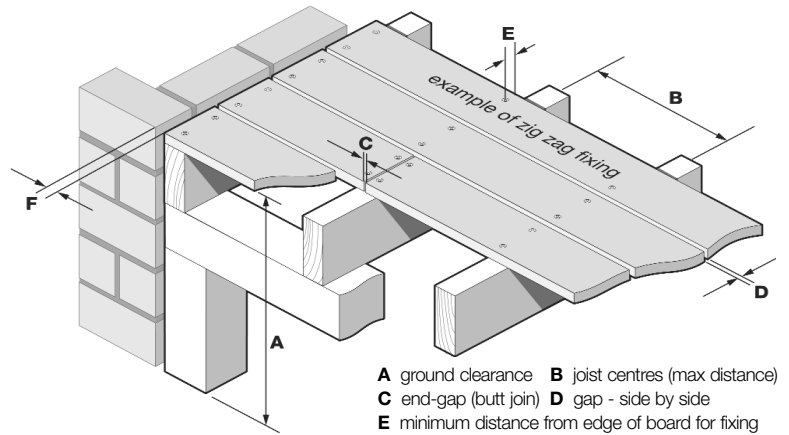
Screw down with low torque, especially at the ends of the boards, ensuring the head of the screw rests only marginally under the top of the board.

Nail Guns

ModWood currently does not recommend using nail guns for fixing to steel.

Concealed Fixing

Currently, the only concealed fixing method we have trialed and approved for use on steel is the KlevaKlip system, please see www.klevaklip.com.au



A ground clearance B joist centres (max distance)
C end-gap (butt join) D gap - side by side
E minimum distance from edge of board for fixing
F end-gap to solid structure Refer to chart below

Concealed Fixing with ModWood

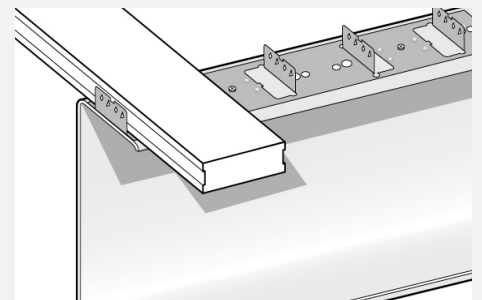
Only ModWood solid section boards can be used with concealed fixing products.

KlevaKlip is the preferred method of using concealed fixing with ModWood.

For all information on KlevaKlip, please contact www.klevaklip.com.au

Please note that when using concealed fixing products, it is still important to ensure that the ModWood standard gapping spacing's for side-by-side, butt-joints, and end spacing's are still strictly adhered to.

Important please check you use the right model KlevaKlip to fit the right model of ModWood. Refer overleaf.



ModWood Fixing Specifications

| | decking solid (mm) | decking wide (mm) | marina board solid (mm) | mini board screening |
|---|--------------------|-------------------|-------------------------|----------------------|
| Dimensions | 88 x 23mm | 137 x 23mm | 137 x 32mm | 68 x 17mm |
| A Minimum ground clearance | 300 | 300 | 300 | na |
| B Joist centres (max distance) | 450**** | 450 | 600 | 1200** |
| C Minimum end-gap (butt join) | 2 | 2 | 2 | 2 |
| D Minimum gap - side by side | 4 | 4 | 6 | 8 |
| E Minimum distance from edge of board for fixing | 20 | 20 | 20 | 20 |
| F Minimum end-gap to solid structure | 6 | 6 | 6 | 6 |
| Screws (pre-drill & c'sink) | yes | yes | yes | yes |
| Fixing over concrete*** | yes | yes | yes | na |
| Suitability for commercial application | yes | yes | yes | yes |

** - 1200mm between uprights on continuous span (on edge). 800mm between uprights on single span (on edge)

*** - check ModWood website for specific instructions for fixing on battens over concrete

**** - 400mm centres for Commercial applications

In all cases, when screwing down do not overdrive screws. Fix with low to medium torque.

