

PCS THERMAL CONSTRUCTION BOARD FIXING INSTRUCTIONS

FIXING TO WOODEN FLOORS

BY ADHESIVE - PCS Thermal Construction Boards can be laid onto a level floor, with a suitable flexible rapid set cementitious solid bed of tile adhesive – solvent based or ready mixed adhesives **MUST NOT** be used. Boards should be thoroughly bedded and laid with staggered joints, like bonding brickwork, making sure that there are no gaps between the boards. **DO NOT ALLOW THE ADHESIVE TO FORM A DRY SKIN.**

BY MECHANICAL FIXING - PCS Thermal Construction Boards (except 6mm boards) can be installed with mechanical fixings only to flat and level timber floors using approximately 12 fixings per 1200mm x 600mm board, with suitable screws and a 35mm fixing washer under the head. Tighten until the washer bites into the board. Specially developed tape, screws & washer kits are available from your supplier.

IT IS IMPORTANT THAT THERE ARE NO ELECTRICAL CABLES OR PIPE WORK UNDER THE FLOOR THAT COULD BE DAMAGED BY THE SCREW FIXING. THE CORRECT SCREW LENGTH SHOULD BE USED.

FIXING TO CONCRETE FLOORS

Prior to fixing PCS Thermal Construction Boards all traces of loose material should be removed back to the concrete substrate. Asphalt coatings need not be removed. The floor should be level and dust free. New concrete or screed should be correctly cured prior to fixing PCS Thermal Construction Boards. A suitable flexible rapid set cementitious tile adhesive should be used – solvent based or ready mixed adhesives **MUST NOT** be used. Apply a solid bed of adhesive to the floor using a 8mm square notched trowel. Boards should be thoroughly bedded and laid with staggered joints, like bonding brickwork, making sure that there are no gaps between the boards. **DO NOT ALLOW THE ADHESIVE TO FORM A DRY SKIN.** Any slight depressions in the concrete floor will normally be taken up with the thickness of the adhesive. Boards should be thoroughly bedded, ensuring that no voids remain beneath them.

MOVEMENT JOINTS

PCS Thermal Construction Boards must not bridge movement joints in the sub floor. The integrity of such joints should be maintained through the board/tiled finish and should be sealed in the appropriate manner; professional advice should be sought.

TILE FIXING FOR FLOORS

When fixing to floors a minimum tile size of 150mm x 150mm is recommended and fixed using a solid bed fixing technique, ensuring no voids remain under the tiles. Once the tile bed has hardened sufficiently, the joints between the tiles can be grouted in the usual manner.

TILE FIXING FOR UNDER FLOOR HEATING CABLE/MAT

Tiles can be laid directly on top of the under floor heating cable/mats, however care must be taken not to damage the heating cable. The tile adhesive must be forced onto, and where possible through, the heating mat so that no voids remain under the tiles. We recommend applying a good proprietary flexible self levelling compound onto the heating mat prior to fixing tiles. Only once the self levelling compound has fully cured should tile fixing begin.

FIXING TO BRICK/BLOCK SURFACES

Make sure that the existing wall surface is sound and free of dust and grease. If the wall has a finished plaster surface and is in a good condition, it may be possible to dot & dab the PCS boards without removing the existing plaster (plastered walls **MUST** be sealed prior to dabbing and professional advice should be sought). To fix PCS Thermal Construction Boards to walls PCS Flexible Adhesive or low expansion PU foam should be used. With PCS Flexible Adhesive a solid bed of adhesive should be used around the edges of the board with centre dots at a maximum of 300mm centres. Maximum adhesive thickness is 30mm. Offer up the board vertically to the wall surface and bed firmly into place. For a waterproof finish, seal the edge with a suitable sealant before butting up the next board. We recommend the addition of PCS Mechanical Fasteners once the adhesive has set. These mechanical fasteners should be positioned around the perimeter of the boards at a maximum of 600mm centres e.g. for a 2400mm long board use 5 fasteners down each edge.

FIXING TO STUD PARTITIONS

For boards less than 20mm thick, vertical studs should be set at *300mm centres. For board thicknesses of 20mm and above *400mm centres are suitable. Minimum board thickness must be no less than 10mm. (*stud centres to be set subject to loading requirement). All board edges must be supported by timber noggins and fixed using approx. 12 fixings on a 1200mm x 600mm board or 21 fixings on a 2400mm x 600mm board. Fixings should be set at approx. 300mm-400mm centres.

TILE FIXING FOR WALLS

Once the adhesive for securing the boards has hardened, cover joints with an alkaline resistant fibre glass mesh tape. Tiles can then be fixed directly to the board surface and grouted in the usual way.

