

# JACKOBOARD® Plano

Construction board for wall applications.



Installation Instructions



## 1. General information

### 1.1 Scope

JACKOBOARD® Plano construction boards provide a completely waterproof substrate for tiling that will not allow moisture to penetrate the fabric of the building assuming that the joints between the boards have been appropriately treated.

The specially developed reinforced cement coating produces an extremely strong bond when used in conjunction with cement based single part flexible tile adhesive. These installation notes describe how to use and install JACKOBOARD® Plano construction boards as sub-structures for tiles for indoor applications. Notes are included for planning and executing normal applications in residential construction.

Since the installation notes are intended for rooms with normal temperatures, the manufacturer should always be consulted prior to using JACKOBOARD® Plano construction boards for special applications, e.g. swimming baths, cold storage areas, etc.

When mounting heavy objects, such as wash basins or toilets, ensure that the fixings penetrate through to the supporting wall or studwork. You may need to modify the layout of any supporting stud frame. Light objects can be fixed with cavity wall fixings.

### 1.2 Storage and use

JACKOBOARD® Plano construction boards should always be stored flat, irrespective of thickness. They must be protected against direct sunlight and moisture. Any use of agents using solvents must be avoided.

### 1.3 Substrate Preparation

The substrate must be able to support the intended load with minimal deflection. Any surface contamination must be removed prior to installation. If necessary the surface should be treated with a primer. Newly installed concrete substrates should be completely cured prior to installation.

## 2. Application

There are different ways to use and install the JACKOBOARD® Plano depending on the type of wall you are trying to fix too. Please refer to the appropriate section. The joints between the boards must be treated as described in section 2.5.

### 2.1 Use on a flat solid wall

On a flat and solid wall the JACKOBOARD® Plano construction boards can be fixed like a large tile. Cut the boards to size prior to applying any adhesive. Using a 5 – 8 mm notched trowel, a continuous bed of cement based single part flexible adhesive should be laid on the wall. The boards must be firmly bedded into the adhesive by gently pushing back and forth. If the wall is slightly uneven then the thickness of the adhesive layer can be varied. The surface of the boards should be checked for level to ensure that the resulting surface is even and suitable for thin-bed tiling. If there is any doubt about the bonding of the tile adhesive to the surface of the wall then mechanical fasteners should be used in addition to the adhesive. Once the adhesive has cured metal dowels should be added at a rate of 5 dowels/m<sup>2</sup>. See figure 1 and figure 2.

figure 1

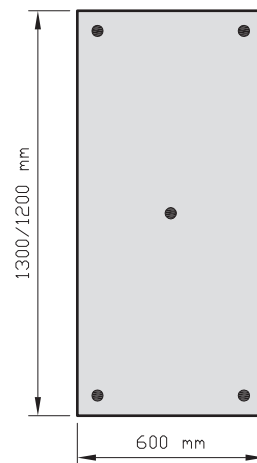
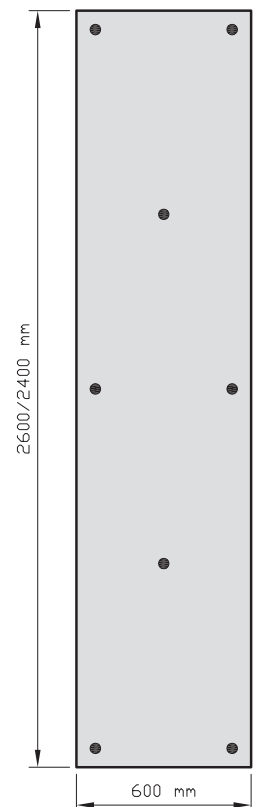


figure 2



JACKOBOARD® Metal Disc Plugs offer a simple dowelling solution if required. They are available in 50, 80, 110 and 140mm lengths. Depending on the thickness of the board and adhesive select a plug that will penetrate the wall by at least 35mm. Drill an 8mm diameter hole through the Plano board, adhesive and into the wall. The plugs are simply hammered home.

