



KlevaKlip KT88 and KT137 Top Fix to Metal or Timber Joists Fixing Instructions

For ModWood Natural Grain Collection 88x23 ,137x23 & 137x32 (With Groove On Edges Only)

Play Installation DVD at www.klevaklip.com.au



Please Read These Important Notes

- **It is essential to read and follow the steps listed in this Fixing Instruction manual prior to installing the KlevaKlip System with ModWood Composite Boards.**
- **Thought should be given to finishing the last board option at the front of your deck before actual commencement of your deck.**
- **The KT88,KT137 Top Fix are designed to fit only the 88mm X 23mm and 137mm X 23mm & 137mm X 32 ModWood Natural Grain Collection with Grooved edges in the deck board.**
- **Please ensure all the KlevaKlips are clean, sound, dry and free of oil or grease. Thoroughly remove all loose particles and dust prior to fixing.**
- **Never fix boards relying on adhesive only. If fixing boards in areas without KlevaKlip make sure you use some type of mechanical fix. (eg screw)**
- **KlevaKlip is not suitable for non-square decks or irregular joist heights. Whilst the fixing of the boards into the KlevaKlip is fast and will save time over conventional hand fixing, it is important that extreme care is taken in installing your first row of KlevaKlips. This will govern the straightness of your deck.**

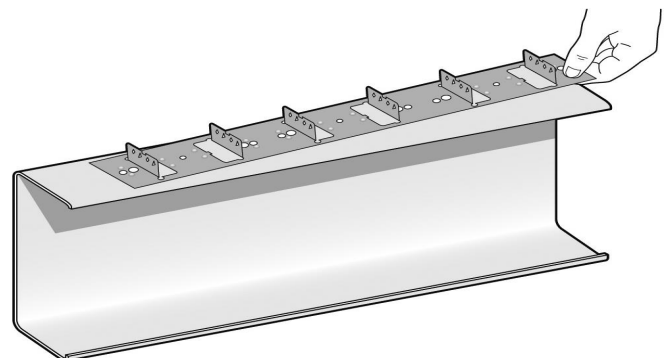
APPROVED ADHESIVES FOR KLEVAKLIP KT88 and KT137 CLIPS

Board Type	Approved Adhesives	Coverage
ModWood Natural Grain Collection Grooved Edges	Fuller Toolbox, Selleys 3 in 1, Sikaflex 11FC, Selleys Liquid Nails High Strength, & Bostik Solvent Based "No More Nails."	Approx 1 Cartridge 3M2

Step 1- Positioning the Front KlevaKlips to the Outer Side Joists

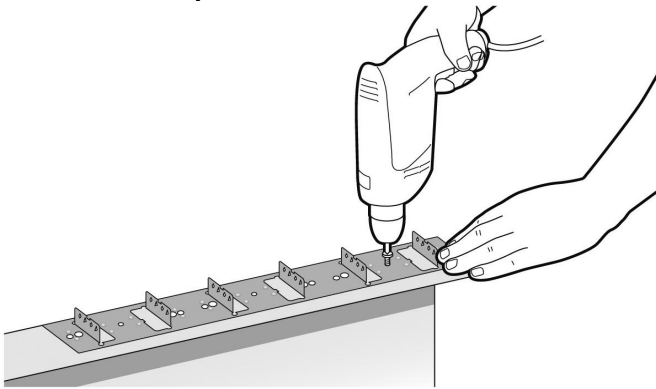
Starting from the outside front edge of your deck place a KlevaKlip on each one of your outer side Joists of your decking substructure. Make sure the KlevaKlips are sitting squarely on the outside joists and are either flush with front face of the joist, or alternatively positioned just back from the end of the joist to provide the current overhang for the front full deck board and fascia when fixed. Full deck board widths are recommended at the front of your deck and once this is obtained we suggest you place your other KlevaKlips on the end joists towards the house to check squareness of your deck thus ensuring last deck board size against the house is not too small. When fixing the clip there are open spaces on the base of the clip where you can line up squarely to the outside edge of the joists.

TIP: Please see Step 9 Finishing Front edge deck board as there are (2) two methods suggested and this will influence the positioning of your first clip.



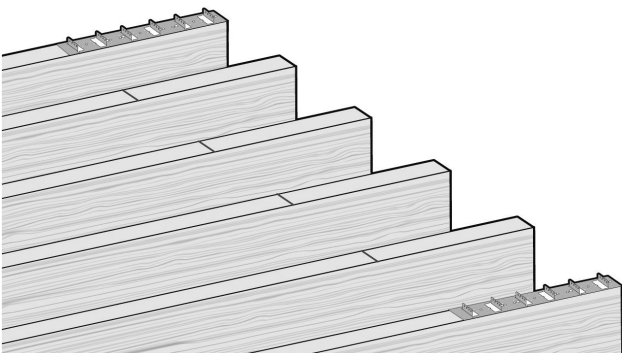
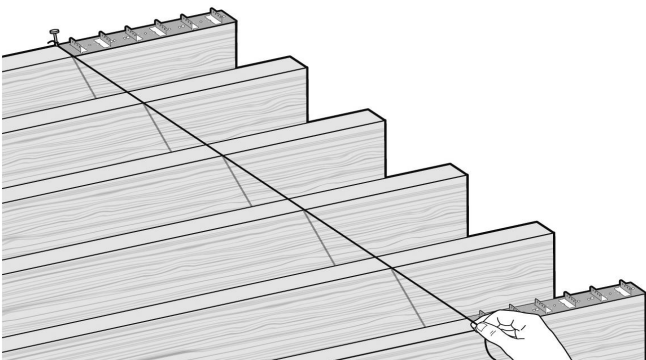
Step 2- Fixing the Front KlevaKlips to the Outer Side Joists

