

MULTISTONE®

Multi-functional Tile and Natural Stone Adhesive C2 FT – S1/S2



MULTISTONE® is a multi-functional light-weight tile adhesive for the fitting of almost all of almost all natural stones as well as ceramic wall and floor coverings in interior and exterior areas.

Properties

- ❖ Highly stable and highly flexible
- ❖ Particularly well suited for large format sizes
- ❖ Highest yield (goes a long way)
- ❖ Rapid curing
- ❖ Dust-reduced formulation
- ❖ For levelling unevennesses up to 30 mm
- ❖ Suitable for swimming pools and potable water containers

Application Areas

Bonding of

- ❖ Natural stones
- ❖ vitreous stoneware and porcelain
- ❖ non-vitreous stoneware
- ❖ split tiles
- ❖ floor clinker tiles, clinker tiles and Cotto
- ❖ hand-made tiles
- ❖ small, medium and glass mosaics
- ❖ glass tiles
- ❖ 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)
- ❖ torsion-resistant steel substrates in interior areas

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

For the fitting onto steel substrates please contact our technical department.

Technical data

material basis	cement combination with mineral lightweight-fillers and additives
packaging	15 kg bag
storage	cool and dry at least 9 months in its original sealed container
density	~ 1.3 kg/ dm ³
temperature resistance	- 20 °C up to + 80 °C
optimal water-solid ratio	~ 24 % as levelling comp. ~ 24 % as thick-bed ~ 25 % as mid-bed ~ 30 % as thin-bed ~ 32 % as self-levelling
mixing ratio S1	
levelling mortar	~ 3.6 l of water/ 15 kg
thick-bed	~ 3.6 l of water/ 15 kg
medium-bed	~ 3.8 l of water/ 15 kg
thin-bed	~ 4.5 l of water/ 15 kg
pourable bed	~ 4.8 l of water/ 15 kg
mixing ratio S2	
thin-bed	3.75 l BOTAMENT® D 10 + 0.75 l water/15kg
pourable bed	4.0 l BOTAMENT® D 10 + 0.8 l water /15kg
maturing time	~ 3 minutes
open time	~ 20 minutes
working time	~ 30 minutes
max. layer thickness	30 mm
walkable	after ~3 hours
ready to be grouted	after ~3 hours
fully loadable	after ~ 48 hours
consumption thin-bed	
6 mm notched trowel	~ 2.0 kg/m ²
8 mm notched trowel	~ 2.6 kg/m ²
10 mm notched trowel	~ 3.0 kg/m ²
consumption medium-bed	
	~ 4.0 kg/m ²
consumption pourable bed	
8 mm notched trowel	~ 2.5 kg/m ²
10 mm notched trowel	~ 2.8 kg/m ²
application and substrate temperature	+ 5 °C to + 25 °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 of up to 20 mm are to be levelled with MULTISTONE®, larger unevenness with BOTAMENT® M 90 levelling compound or M 100 levelling mortar
- ❖ large surface floor levelling is to be performed using levelling compounds BOTAMENT® M 50, M 51, M 52 Duoplan 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 gypsum plasters

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

- ❖ minimum age of concrete substrates: 3 months
- ❖ maximum layer thickness of MULTISTONE® on sanded mastic asphalt screeds: 5 mm

If the substrate is made of non-absorbent material or is made of old tiling it must either be primed with BOTAMENT® D 15 (only to be used in interior areas) or must receive a scratch coat of MULTISTONE® 24 hours prior to tile fitting.

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 MULTISTONE® using the smooth side of the notched trowel onto the substrate
- ❖ then apply MULTISTONE® 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

Natural stone coverings must be bonded throughout.

Fitting of glass tiles

- ❖ bonding only onto substrate with flexural rigidity
- ❖ only use tiles with alkaline-resistant back-coatings
- ❖ only fit translucent glass tiles in dry areas
- ❖ joint width: At least 3mm up to a maximum of 5 mm
- ❖ installation using the combined method
- ❖ observing tile manufacturer's instructions in particular

When laying glass tiles the mixing water of MULTISTONE® must be made up to 1/3 of BOTAMENT® D 10 bonding emulsion.

Areas larger than 15 m² or in areas where there are support structures or other material changes in the substrate expansion joints must be installed as well. Substrates such as plasterboard and timber materials are not suitable for receiving glass tiles.

Where tile sizes exceed 30 x 30 cm please contact our department Application Technology.

We recommend MULTIFUGE® Schmal for the grouting.

Important Tips

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

In case of tiling on fresh cement screeds please contact our technical department first of all.

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

Attention: A number of different natural stones are available in the market, which are sometimes sold under identical names. Because of substances specific to a type of stone or based on the substrate, irreversible discolorations or efflorescence may be experienced. Absorbent natural stones may develop water stains or crowning. Some slate types also contain separating substances.

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

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.

MULTISTONE® must only be used for coverings being mechanically stressed by pressures up to 6.0 N/mm².

MULTISTONE® must only be mixed with the additives mentioned in this data sheet.

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-1307. Further technical details can be found in our technical data sheets on our website: www.botament.com.
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