



# Ardaflex Top<sup>2</sup>

HIGHLY FLEXIBLE DUST-REDUCED MULTI-ADHESIVE MORTAR

## TECHNICAL DATA SHEET

### SMART PRODUCT BENEFIT

- Thin-, mid-, and fluidized bed laying, trowelling
- more malleable workability now
- high improved stability
- for underfloor heating
- for fine porcelain stoneware
- fibre-reinforced
- reduced dust

### PRODUCT INFORMATION

After water has been added, Ardaflex Top<sup>2</sup> is ready for use, hydraulically bonding, highly flexible thin-, mid-, and fluidized bed mortar with very good processing characteristics, high initial adhesion, and universal application possibilities.

The cured bonding mortar is permanent moisture-resistant, frost-proof and of high formability.

**Ardaflex Top<sup>2</sup> is approved according to 12004-C2 TE and fulfils the requirements of the directive for flex mortar EN 12002-S1.**

**Ardaflex Top<sup>2</sup>** has a low-chromate content as per regulation (EC) No. 1907/2006.

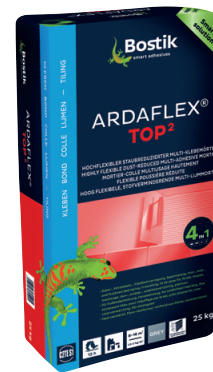
### FIELDS OF APPLICATION

Ardaflex Top<sup>2</sup> is suitable for bonding ceramic wall and floor tiles, also fine porcelain stoneware, glass and porcelain mosaic on indoor and outdoor surfaces, as well as in areas underwater. Also natural and artificial stone tiles can be bonded with Ardaflex Top<sup>2</sup>. We especially recommend the use of Ardaflex Top<sup>2</sup>:

- For laying on substrates with surfaces critical referring to adhesive strength, e.g. on fair-faced concrete, mastic asphalt, existing tile floorings, calcium sulphate bound screeds (anhydrite), as well as on gypsum plaster and gypsum plasterboards;
- on substrates, for which considerable changes of length due to temperature differences are expected, e.g. for screeds with underfloor heating or on surfaces of balconies, terraces and façades;
- On prefabricated concrete parts and cast-in-situ concrete, where drying shrinkage is expected until it is completely dry.

### SURFACE PREPARATION

The substrates must be solid, dry, and free from dirt or separating agents. On highly-absorbent and gypsum-based substrates use the Ardagrip Classic primer. Suitable substrates for Ardaflex Top<sup>2</sup> are, for example: concrete, light-weight concrete and aerated concrete, cement, lime, and gypsum plasters, composite elements with mortar coating, precast concrete wall blocks, gypsum plasterboards, gypsum boards and gypsum fibre boards, cement, mastic asphalt, and calcium sulphate-based floor



screeds, heated screed structures, gypsum-based dry screed plates, and existing tile flooring. Non-absorbent, smooth substrates indoors must be primed with Ardagrip Special or Ardagrip Xpress, and outdoors, with Ardagrip Xpress.

Screed surfaces are to be prepared accordingly; if necessary, first sand them back and remove dust. Drying rate of the screed is expected to be achieved after the respective residual humidity has been reached. This is determined by measurement of humidity using the calcium carbide method (CM)

- at < 0.3% CM; heated calcium sulphate screed (CA)
- at < 0.5% CM; unheated calcium sulphate screed (CA)
- at < 2.0% CM; heated and unheated cement screeds (CEM)

In addition, heated screed structures are to be heated up and cooled down as per good building practice. Wooden substrates (e.g. OSB or chip boards) are not standard substrates for tile coverings. They require special measures. We recommend a system decoupling to the wooden substrate; - Direct bonding to the wood surface of Nibolay Renofleece, decoupling and stress-relieving laying fleece, anhydrous and shear-elastically bonded with Ardaflex Multi (SMP hybrid adhesive). On this decoupling layer, the tile flooring can be laid with Ardaflex Top<sup>2</sup> as usual.

### PREPARATION OF WALL SURFACES

Ardaflex Top<sup>2</sup> can also be used as repair mortar for filling holes, depressions, and cracks, as well as for straightening or levelling wall surfaces up to a layer thickness of 15 mm.

### APPLICATION

Ardaflex Top<sup>2</sup> shall not be applied at temperatures below + 5°C. Arrange edge and expansion joints as well as joints in the ceramic flooring as required.

