

# STEICO

## floor deck fixing

Flooring solutions  
Naturally made from timber



# handling & details

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**STEICO**  
engineered by nature

Fixing all STEICO flooring products both particle board and plywood is simple and straight forward. Provided the following recommendations are followed, the product will give a quiet, trouble free life.

## Board Data

Type	mm	Application	Max UDL (KN/m <sup>2</sup> )	Max CL (KN)	Max Joist Spacing (mm)	Profile	Dimensions (mm)	Packing
STEICO P5	18	Domestic	1.5	1.4	450	TG4	2,400 x 600	86
	22	Domestic	1.5	1.4	600	TG4	2,400 x 600	70

### | APPLICATION

STEICO flooring products have a moisture content of around 6% when they leave the factory therefore expansion and contraction must be expected on site especially in the winter months. To minimise the risk of movement the following guidelines should be adopted.

Following delivery boards should be stored undercover in a dry building. Any banding should be cut and the boards supported by bearers on level ground. If stored outside the boards must be protected from the weather with a loose fitting polythene sheet and raised off the ground.

We recommend boards are "conditioned" 2-3 days in the area to be fixed by stacking on bearers with spacers in between so that the moisture content reaches equilibrium.

### | MOVEMENT

It is vital that perimeter expansion gaps are allowed for in both platform and floating floors especially when large areas are being laid. Allow a clear movement gap of 2 mm per metre run of floor at each wall or 12 mm minimum. These gaps will normally be covered by the skirting boards.

For longer runs of boards for instance in corridors it may be necessary to allow interim gaps. These added expansion gaps can normally be left at door thresholds.

Remember leave gaps around pipes or other obstructions and do not allow expansion gaps to be obstructed.

Protect the floor from wet trades and when the heating is turned on increase the temperature gradually. These simple actions will ensure a flat trouble free floor and help avoid expansion or shrinkage gaps.

### | FITTING ON JOISTED / BATTENED FLOORS

Ensure the I-joists or timber joists are secure and braced prior to fixing the boards. All STEICO floor decking boards should be laid with the cross joints staggered in a brick bond pattern.

All short edge board joints must occur on a joist. Where these board joints do not land on a joist, the board must be cut back to the nearest joist. Apply TFS safestick D3 or TFS safefix D4 adhesive to the top of the joists or the i-joist flange. All tongue and grooved joints must be glued. Apply an ample bead to the grooved edges and a smaller bead to the top of the tongue. Do not force or cramp the boards together.

Fix the boards to the joists using 4 nails or screws into each joist or I-joist flange that the board crosses. It is also necessary to use 2 nails per perimeter noggin for the first and last row of boards. Nails should be flat headed annular ring shank type or other superior nails with improved holding power and corrosion resistance with a length at least 2.5 times the depth of the board and a minimum diameter of 3 mm.

If screws are used they again should be at least 2.5 times the board depth (No8 particleboard screw). Before any overlay or finish is applied the board area must be flat clean and dry. Where necessary joints can be sanded down to avoid telegraphing of joints through vinyl floor coverings or similar.

Where fully bonded coverings go over an expansion joint ridging may occur.

Please note the fixing of ceramic tiles directly to the board should be avoided and an inert barrier should be placed between board and tiles.

## | FLOATING FLOOR CONSTRUCTIONS

All concrete floor slabs should have a level surface produced by a float finish. Surface regularity should be SR2 minimum to BS 8204: Part 1 (on a 3M straight edge maximum deviation 5mm). A pre cast concrete floor may need a levelling screed prior laying the floor construction. A damp proof membrane must be incorporated into the slab as detailed in CP102 and BS 8102 to protect the board from ground moisture. A layer of suitable rigid insulation should then be placed on the floor slab. The insulation layer should be appropriate and continuous with no gaps and have no corresponding joints with the floor panels. A vapour control layer (250 MNs/g) should then be placed on top of the insulation layer and upturned 38mm around the perimeter walls and abutments. 1000 gauge polythene sheet provides the minimum requirement. All joints should be overlapped 150 mm, taped and sealed with a vapour resistant tape.

## | LAYING BOARDS

In any floating floor construction the board conditioning and the provision of perimeter expansion gaps is vital to avoid warping or distortion in the boards (see general fixing instructions above). Boards should be laid brick work fashion and glued as previously advised. Service access must be pre planned and at door thresholds timber battens should be inserted to avoid any localised compression. A movement gap equal to that on both sides of the threshold should be included. Load bearing partitions must not be built on to the floor but should be continuously supported from beneath. A non load bearing partition can be constructed on the floor but must not exceed 81.5kg/metre (0.8K/M). An alternative where more stability and loading is required treated timber battens can be incorporated into the floor construction.

## Additional Fixing Instructions for STEICO*weatherdek*.

Ensure that the I beams or joists are secure and braced prior to fixing Weatherdek and the operation of fixing and taping the board joints takes place in dry conditions.

- Glue boards to joists or beams using TFS safestick D3 adhesive.
- Glue all board edges with an ample bead of adhesive to both the tongued and grooved edge.
- Use four fixings to every joist or I beam flange in the normal way.
- Tape all exposed board edges and nail runs with Weatherdek tape as laying progresses
- Sweep off standing water when completed floor area is exposed.
- Leave the protective film in place until all building work is complete.
- The protective film can be easily removed by pulling from the board's short edge.
- Do not overload the floor with pallets of bricks or blocks.
- If board edges do get wet and swell this can be remedied by simply sanding.
- The wax board surface can be cleaned with a damp cloth or mop prior to hand over.

## Alternative fixing instructions for STEICO*weatherdek* and STEICO*weatherprotect*

This system avoids the need for most mechanical fixings and taping and eliminates almost all causes of floor squeaks. This fixing method is ideal when using engineered floor joist systems.

- Glue boards to joists or beams using TFS safefix D4 adhesive.
- Glue all board edges with a generous bead of D4 adhesive to both tongue and grooved edges.

- Take care to ensure sufficient adhesive is applied to all tongued and grooved edges so that when boards are pushed together a clear ridge of adhesive can be seen along the joint line.
- Make sure the grooved long edge of the board is closest to the perimeter.
- Ensure the first row of decking is secure and then mechanical fix by using a 55 mm long annular ring nail, 50 mm from the perimeter edge into each supporting joist.
- In line with the UKTFA recommendations secret nail into the long tongued edge every joist at a 20 degree angle to make a safe working platform.
- Fix subsequent rows of decking by using the D4 adhesive and secret nailing only thereby avoiding puncturing the protective surface.
- The last row of decking should be fixed as the first with 55 mm annular ring nails used.
- Edge tape is only required on cut or exposed edges.
- Once dry excess D4 adhesive can be removed from the boards with a scraper.



Your STEICO Agent

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