

wedi building boards

Wall and flooring applications

A Wall application (indoors)

I. Processing wedi building boards

a) Full-surface bonding (without dowelling) on load-bearing sub-surfaces

- All sub-surfaces must be firm, load-bearing, non-deformable and free from dust, dirt and other impurities.
- Highly absorbent, mineral sub-surfaces (e.g. cement plasters, gypsum plasters) are to be primed.
- Smooth, non-absorbent sub-surfaces (e.g. old tiles) which cannot be removed are also to be primed.
- Any imperfections are to be levelled using suitable filling compounds.
- The residual moisture content of the sub-surfaces must not exceed the following values:

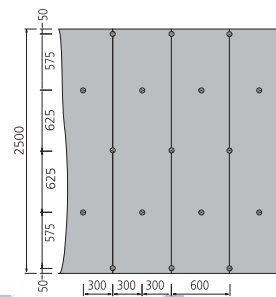
Gypsum-bound plasters	1.0 %
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- The building boards are (from a thickness of 4 mm) applied and aligned on the full surface using thin-bed mortar. The joints of the individual building boards are to be equipped with the wedi Tools reinforcement tape using commercially available thin-bed mortar or with the wedi Tools self-adhesive reinforcement tape.
- In areas exposed to splash water, the building board joints are to be sealed using wedi Tools sealing tape and commercially available thin-bed mortar. Another form of sealing is full-surface bonding of the joint edges using wedi 610 adhesive sealant.

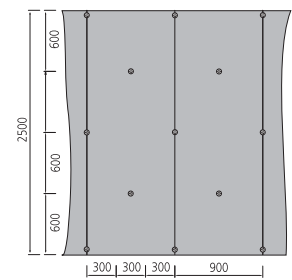
b) Full-surface bonding (with dowelling) on non-load-bearing sub-surfaces

- This mounting method is used when permanent bonding of wedi building boards with the sub-surface is not possible due to impervious surfaces, separating layers or similar. Building boards should be processed as described under a). Also, dowelling of building boards is also required prior to the building board joints being reinforced. wedi Tools metal dowels (galvanised or stainless steel) should be used as dowels (five dowels/mm²). The minimum dowel driving depth in the load-bearing sub-surface is 35 mm. Dowels are to be arranged

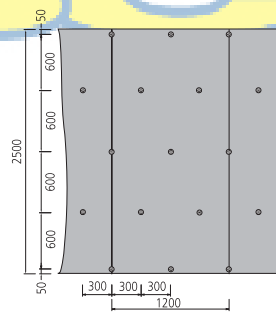
as described in the diagrams. The building board joints should be reinforced and/or sealed as described under Point a).



Application: Full-surface bonding and dowelling from BA 04 mm.



Application. Full-surface bonding and dowelling for BA 12.5; BA 20; BA 30; BA 50 mm.



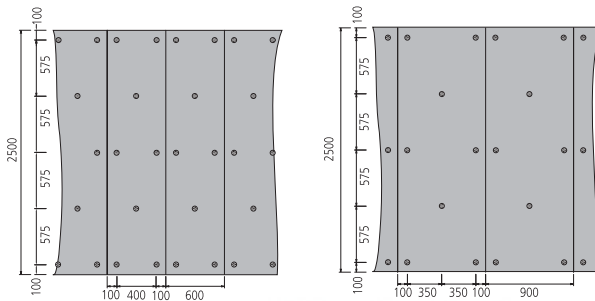
Application. Full-surface bonding and dowelling for BA 12.5; BA 30; BA 50 mm.

c) Spot bonding (with dowelling) on uneven sub-surfaces

This mounting method is used when the sub-surface does not allow for full-surface bonding due to existing unevenness. The lumps of mortar are applied to the floor panel (minimum thickness 20 mm), the thicknesses of which is to be selected depending on the task to be dealt with. The number and arrangement of the lumps of mortar should correspond to the rule for dowelling,

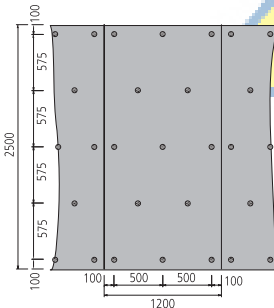
i.e. at least five lumps of mortar/m² building board. The building boards are attached to the wall by striking them, whereby they must be aligned in such a way that an even vertical and horizontal sub-surface is created.

