



BOTAMENT® M 21 HP

Premium Flexible Adhesive thin-bed/ medium-bed C2 TE S1

BOTAMENT® M 21 HP is a highly flexible light-weight adhesive for the fitting of almost all ceramic wall and floor coverings and natural stones which are non-sensitive against discolouration in interior and exterior areas. Due to the airflow Technology the thin-bed and medium-bed adhesive is particularly easy to handle.

Properties

- ❖ Very productive thin-bed and medium-bed adhesive
- ❖ Highly flexible- outmatches the S1 requirements
- ❖ For heated areas, balconies and terraces
- ❖ Particularly stable according to EN 12004
- ❖ For levelling works up to 10 mm in one step
- ❖ Easy and smooth to handle
- ❖ Long working time
- ❖ certificated as a system in connection with the BOTAMENT® Sealing and Decoupling Membrane

Application Areas

Bonding of

- ❖ vitreous stoneware and porcelain stoneware
- ❖ non-vitreous stoneware
- ❖ split tiles
- ❖ floor clinker slabs and clinker tiles
- ❖ hand-made tiles
- ❖ small and medium-sized mosaics
- ❖ natural stones which are non-sensitive against discolouration
- ❖ insulation and lightweight building boards

Very smooth boards (e.g. rigid foam slabs) must be roughened up prior to bonding.

Suitable substrates

- ❖ concrete, lightweight concrete and porous concrete
- ❖ joint full brickwork
- ❖ plasters of the mortar categories CS II, CS III and CS IV in accordance with DIN EN 998 and gypsum plaster in accordance with DIN EN 13279 (compressive strength $\geq 2.5 \text{ N/mm}^2$)
- ❖ BOTAMENT® building boards
- ❖ old tiling
- ❖ gypsum walls, gypsum plaster boards and gypsum fibreboards
- ❖ cement screeds and calcium sulphate screeds
- ❖ sanded mastic asphalt screeds (IC 10)
- ❖ tested as one system for the further application onto the BOTAMENT® AE Sealing and Decoupling Membrane

Application on porous concrete and mastic asphalt screeds is only permissible in interior areas.

Technical data

material basis	cement combination with mineral light-weight fillers and additives
packaging	25 kg bag
storage	cool and dry at least 12 months in its original sealed container
density	~ 1.30 kg/ dm ³
temperature resistance	- 20 °C up to + 80 °C
optimal water-solid ratio	~ 29 % as thin-bed adhesive ~ 28 % as mid-bed adhesive
mixing ratio	thin bed ~ 7.25 l of water / 25 kg mid-bed ~ 7.00 l of water / 25 kg
maturing time	5 minutes
open time	~ 30 minutes
working time	~ 3- 4 hours
max. layer thickness	10 mm
walkable	after ~ 24 hours
ready to be grouted	after ~ 24 hours
fully loadable	after ~ 7 days
consumption thin-bed	
6 mm notched trowel	~ 2.00 kg/m ²
8 mm notched trowel	~ 2.55 kg/m ²
10 mm notched trowel	~ 2.95 kg/m ²
consumption mid-bed	~ 4.20 kg/m ²
application and substrate temperature	+ 5 °C to + 30 °C
cleaning agent	
when fresh	water
when fully cured	cement laitance remover

All times stated refer to the standard atmosphere of + 23 °C and 50 % relative humidity. Higher temperatures and lower humidity accelerate, while lower temperatures, higher layer thicknesses and higher humidity delay processing time and curing.

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Substrate preparation

The substrate must be in the following condition:

- ❖ dry, clean and frost-free
- ❖ stable
- ❖ free from grease, paint, cement laitance, separating agents, sinter layers and loose particles
- ❖ in true alignment and perpendicular

Please also note:

- ❖ unevenness of wall and floor surfaces are to be levelled with BOTAMENT[®] levelling mortars
- ❖ carry out large surface floor levelling with levelling compounds BOTAMENT[®] M 50 Classic, M 51 Classic or M 53 Extra
- ❖ absorbent substrates must be primed with BOTAMENT[®] D 11
- ❖ where the substrate is gypsum → minimum layer: 10 mm surface condition: rough, not felted or smoothed
- ❖ perform a Concrete Moisture Test to check the residual moisture in cement and calcium sulphate screeds and for plasters

maximum permissible residual moisture		
substrate	unheated	heated
cement screed	2.0 %	2.0 %
calcium sulphate screed	0.5 %	0.3 %
plaster	1.0 %	

- ❖ minimum age of concrete substrates: 3 months
- ❖ maximum layer thickness of BOTAMENT[®] M 21 HP on sanded mastic asphalt screeds: 5 mm

If the substrate is made from non-absorbent material or is made of old tiles, it must first be primed either using BOTAMENT[®] D 15 (only to be used in interior areas), alternatively with BOTAMENT[®] R 20 Multiprimer or must receive a scratch coat 24 hours prior to installation using BOTAMENT[®] M 21 HP.

Application

- ❖ mix up using cold, clean water while stirring with a slow rotating agitator until a homogenous, stiff and paste-like mass has formed
- ❖ briefly stir again after the maturing time
- ❖ first apply a thin contact layer of BOTAMENT[®] M 21 HP using the smooth side of the notched trowel onto the substrate
- ❖ then apply BOTAMENT[®] M 21 HP onto the fresh contact layer with the notched side of the trowel
- ❖ press tiles using light pressure and a side-to-side movement into the adhesive bed and position

Important Tips

When installing ceramic coverings all existing standards and guidelines in their current versions must be observed.

You can view or download the safety datasheet at www.botament.com.

To achieve optimal results we recommend conducting a site-specific test sample prior to using.

When fitting larger tiles (especially in connection with heated constructions) and for works in exterior areas, we recommend the use of BOTAMENT[®] M 21 HP in the combined method or the use of a pourable bed adhesive from our product range.

When bonding insulation boards the current regulations must be observed.

If the substrate is made of gypsum-containing material, the respective manufacturer's guidelines must be observed.

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BOTAMENT[®] M 21 HP must not be mixed with any additives.

Important Notice: The information provided here is based on our experience and is given to the best of our knowledge, but is non-binding. All instructions must be adapted to suit the individual building projects, the application purpose and the specific local conditions. Given these preconditions we shall be liable for the accuracy of the information given as outlined in our sales and delivery terms and conditions. Recommendations by our employees that deviate from this information are only binding for us if they have been confirmed in writing. In any case, the generally accepted technical rules must be adhered to. Edition GB-1604. Further technical details can be found in our technical data sheets on our website: www.botament.com.
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