## 2.2 Use on an uneven solid wall

If the full surface bonding of the JACKOBOARD® Plano is not possible due to the unevenness of the substrate they can be fixed using a 'dot and dab' method with the addition of metal dowels. Construction Boards must be at least 20mm.

First cut the boards to size and mark the position of the dabs of adhesive by punching a small hole through the board using a screwdriver or bradawl. The spacing of the dabs is the same as for the metal dowels above. See figures 1 and 2. We recommend the use of a cement based rapid set flexible tile adhesive. Apply a dab of adhesive over the pre punched holes. Offer the board up to the wall and gently tap it home with a rubber mallet. Ensure that the board is vertical and flush with the adjacent boards using a spirit level.

Once the dabs of adhesive have fully cured drill through the pre punched holes with an 8mm drill and fix with the JACKOBOARD® Metal Disc Plugs as above.

## 2.3 Use on stud frames

JACKOBOARD® Plano construction boards can be fixed to timber or metal stud frames using JACKOBOARD® 36mm diameter galvanised steel washers and appropriate screws. If the frame centres are 600mm apart then boards of at least 20mm thick should be used. Fastening points must be arranged as per figure 3 or 4. If the frames are at 300mm centres then 10 or 12,5mm thick boards can be used. Fastening points must be arranged as per figure 5 or 6.

## 2.4 Free-standing walls

JACKOBOARD® Plano construction boards must be at least 50mm thick when building free-standing partition walls. Wall depths of up to 1200mm can be realised with no need for additional reinforcement of the cantilevered

corner. Equally, two construction boards measuring 600mm in width can be bonded together with for example JACKODUR® adhesive (solvent-free PU-based adhesive) to create the overall depth of 1200mm. The method for fastening the free-standing JACKOBOARD® Plano construction boards to the wall and floor is determined by the subsequent load to which they will be exposed.

U profiles should be used to fasten the JACKOBOARD® Plano construction boards to the wall and floor surfaces of the load-bearing substrate. At least one side of the construction board should be tiled following installation to ensure sufficient stability. The other side should be covered with suitable plaster or render for reasons of appearance and to ensure sufficient load bearing performance.