Also, the building boards must be dowelled in the area containing the lumps of mortar. wedi Tools metal dowels (galvanised or stainless steel) should be used for this purpose. For this reason, it is useful to pierce the areas of the building board where lumps of adhesive are subsequently to be applied using a screwdriver. The minimum dowel driving depth in the load-bearing sub-surface is 35 mm. Dowels are to be arranged as described in the diagrams. The building board joints should be reinforced and/or sealed as described under Point a).

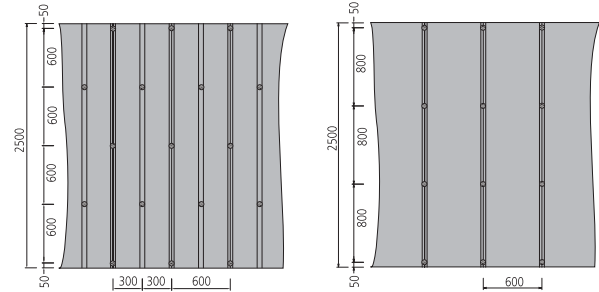


Application: Lumps of mortar and dowelling from BA 20 mm.

Application: Lumps of mortar and dowelling for BA 20; BA 30; BA 50 mm.

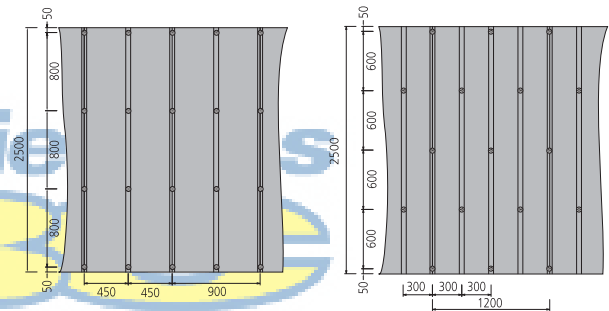


Application: Lumps of mortar and dowelling for BA 30; BA 50 mm.



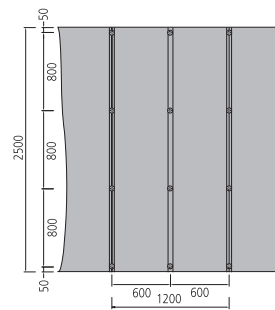
Application: 300 mm stud frame with washers and screws for BA 10; BA 12.5 mm

Application: 600 mm stud frame with washers and screws from BA 20 mm.



Application: 450 mm stud frame with washers and screws for BA 12.5 mm.

Application: 300 mm stud frame with washers and screws for BA 12.5 mm.



Application: 600 mm stud frame with washers and screws for BA 30; BA 50 mm.

d) Installation on wooden or metal stud frames

The wooden or metal sub-structure should be created vertically and horizontally, and a maximum stud distance of 600 mm should not be exceeded. Cladding takes place using wedi building boards with a minimum total thickness of 20 mm. If the stud distance reduces to 300 mm, building boards with thicknesses of 10 mm and 12.5 mm can also be used.

The building boards are mounted to the sub-structure using commercially available wood or drywall screws and the wedi Tools washers (galvanised or stainless steel). Screws are to be arranged as described in the diagrams. Alternatively, there is

the option of bonding the wedi building boards to the stud frame using wedi 610. The building board joints should be reinforced and sealed as described under Point a).

II. Tiling wedi building boards

The building boards can be tiled directly after reinforcement without further pre-treatment. It is to be observed that the joints between the wall and floor coverings and the corner joints of the wall covering must be developed as expansion joints.

III. Applying plasters to wedi building boards

If materials contain gypsum, wedi building boards are to be primed. The manufacturer's information is to be observed.

IV. Important information on processing and storing wedi building boards

When installing heavy objects, such as wash basins, WC pans folding seats, supporting handles or similar, ensure that they are mounted in the wall behind or in suitable installation frames. Ensure that load transfer is guaranteed in the area of pressure points. The tile size for this application must be at least 10 x 10 cm, and the tile thickness must be at least 7 mm. Spot mounting of the building boards and free-standing application are not permissible in this case. Lighter objects (e.g. soap dishes, toilet roll holders) can be mounted using cavity dowels. Building boards measuring 4 and 6 mm thick are only suitable for full-surface bonding, not for spot bonding or installation on a frame structure. To fully exploit the "water impermeability" properties of wedi building boards, wedi Tools sealing tape should be applied to the joints. Another form of sealing is full-surface bonding of the joint edges using wedi 610 adhesive sealant. Also, it must be ensured that any penetrations in the building board, such as those made for pipes or mounting with screws or dowels, are sealed using suitable sealants. The above-mentioned recommendations apply only to indoor wall applications within rooms at normal temperature. We ask that you consult with us in advance when using building boards in swimming pools, cold stores, etc. wedi building boards should be stored horizontally as a matter of principle, irrespective of their thickness. They are to be protected from direct sunlight and moisture. Avoid processing using substances that contain solvents. The information provided is correct to the best of our knowledge and has been proven in numerous laboratory and practical tests. However, it does not provide any assurances in the legal sense.