Your first clips should be fixed by hand to ensure accuracy. For metal joists fix the Galvanised KlevaKlips to the outside joists using 10 Gauge 18mm Wafer Head Galvanised self drilling screws with a head size of less than 2mm. Timber joists use 8 gauge 25- 30mm Button Head Galvanised screws with a head size less than 2mm. Galvanised Connector Nails 32mm x 3.15 or equivalents can also be used. When using Stainless Steel clips, it is essential that you use stainless steel fixings. Use counter-sunk heads if button heads are not available. The KT88 requires one fastener per board space (6 per clip) and the KT137 requires two fasteners per board space (8 per clip). **When fixing to steel joists**, we suggest a thin layer of sealant/adhesive to be applied to the top of the joist to give protection against water entering the channel. This is mandatory when using Lysaght Firmlock joists. The knuckle nails on the powder-coated clips will not penetrate steel joists and will need to be flattened with a hammer prior to fixing the clip. **TIP: Time saving benefits can be achieved by utilising Coil Nailer gun to secure the second and subsequent rows of KlevaKlip's into Timber Joists.**



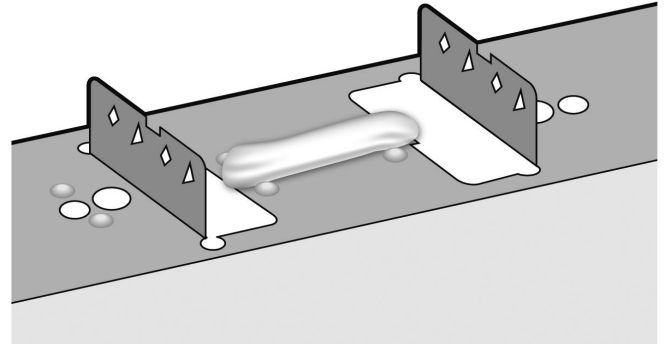
Step 3- Positioning the Front KlevaKlips to the Inside Joists

Once both outer side KlevaKlips have been securely fastened to the joists, run a string chalk line from one of the outer side KlevaKlips across the inner joists of the deck on to the other outer side KlevaKlip. Pull string tightly and flick the string line and this will mark a chalk line on all the internal joists between the two outer side joists. Using this chalk line mark you can then correctly position the remainder of front KlevaKlips on to the other internal joists. Fix to the joists using the same fixing methods as described in **Step 2**. Using this method will align your inside KlevaKlips directly inline with your outside KlevaKlip's and elevate any incorrect internal joist lengths.



Step 4- Applying Adhesive to your Deck Boards

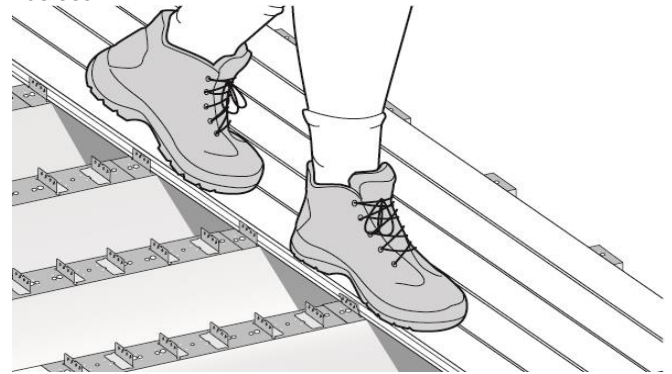
Now you have completed laying your first row of KlevaKlips to your joists, it's time to apply a bead of Construction adhesive into the base of each of the KlevaKlips. **Tip: Apply a bead of Construction Adhesive 10mm high across the middle of the clip.**



Step 5- Inserting your Deck Boards

Firstly, you will need to cut your deck boards to the required length and start from the front of your deck. Place the complete length of the ModWood deck board on a slight angle and insert the leading edge of the groove into all the claws. Once the complete length of the board's groove is engaged into all the claws ensuring the outside KlevaKlip uprights are visible on the outside edge of the ModWood, simply walk on the outside edge of the deck board until it engages into the KlevaKlips or alternatively gently tap the top of the deck boards with a rubber mallet until the deck board are locked into the KlevaKlips claws and are sitting squarely on the four base nipples (or ridges).