Fixing too close to the end of the board may cause splitting. Do not fix within 15mm of end of board.

PTO

ModWood thermal expansion properties – fixing tip

The temperature of a ModWood board sitting in full sun for a length of time is approx. 20-25°C warmer than the ambient air temperature.

As ModWood expands in heat and sun, to avoid building stress into your deck and having possible lengthways shrinkage, it is best to fix your

decking boards when the ambient temperature is less than 25°C and when the boards are not sitting in full sun (see “coefficient of thermal linear expansion” on our website).

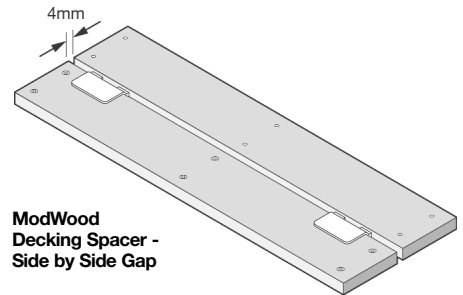
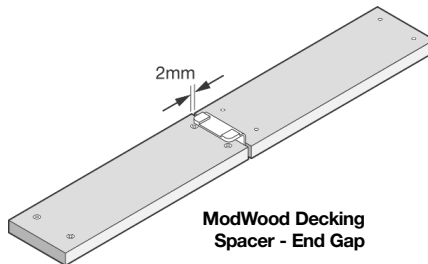
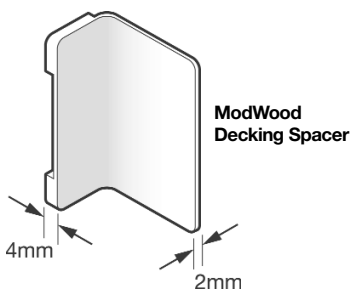
ModWood Decking Spacers

ModWood decking spacers, as seen below, have been developed to make your installation easier, and in line with ModWood fixing instructions.

Note: Every pack of ModWood comes with 10 free spacers (used as strapping

holders on the corners of full packs).

Extra spacers are available from your local ModWood retailer, or by contacting the ModWood distributor in your state.



Typical Fastenings used with ModWood

Up to 23mm thickness boards

Fixing to steel 10 gauge x 40mm self-drilling ‘tek’ screws

Over 23mm thickness boards

Fixing to steel 10 gauge x 50mm self-drilling ‘tek’ screws

General:

- Pre-drilling and countersinking is always essential
- The hole drilled should be slightly greater than the ‘outside diameter’ of the screw thread – do not penetrate the joist
- Screw down with low torque, especially at the ends of the boards
- Ensure the head of the screw rests only marginally under the top of the board
- In high corrosion areas we recommend stainless steel fasteners
- Use only fixings which comply with Australian Standards

Concealed Fixing on to steel with KlevaKlip

It is critical that the correct model of KlevaKlip is used with the right model of ModWood. The Natural Grain Collection of boards have a groove on edge and suit the following KlevaKlip models:-



88mm with groove on edge

KT88G Top Fix Clip Galvanised

KT88S Top Fix Clip S/Steel

137mm with groove on edge

KT137G Top Fix Clip Galvanised

KT137S Top Fix Clip S/Steel

Please refer to www.klevaklip.com.au for fixing details and adhesive instructions.

For non-grooved ‘Traditional’ colour range please contact ModWood or KlevaKlip directly.

ModWood Fixing Instructions for screening

Upright must be rigid and fixed at base, eg. 75 x 75 steel or 90 x 90 timber - do not use ModWood for the upright.

1200mm between uprights on continuous span (on edge). 800mm between uprights on single span (on edge).

Fixing too close to the end of the board may cause splitting. Minimum side by side gap is 8mm.

Do not fix within 15mm of end of board. A single fastener per post positioned in the centre of the board is suitable.