ISOBOARD®

Premier Thermal Insulation for • Roofs • Ceilings • Floors • Walls

# Surface Bed Insulation

Loss of heat through floors on concrete surface beds is experienced as a cold underfoot condition, particularly during winter when the supporting soils cool down due to hygroscopic action of water. In order for rooms to be heated or cooled energy efficiently, the floors need to be insulated from the surrounding soil bed to prevent soil bed from being heated.

## Typical uses for IsoBoard in this application

1. Placed between mesh reinforced floor screeds and surface bed to prevent room heat loss and additional comfort.
2. Installed below refrigerated slabs of ice rinks, freezer rooms and certain agricultural applications to minimise heat flow from warmer surface beds into cold room environments.
3. Installed below screeds of domestic and commercial applications where under-floor heating systems are installed.

## Typical uses as IsoBoard surface perimeter insulation

Installed new or as a retrofit to residential homes having under floor heating, for those interested in energy cost saving.

## Suggested bill of quantity specification

**Surface Bed Insulation for residential applications**
IsoBoard high density 32-36kg/m3 rigid extruded polystyrene 100% closed cell insulation board of30 mm thickness and 600 mm width with tongue and groove joints laid on plastic sheeting (elsewhere) under reinforced concrete beds.

**Perimeter Insulation**
soBoard high density 32-36kg/ m3 rigid extruded polystyrene 100% closed cell insulation board of 30 mm thickness and 600 mm width installed upright against outer foundation wall to depth of 600 mm secured with soil ballast.

**Above slab, below screed Insulation**
IsoBoard high density 32-36kg/ m3 rigid extruded polystyrene 100% closed cell insulation board of mm thickness and 600 mm width installed above floor slab below reinforced screed not less than 60 mm thick.

Weldmesh reinforcing in surface bed

Adbove slab, below screed insulation

Above slab, below screed insulation

## Site handling instructions

- Store boards flat within original packaging until required.
- Boards are to be protected from adverse weather conditions and direct sunlight for the storage period.
- Handle and install with care to prevent damage to board edges.
- IsoBoard is easily cut to length on site using a sharp blade or hack-saw, or can be supplied cut-to-length by the Regional Distribution Centres.

## Installation guidelines

**Surface Bed Insulation**

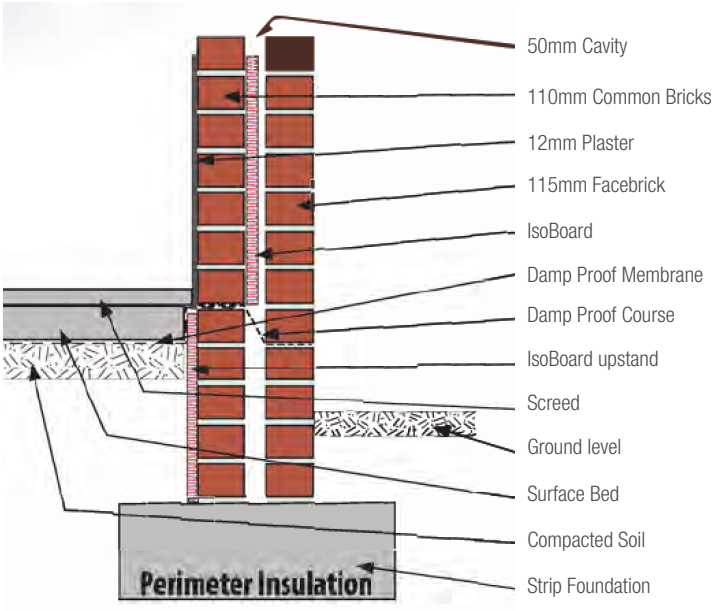
1. Prepare soil foundation and treat with weed killer and place damp proof course. After cleaning, place IsoBoard panels.
2. Jointing between boards should be effected with the tongue and groove or shiplap edge profiles.
3. The reinforced concrete slab is poured above the IsoBoard, in accordance with the specifications of the Structural Engineer, with the reinforcing spaced above the board.
4. Care must be exercised to prevent board flotation during pouring.

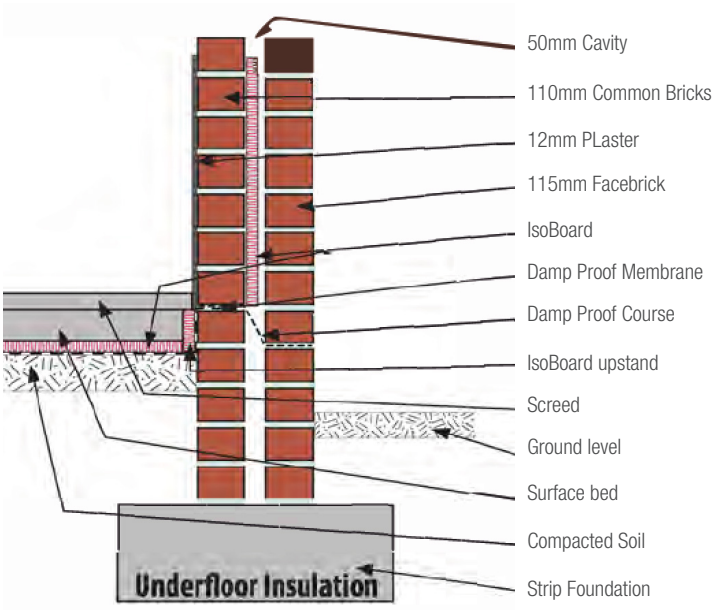
**Perimeter Insulation**

1. IsoBoard is installed vertically against the inner or outer foundation wall to a depth of 600mm, with the tongue towards the top. Secure IsoBoard with soil ballast.

## Ordering information

- For this application 1,2m or 2,4m board lengths are practical.
- Order boards with shiplap or tongue and groove edge profiles all round.
- In South Africa 30 mm thick board will generally suffice for domestic applications, whilst up to 150mm will be required in the ice rink/ freezer room applications.




Perimiter insulation

IsoBoard installation over slab under screed

AutoSpec®