After you have walked each board into the clip, its good practise to use the fixing tool to tap the upright up to the **vertical** position at each joist. Remember don't over hit the fixing tool, all is required is a light tap. Repeat the processes in Step 4 and 5 until all the deck boards are inserted into the KlevaKlips. Try and avoid walking on top of newly laid deck boards until the adhesive has set.



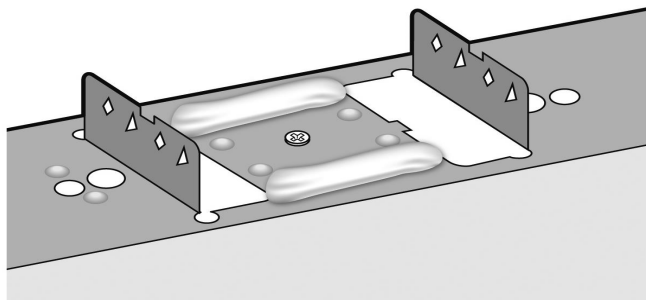
Tip: The fixing tool has a hole in it – for easy use, and to save bending over as much, we insert a small length of broomstick handle into the hole."



Step 6- Butt Joints

At the top of each KlevaKlip uprights you will see a notch. This notch is designed to line up with each your butt joints. Apply a bead 10mm high of Construction Adhesive across both sides of the clip. (See shot below) Insert your deck boards as instructed in Step 5 making sure you leave a 2mm gap at the butt joint using the ModWood decking spacer provided.

Tip: It is important that your butt joints are square and line up with the notch in the KlevaKlip upright otherwise the deck board end may not engage correctly with the KlevaKlip claw.



Step 7- Installing the remaining KlevaKlips

Now you have completed your first front row of KlevaKlips and deck boards it is time to fix the remainder of the clips to the joists. Simply place the next KlevaKlip at the back end of the previous clip making sure both KlevaKlips are hard up against each other. (End to end). Secure the remainder of the KlevaKlips to the joists using the same fixing methods as described in fixing the KlevaKlips **Step 2**, Apply adhesive as described in **Step 3** and Insert your deck board as described in **Step 4**.

Step 8 - Modifying KlevaKlips

Tip: You can design your deck width to suit full KlevaKlip lengths. (KT88 553mm KT137 568mm) however, in some cases you may have to cut the KlevaKlip to fit. This will happen at the back of the deck generally against the house end. KlevaKlip is designed either to take a half width board at this end or you can cut the KlevaKlip with snips to utilise any board width.

Tip: Last board adjustments can be made when fixing the initial KlevaKlip's to the outside joists, as suggested in Step 1 you place your other KlevaKlips on the end joists towards the house to check squareness of your deck and correct last board width against the house.

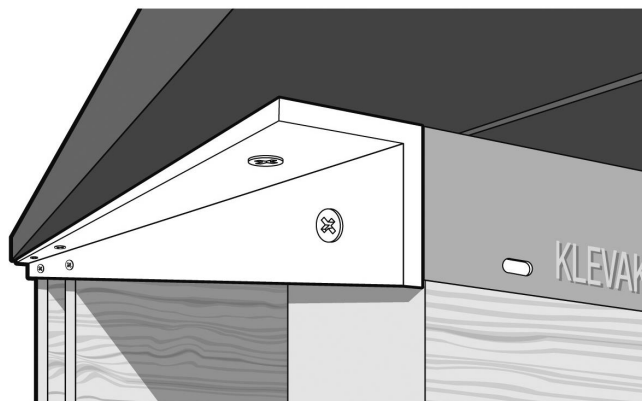
Step 9 – Finishing Front Edge Deck Board

TIP: Thought should be given to finishing the last board before actual commencement of your deck.

1. Using 30mm x 30mm aluminium angle along the length of your deck drill holes thru the aluminium angle at each of the joist ends and screw fix to your joist ends making sure the aluminium angle is flush with the top of the KlevaKlip nipples (or ridges).

Drill holes in the aluminium angle between all the joists so as you can fix screws from underneath your deck board. Apply a bead 10mm in height of Construction Adhesive into the base of each of the KlevaKlips and push front edge deck board hard into each of the KlevaKlips, then fix screws through the aluminium angle from underneath into your deck board.

Depending how your deck is constructed you can then utilise a deck board for the fascia board to cover your joist ends.



2. Only use this method if you don't require an overhang of your front deck board as this utilises the upright on the clip to secure the front edge deck board. On the KT88 cut the second last upright with snips as shown below from the end of the clip. It doesn't matter which end you cut as they are identical. The KT 137 Clip is different and you can cut the last upright. Apply construction adhesive as described above in each of the KlevaKlips and walk the deck boards into the KlevaKlip as described in Step 5. Also you will lose 1.5 deck boards from 88mm and half a board from the 137mm clip.

TIP: Please ensure when using this method that the KlevaKlips are firstly secured to the joist as part of STEP 1, otherwise the Front KlevaKlips cannot be fitted at a latter stage without removing the other secured KlevaKlips.