figure 3

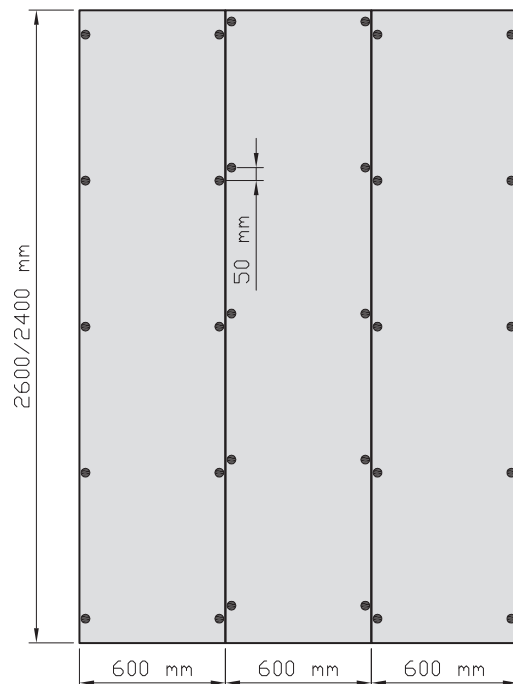


figure 4

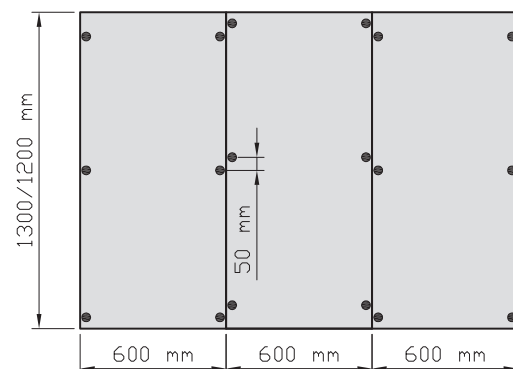


figure 5

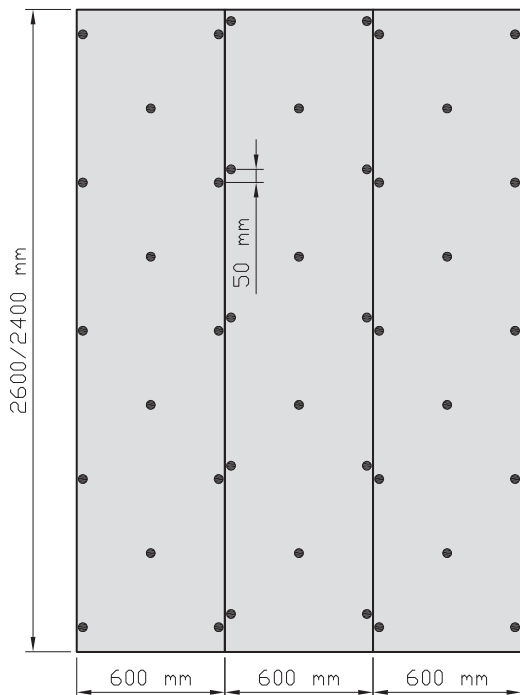
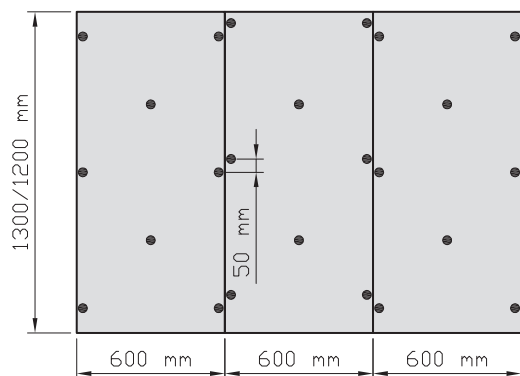


figure 6



## 2.5 Treatment of joints

Once any adhesives fixing the JACKOBOARD® Plano are cured the joints between the boards must be reinforced. In dry areas the joints between the construction boards must be reinforced with an alkaline resistant glass fibre tape (e.g. JACKOBOARD® glass fibre tape) with a minimum width of 120mm.

In wet areas the joints between the boards are sealed with waterproof tape (e.g. JACKOBOARD® sealing tape) and cement-based single part flexible tile adhesive. In wet areas with high humidity levels (Shower area), the joints should be sealed with a suitable waterproofing system. We recommend the use of the JACKOBOARD® Waterproofing Sealing Set or the combination of JACKOBOARD® glass fibre tape and JACKOBOARD® BOARD-FIX® adhesive.

In addition, care must be taken to seal any penetrations in the construction board, e.g. for pipes, screws or anchors, using suitable sealing agents (e.g. JACKOBOARD® pipe collars).

## 2.6 Notes for fixing tiles to JACKOBOARD® Plano construction boards

Tiling can begin as soon as the joints between the boards are sealed. Use cement based single part flexible tile adhesive.

## 2.7 Tips for applying plaster to JACKOBOARD® Plano

When covering JACKOBOARD® Plano with plaster, an additional, full-surface fibre glass mesh must be embedded in the upper third of the layer of plaster. The layer of plaster must be at least 3 mm thick but should not exceed 15 mm. Suitable plasters are cement plasters, lime cement plasters and lime plasters. When using gypsum plaster, the board must first be suitably primed before applying the plaster. Please observe the instructions of the plaster manufacturers.

### Please note

The information in this leaflet is based on our experience and current materials specification. It represents no specific guarantee and the instructions for use outlined should be always observed together with considerations regarding building structure and existing Building Law.