

termPIR[®]
insulation boards



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termPIR[®] INSULATION BOARDS

termPIR[®] AL GK INTERIOR THERMAL INSULATION SYSTEM

PREPARATION WORK TO THE WALL

- ▷ Ensure that the substrate is level, free from dust and that it guarantees good adhesion for gypsum adhesive. No surface irregularities should exceed 15 mm. Where such irregularities exceed the limit, consider levelling out the surface or mechanical installation of insulation boards using wooden or system profiles.
- ▷ termPIR® AL GK insulation boards can be glued as they are, without any further treatment, to walls made of brick, concrete or aerated concrete.
- ▷ Very absorptive substrates should be primed. Gypsum plasters and smooth concrete should be checked for adhesion. Pay special attention to anti-adhesion agent residues on concrete surfaces installed in reusable formwork. Where such residues are found on wall surfaces, it is absolutely necessary to remove them. Prior to gluing termPIR® AL GK insulation boards to a wall, ensure that the wall is cleaned: remove soot, grease, dust, wallpaper, paint coatings and loose plaster.
- ▷ Do not glue insulation boards to the walls in temperatures below +7 °C or when the walls are frozen. The temperature of termPIR® AL GK insulation boards should not be below +7 °C either. If insulation board temperature is markedly different than the ambient temperature in the installation site (e.g. cold boards unloaded from a vehicle and brought into a heated room), wait until the temperatures are equal.

GLUING BOARDS TO WALLS

- ▷ It is recommended to use slow-setting gypsum adhesives, intended for gluing gypsum boards. Shown below are sample adhesives, recommended by contractors.
- ▷ Using a trowel, apply adhesive mortar as spots to the surface of the board and as strips around the perimeter (Figure 01). The glue spots (14 as a minimum) should have diameter of 80 - 130 mm and thickness of 20 -40 mm. The spots in the centres of the board surface can have slightly larger thickness (Photo 02). The glue strips around the board perimeter should have width of 40 - 80 mm and thickness of 20 - 40 mm. Glue strips along the edges should be applied at a distance of 10 - 80 mm from the board edge .
- ▷ Where the wall is not plumb or there are large holes or deviations it is recommended to install insulation boards on a support frame.



Photo 01



Photo 02

- ▷ Ensure the insulation board rests on wooden or plastic wedges; place and press the board against the wall and then set it plumb using a straight edge and a horizontal level (Photo 03-04).



Photo 03*

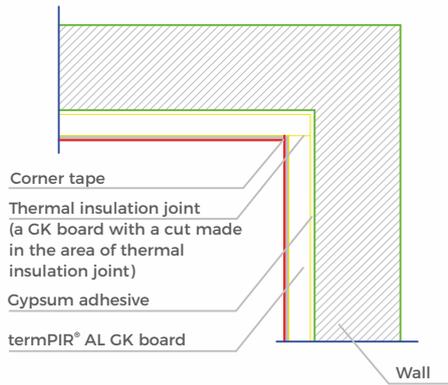
*It is recommended to use two plugs as a minimum.



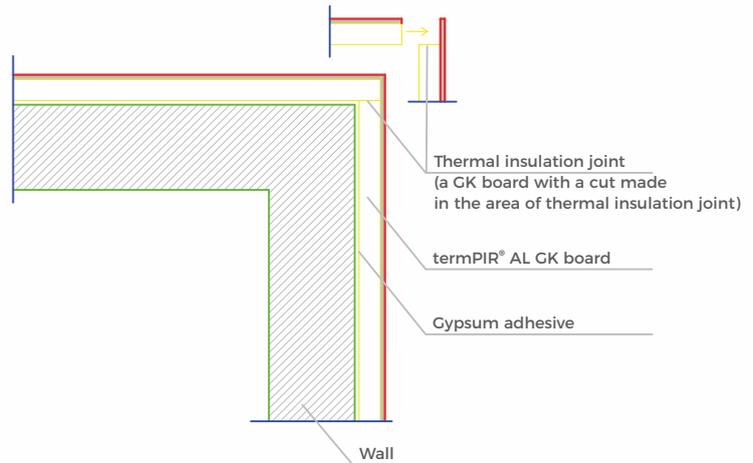
Photo 04*

- ▷ After you glue an insulation board to the wall, it is recommended to provide additional mechanical fixing using standard plugs. Where insulation boards are installed in one row only at standard storey level (2,6 m), we recommend that you use two plugs per board, positioned in the upper part of the board.
- ▷ If you are installing insulation boards in two or more rows at height (e.g. between staircase landings), the insulation boards above the first row should be fastened mechanically using a minimum of 6 plugs.
- ▷ Sink the plug collars into the gypsum boards ensuring that you do not damage the thermal insulation as well as the paper and aluminium layer factory-jointed with PIR foam.