PLASTERING

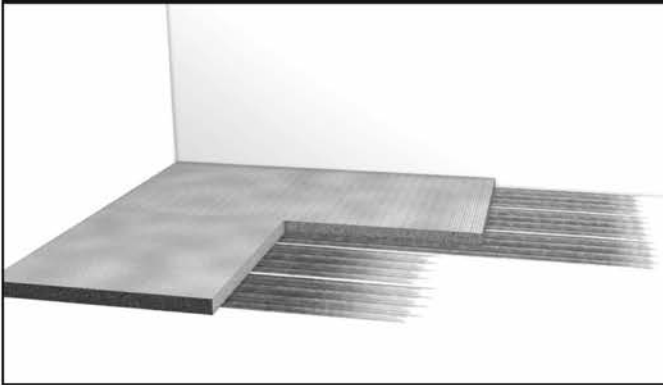
Prior to skim coating with plaster, the surface of the PCS Thermal Construction Boards should first be primed using a suitable primer, used in accordance with the manufacturer's instructions. Only then should a plaster skim coat be applied to the boards as per the plaster manufacturer.

NOTE

PCS Thermal Construction Boards can be affected by atmospheric conditions which can cause them to warp slightly prior to installation. If this occurs they can be straightened by applying a minimal amount of hand pressure. This correction will not affect the performance of the boards. All information is given as guidance and if adhered to will perform as intended. We fully guarantee the quality of our boards but as we do not have knowledge of site conditions and capability of the installer, we cannot accept liability for damage which may arise as a result of installation. For further information, please do not hesitate to contact us.

How to install PCS Thermal Construction Board with Electric Under Floor Heating

Stage 1 Fixing to Concrete/Suspended Timber Floors



Prepare and prime the floor, then lay each board using a rapid set flexible cement based tile adhesive applied with an 8mm square notched trowel to form a level base. Boards must be pressed firmly into the adhesive whilst the adhesive is still within its open time. DO NOT let the adhesive form a dry skin. (Follow manufacturer's instructions)

Stage 2



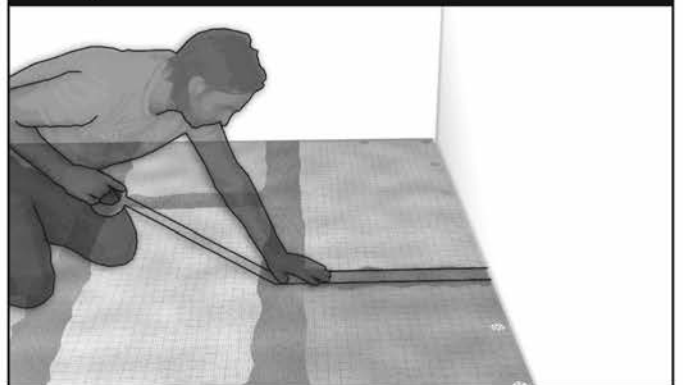
Lay the boards with staggered joints. Use a straight edge and level to ensure good alignment. Lightly butt the boards together leaving a 5mm gap around the perimeter of the room.

Stage 3 Fixing Without Adhesive Floor must be level (board size 1200 x 600mm)



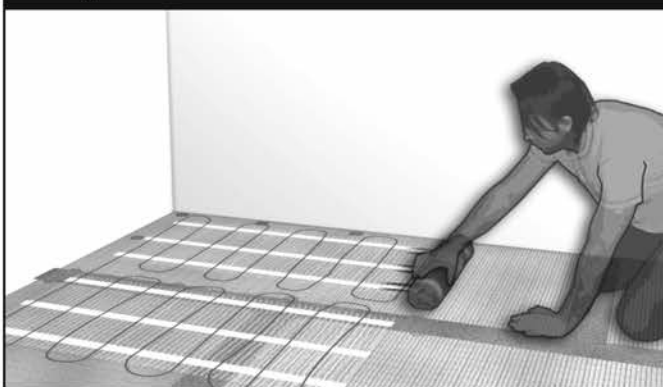
Secure with PCS fixings at a rate of 12 per board. Fixings should be approx. 30mm from the edge of the board and placed at 300mm-400mm centres over the board surface.

Stage 4 Joint Details for Wetroom Floors



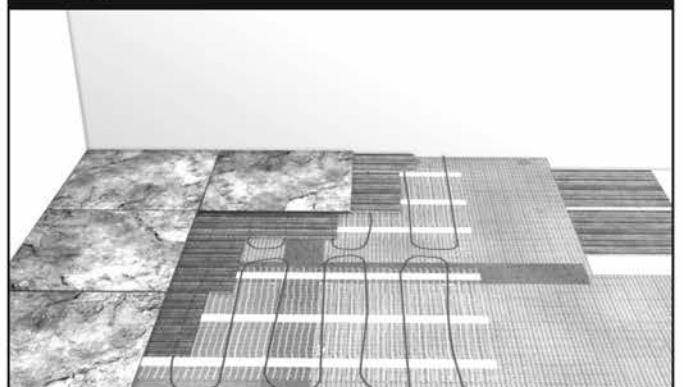
All gaps must be filled and all joints taped and sealed using a suitable waterproofing system.

Stage 5



Lay the heating element following manufacturer's instructions.

Stage 6



In certain circumstances it may be useful to apply a cement based flexible self-levelling compound over the underfloor heating element, reducing the risk of damaging the heating cables and to assist in the laying of tiles (optional). Lay tiles using the correct cement based flexible adhesive for the tiles selected (check with supplier) then grout.