termPIR®
insulation boards

Insulation boards from Gór-Stal

termPIR® INSULATION BOARDS

INSTALLATION INSTRUCTIONS FOR CHAIR PROFILES

Installation instructions for chair profiles

TOOLS NEEDED

- hand saw / jig saw / circular saw
- screw gun/ drill-driver
- tape-measure, straight edge, marker

Installation instructions for chair profiles

PREPARATION OF THE SUBSTRUCTURE

01. THE FRAME

Before installing the boards, a wooden/aluminium frame suspended from the building structure should be made. The spacing between the transverse elements (perpendicular to the longer sides of the boards) should be adjusted so that each board can be fixed in three places. The recommended spacing is shown in Figure 1.

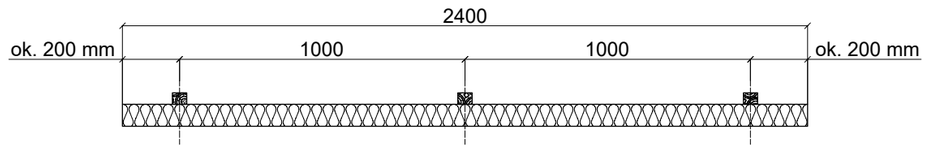


Fig. 1. Spacing of construction elements for fixing 1200 x 2400 mm boards

NOTE:

When installing 600 x 1200 mm boards, it is recommended to use two structural elements per board and to reduce the distance from the edge to approx. 100 mm.

The selection of the spacing of the longitudinal elements, the cross sections, the method of suspension and the fixing of the frame are outside the scope of this manual. All that needs to be borne in mind is that it must form an even plane and that its load-bearing capacity and rigidity must be sufficient to withstand the loads which may occur during installation and use.

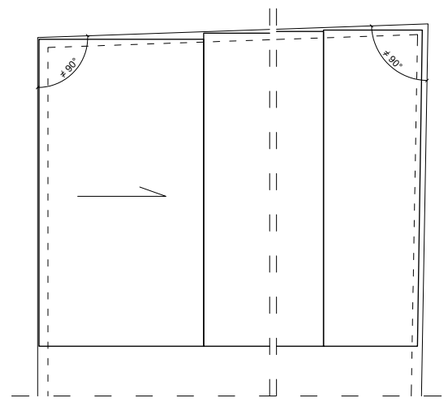
02. PERIMETER TRIM

Additionally, it is recommended to use a perimeter trim to cover the connection between the ceiling and the walls. Its installation should be carried out before the installation of the boards, making sure to leave enough space between the frame and the perimeter trim to allow for the installation of the board used. The choice of cross-section, installation method and material is up to the client.

Installation instructions for chair profiles

STAGE 1: SCRIBING THE CEILING

After the substrate has been prepared, it is recommended that the scribing (measurement of the area to be covered) is made to check the perpendicularity of the walls in relation to each other in the corners and to pre-plan the distribution of the boards. If the walls are not perpendicular to each other, it is recommended to lay the boards in such a way that one of their edges (preferably the longer one) is parallel to the wall. In the case of the other one, if the resulting gap in one of the corners is larger than the width of the perimeter trim, the subsequent boards should be cut from the length so that the opposite edges form a straight line. Using this procedure, the installation direction should also be changed to perpendicular to the one shown in these instructions.



STAGE 2: INSTALLATION OF THE FIRST BOARD IN THE CORNER

Fig. 1.
View of the frame and perimeter trim prepared in accordance with the recommendations in this manual and of the board before installation.

Once the arrangement of the boards has been planned, you can start the installation. It should be carried out according to previous assumptions and the recommendations of this manual.

Fig. 2.
View of the positioned corner board during installation.

To screw the boards to the frame, use an installation kit consisting of a galvanised screw dedicated to the frame material, a PVC pressure plate and a masking element of the same material. The length of the screw used depends on the thickness of the board and the frame material. In the case of a wooden board, it is recommended that the screw is recessed by at least 4 cm, and for an aluminium board that the length of the screw is greater than the thickness of the board by at least 2 cm.

Fig. 3.
View of the installation kit.

After the corner board has been screwed to the structure, the trim for the transverse joint (the so-called chair profile) must be installed. The length of the chair profile must be chosen so that it will be possible to install the longitudinal profile at a later stage of installation (when changing the direction of installation, the longitudinal profile must be cut and the transverse profile must be installed in its entirety).

Fig. 4.
View of the way the chair profiles are joined

NOTE:
The layout of the boards in the figure has been changed to improve legibility. It is recommended to lay the boards in such a way that the transverse joints were adjusted.

Fig. 1.

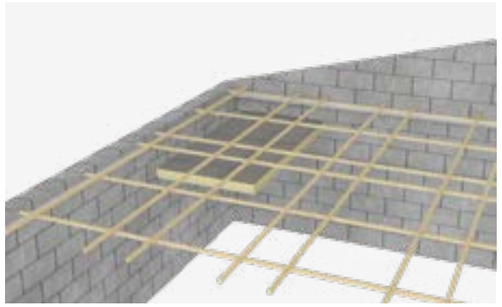


Fig. 2.