B Flooring application (for living spaces and spaces that are used in similar ways to living spaces)

I. Processing wedi building boards

a) On mineral sub-surfaces

- All sub-surfaces must be firm, load-bearing, non-deformable and free from dust, dirt and other impurities.
- Highly absorbent, mineral sub-surfaces (e.g. anhydrite screeds) are to be primed. Any sinter layers must be removed in advance.
- Smooth, non-absorbent sub-surfaces (e.g. old tiles) and old carpet adhesive which cannot be removed are also to be primed.
- Laying on heated screeds is not advisable due to the insulating function of the building boards. Any unevenness is to be remedied using suitable filling compounds.
- The residual moisture content of the sub-surfaces must not exceed the following values:

Cement screeds	2.0 %
Calcium sulphate screeds	0.5 %

The building boards are (from a thickness of 10 mm) laid and aligned on the sub-surface using a thin-bed mortar. The building boards should be laid in the bed of adhesive in such a way that the joints are offset. The joints of the individual building boards are to be equipped with wedi Tools reinforcement tape using commercially available thin-bed mortar or with wedi Tools self-adhesive reinforcement tape. It is advisable to reinforce the entire building board surface using a 600 mm-wide reinforcement tape (recommended: wedi Tools 600 mm reinforcement tape). In areas exposed to splash water, the building board joints are to be sealed using wedi Tools sealing tape and commercially available thin-bed mortar. Another form of sealing is full-surface bonding of the joint edges using wedi 610 adhesive sealant.

b) On wooden surfaces

Existing suspended timber floors must be checked for their load-bearing capacity. The wooden structure must not buckle or give way (maximum sag: 1/600) and must be as bending-resistant as possible and be secured against height offsets. Loose planks or floorboards must be screwed down again if necessary. Uneven floorboards must be levelled (injection-mould and prime floorboard joints and level them with levelling compound).

The following minimum specifications for wooden substructures are to be complied with:

Derived timber product panels: ≥ 16 mm, $\rho \geq 600$ kg/m³

Plywood panels: ≥ 16 mm, $\rho \geq 520$ kg/m³

Planks / floorboards: ≥ 21 mm

Processing should be performed as described under a). Also, before the building board joints are reinforced once the thin-bed mortar has fully set, it is necessary to mechanically mount the building boards using wedi Tools washers (galvanised or stainless steel) and wood or drywall screws. At least five screws, which must be screwed at least 20 mm deep into the wooden structure, must be used per/m² for this purpose. The screws are to be tightened until the insulating board discs are flush with the building board surface. The building board joints should be sealed as described under Point a). Then, fully reinforce the entire building board surface using a 60 cm-wide reinforcement tape (recommended: wedi Tools 600 mm reinforcement tape).

C Laying building boards for sealing purposes in conjunction with tile and panel coverings on walls and floors featuring load classes A and B

This applies to building boards being installed on walls and floors in spaces that are directly exposed to tap or cleaning water for frequent or prolonged periods of time, such as areas around swimming pools and showers, and building boards being installed on walls and floors of indoor and outdoor tanks filled with water featuring drinking water characteristics. The procedure for this application deviates from the general application guidelines that were described previously. Visit "<http://www.wedi.eu>" for more information.

II. Tiling wedi building boards

When tiling, it is to be ensured is that joints between the floor tile covering and the wall covering are developed as expansion joints. Expansion joints in screed or building separating joints used for panel borders are to be developed in the same way as the regulation for floating screeds. The tile size must be at least 10 x 10 cm, and the tile thickness must be at least 7 mm. The building boards can be tiled directly after reinforcement without further pre-treatment.

III. Important information on processing and storing wedi building boards

The above-mentioned recommendations refer only to floor applications in living spaces and spaces that are used in similar ways to living spaces. Wheeled loads with high spot loading are not permissible. wedi building boards should be stored horizontally as a matter of principle, irrespective of their thickness. They are to be protected from sunlight and moisture. Avoid processing using substances that contain solvents.

Due to their high compressive strength, building boards do not have impact sound insulating properties. The information provided in these application guidelines is correct to the best of our knowledge and has been proven in numerous laboratory and practical tests. However, it does not provide any assurances in the legal sense.