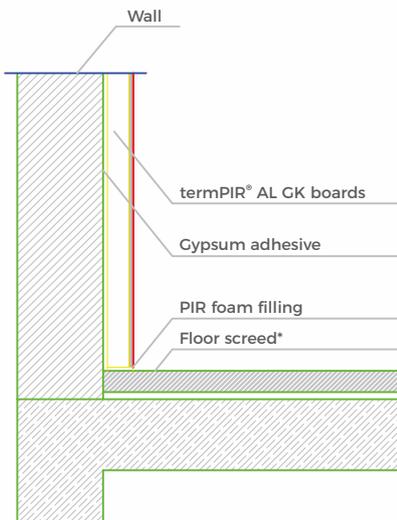
INSIDE CORNER



OUTER CORNER

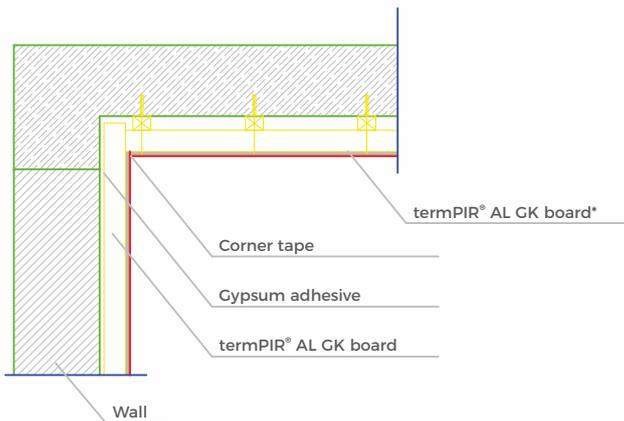


FINISHING JUST ABOVE FLOORING



* It is recommended to leave a gap of ca. 1 cm between the gypsum and the floor.

WALL AND CEILING JOINT



* Between the ceiling and the AL GK board there are marks indicating the location of a support frame for fixing GK boards. Ceiling installation is not carried out with the technology used for installation on walls (i.e. by gluing).

STAGE II: BOARD SURFACE FINISHING

- ▷ Once glued, the board joints should be left without finishing, depending on the weather conditions, for a period of 7-14 days, to allow water content of the adhesive to freely evaporate.
- ▷ After this time period, start making board joints using gypsum and a tape or mesh for GK boards.
- ▷ Gaps and breaks between insulation layer sheets should be filled with low pressure polyurethane foam. Carry out the same procedure for joints between the board and the floor and floor slab. Excess foam should be cut off, and filled with pliable acrylic filler.
- ▷ As normative deflection can occur on board surfaces, it is recommended to carry out the pointing up of the entire surface. Prior to pointing up, prime the GK layer with the product recommended by the supplier of the levelling layer used.
- ▷ All joints between the boards should absolutely be reinforced with an appropriate type of tape or mesh intended for finishing GK boards.

STAGE III: INSTALLATION OF ELECTRICAL WIRING

- ▷ Electrical leads and cables should be run in a chasing in the wall. It is not recommended to partly or completely cut and remove thermal insulation from termPIR® AL GK boards. If installing boards on a support frame, run cables in vacant space in the support structure.
- ▷ If it is necessary to extend cables (in old houses), use appropriate connectors to prevent short-circuits.
- ▷ It is recommended to use vapour-tight cables boxes. Ensure that you install cable boxes tight (e.g. using a sealing compound).

IMPORTANT GUIDELINES

In order to prevent joints from developing cracks, and boards from scaling starting on the substrate, prior to/ and while / installing boards avoid:

- ▷ exposing boards to moisture prior to and during storage and installation as GK boards, if exposed to moisture, they are likely to swell and then shrink when drying.
- ▷ gluing termPIR® AL GK boards at temperatures below +7 °C.
- ▷ finishing joints between the boards at temperatures below +7 °C.
- ▷ applying too little adhesive to board edges and surfaces
- ▷ improper application of adhesive - i.e. failing to apply a “zigzag strip” of adhesive around the perimeter.
- ▷ excessive moisture in the room and on the walls where boards are being installed, as this may prevent the gypsum adhesive from drying (evaporation of moisture), leading as a result to the loss or deterioration of the adhesive characteristics guaranteeing proper adhesion (the gaps between the boards should be left to dry, depending on moisture levels, for 7-14 days).



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