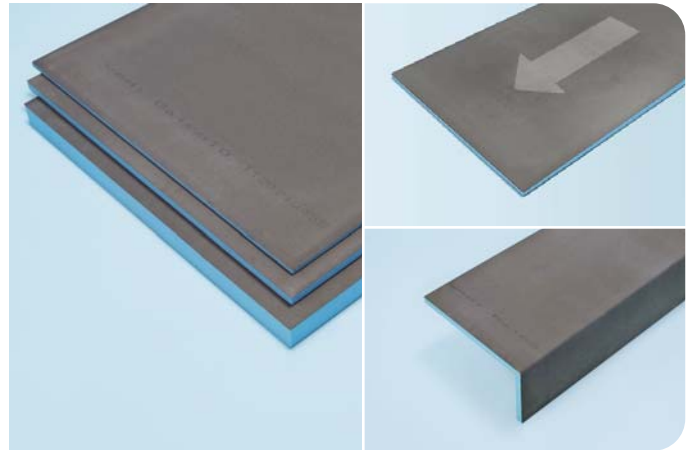


wedi building board *Balco*

wedi building board *Balco* | sloping board lengthwise
and sloping board widthwise

wedi building board *Balco* | stepboard

- For balconies and terraces
- Waterproof
- Heat insulating
- Frost-resistant



General product description

The wedi Balco building board consists of a blue core made from extruded polystyrene rigid foam which is glass-fibre reinforced (with alkali-resistant finish) and coated on both sides with a special frost-resistant cement coating. The system includes the building board Balco sealing set which is used to seal Balco/Balco and Balco/wall joints and the Balco Combit special primer (only on bituminous sheets).

Applications

With its special properties, the uses of the wedi building board Balco are versatile:

- Carrier element for laying tiles, slabs and natural stone floor coverings using the thin-bed method
- Moisture protection
- Effective heat insulation
- Composite sealing with tiles, slabs and natural stone on floor areas of load class B0 (directly and indirectly loaded areas outdoors with non-pressing water load)

wedi building boards Balco are approved for exterior use as a seal on balconies and terraces. When sealing terraces over heated living areas, sealing materials complying with DN 18195 must be used. When using wedi Balco building board (10 mm and over), a ceramic finishing covering can be applied on top of the boards and sealing layer in accordance with the standards. Wheeled loads with high concentrated loads are not permitted.

Product properties

The wedi building board Balco does not absorb water, it is heat insulating, reduces stresses, it is frost-resistant, can be tiled and is quick to process. Using wedi building boards Balco brings thermal improvements. A calculated value of thermal conductivity of the polystyrene rigid foam under DIN 4108 of 0.035 W/mK is used as the basis for calculating the individual component. The test certificates and product information can be downloaded from the Internet at www.wedi.de.

Surface requirements

All surfaces must be solid, load-bearing, non-deformable, dry and free of dirt and other contaminants. Damaged tiles must be removed and the damaged areas made good with a mortar (recommended: wedi Balco middle bed mortar, quick).

Highly absorbent, mineral surfaces must be primed (recommended: wedi 110 primer). Smooth, non-absorbent surfaces (e.g. old tiles) must also be primed (recommended: wedi 120 adhesive and contact primer).

Bituminous sheets may be smooth, sanded or slate-coated. Bituminous surfaces must be primed using Balco Combit special primer (surface temperature max. 30°C) and sprinkled with quartz sand (recommended: wedi quartz sand 0.4 – 0.8 mm).

Balco cannot be laid on wooden surfaces.

The surface should have a minimum slope of 1.5%. If it is less than this, a surface slope of 1.5% can be created by using wedi Balco sloping boards.

Laying

wedi Balco building boards are laid on the surface with a quick drying thin-bed or medium-bed mortar (recommended: wedi 330 flexible tile adhesive, quick, wedi middle bed mortar, quick) applied across the entire surface of the board and aligned. The boards must not be laid on blobs of mortar.

The Balco/Balco and Balco/wall joints must then be sealed with the wedi building board Balco sealing set (sealing table and sealant) as soon as the mortar has dried sufficiently to be load-bearing.

If a ceramic floor covering is to be laid, complying with DIN 18157 part 1, the sealant must be filled as snugly as possible. Saponification-resistant cement mortars modified with an elastifying dispersion are recommended (recommended: wedi 320 tile adhesive with wedi 370 synthetic resin coating). An enclosure is recommended to protect the surface against the weather.

Ceramic half-tiles are preferred (frost-resistant in accordance with DIN EN ISO 10545-12).

The expansion joint in the ceramic covering should be aligned according to the expected direction of sunlight. The field definition joints must be arranged at intervals of 2.00 to 5.00 m. The fields should have the most compact side ratio possible (up to max. 1:2).

Technical properties – Rigid foam

HCFC-free extruded polystyrene rigid foam with closed cell structure and flame-retardant additive.

| | |
|--|------------------------|
| Long-term compressive strength (50 years) \leq 2% compression EN 1606 | 0.08 N/mm ² |
| Compressive resistance or compressive strength at 10% compression EN 826 | 0.25 N/mm ² |
| Associated module of elasticity EN 826 | 10 N/mm ² |
| Thermal conductivity EN 13164 | 0.033 W/mK |
| Tensile strength DIN EN 1607 | 0.45 N/mm ² |
| Shearing resistance EN 12090 | 0.2 N/mm ² |
| Shear modulus EN 12090 | 7 N/mm ² |
| Bulk density DIN EN 1602 | 32 kg/m ³ |
| Resistance to water vapour diffusion (μ) EN 12086 | 100 |
| Water absorption under long-term immersion EN 12087 | \leq 1.5 % by vol. |
| Capillar action | 0 |
| Linear coefficient of thermal expansion | 0.07 mm/mK |
| Temperature limits | -50°C / +75°C |
| Fire behaviour DIN 4102 | B1 |
| Fire behaviour EN 13501-1 | E |

Technical properties – Coating

- coated on both sides with special cement coating with high tensile glass fibre reinforcement
- waterproof
- sanded
- increased concentrated load capacity
- frost-resistant

Packing

Boards on pallets

Storage

In principle wedi building boards Balco should be stored flat, irrespective of their thickness. They must be protected against direct sunlight and moisture.

Safety notice

none