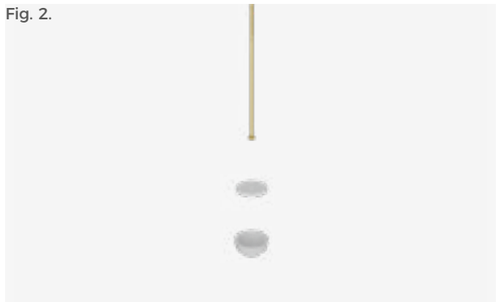


Fig. 3.

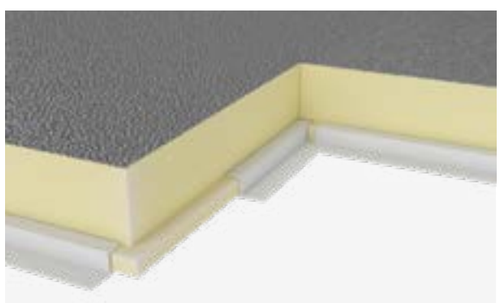


Fig. 4.

STAGE III: INSTALLATION OF THE NEXT BOARDS IN THE FIRST SECTION

Fig. 5.
View of the installed corner board and another board before installation.

The installation method for the next board is the same as for the corner board.

STAGE IV: INSTALLATION OF THE LONGITUDINAL TRIM (FOR THE CHAIR PROFILE)

Fig. 6.
View of the positioned board during installation and the longitudinal chair profile.

Once the next board has been installed and the length of the longitudinal joint is within 5.0 m, the chair profile can be installed. The way in which the profiles are joined is shown in Fig. 4. This profile is only necessary for installing the next section of boards, so it is up to the person carrying out the installation to decide whether to install the profile every two or several boards in one section.

STAGE V: INSTALLATION OF THE SECOND AND NEXT BOARD SECTIONS.

Fig. 7.
View of the installed first board section and the elements of the second section (bottom view).

Fig. 8.
View of the installed first board section and the elements of the second section (top view).

The installation method for the next board sections is the same as for the first section.

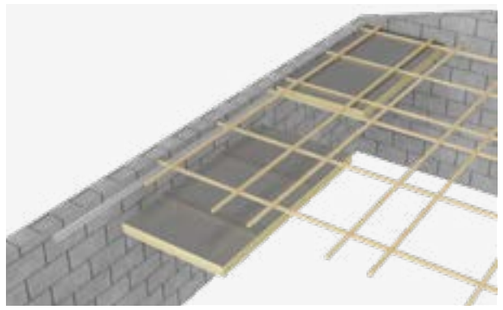


Fig. 5.

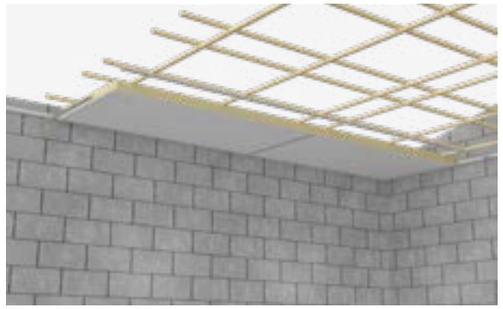


Fig. 6.

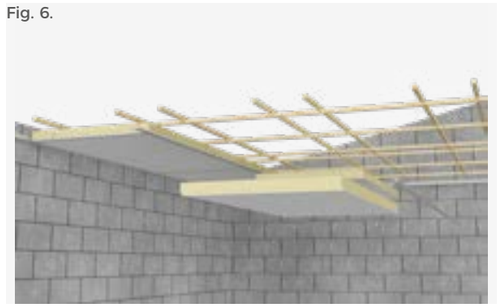


Fig. 7.

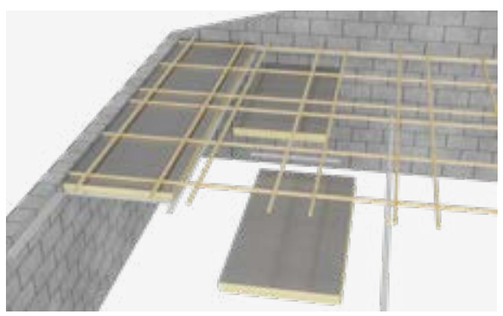


Fig. 8.

FINAL REMARKS

- For design reasons, there is no requirements for joint widths of the next chair profile sections.
- The tightening force of the screws must be selected in such a way that there is no risk of the pressure plates recessing into the board.
- The chair profile should be pushed over the board cutter until a distinct resistance occurs.
- The PVC trims primarily protect the screws from the aggressive environment inside the building. If the installation takes place in a facility with such an enviroment, they must absolutely be used.

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