### MIXING

Ardaflex Top<sup>2</sup> is mixed with tap water in a clean container until it is smooth and lump-free. About 7 litres of water is added to 25 kg of mortar powder in the mixing container. A mortar mixer is recommended for mixing.

After a maturing time of about 3 minutes the mortar is stirred again for a short time and is then immediately workable. The mixed material can be processed for about 3 – 4 hours.

Thin bed consistency: approx. 7 l water: 25 kg Ardaflex Top<sup>2</sup>  
Mid bed consistency: approx. 7 – 8 l water: Ardaflex Top<sup>2</sup>  
Fluidized bed consistency: approx. 10 l water: Ardaflex Top<sup>2</sup>.

### RECOMMENDED NOTCHED TROWELS

Max edge length Notch size mm Designation Approx. consumption kg/m<sup>2</sup>  
Higher temperatures accelerate and lower temperatures delay the curing time.

### PROCESSING

**Thin bed method:** First, a thin contact layer of the adhesive mortar is applied to the substrate using the smooth side of the trowel. Then, additional adhesive mortar is applied on the fresh contact layer using a suitable notched trowel or suitable notch size. Only cover an area of surface with mortar that can be laid with tiles within the workable time. After that, the tiles are to be placed in the applied adhesive bed with slight pushing movements in order to ensure sufficient contact with the substrate; with this the adhesive rib must be broken.

**Fluidized-bed method:** First, the adhesive mortar is poured out section by section and then applied to the substrate as a thin contact layer using the smooth side of the trowel. Then, additional adhesive mortar is applied onto the fresh contact layer using a suitable notched trowel or suitable notch size. Only cover an area of surface with mortar that can be laid with tiles within the workable time. After that, the tiles are to be placed in the fluidized bed with pushing movements in order to ensure sufficient contact with the substrate; the adhesive rib has to be broken.

Laying tiles with largely no hollow spaces requires a sufficient thickness of the fluidized bed using the specified mixing ratio. Use a trowel with suitable notch size for laying tiles with largely no hollow spaces. We recommend removing the first few tiles again after laying and checking the contact side and/or the moistening of the adhesive mortar in terms of all-over contact. If the back of the tiles is not moistened with largely no hollow spaces, use the buttering floating process.

For proper and professional laying of ceramic tile claddings, the applicable building standards as per DIN and the directives issued by the industrial association as well as the general and generally acknowledged rules of technology shall apply.

### HEALTH AND SAFETY AT WORK

It contains cement and reacts alkaline with water. It may irritate the skin and eyes. Please observe the hazard warnings and safety instructions on the containers and in the safety data sheets.

### TOOL CLEANING

Clean tools and affected areas with water immediately after use.

These instructions reflect the extent of our current knowledge and are the result of extensive testing and practical experience. In view of the multiplicity of the possible applications and storage and processing factors over which we have no control, we cannot guarantee good results in each individual case. We recommend you test the product first before final application. Slight discolouration of sealants can occur under UV-radiation. Slight colour differences between the batches are possible through the production process. No liability can be accepted for absolute colour fidelity. Use material of the same charge-number for a building object. Our technical and commercial advisory service will be pleased to answer your queries.

This data sheet supersedes all previous issues.

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### STORAGE

Cool and dry 12 months in original packaging.

### DELIVERY FORM

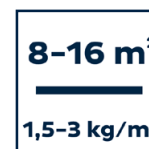
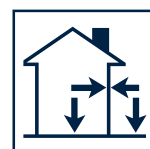
#### Ardaflex Top

Art.-Nr. 30120011 5-kg-Bag, grey

#### Ardaflex Top<sup>2</sup>

Art.-Nr. 3083593825-kg-Bag, grey

TECHNICAL SPECIFICATIONS AND DATA	
Colour	grey
Thickness of adhesive bed	1 – 15 mm
Processing time	about 3 – 4 hours depending on temperature
Dry mortar consumption	1.5 – 3.0 kg/m <sup>2</sup> with rectangular tooth shape 4.5 – 6.0 kg/m <sup>2</sup> with mid-bed tooth shape
Workable time absorbency of the substrate	> 30 minutes, depending on temperature and
Application temperature	+ 5 °C to + 25 °C
Trowelling of wall areas	up to 15 mm
Pointing the substrate	after approx. 12 hours depending on the absorbency of
Can be walked on	after approx. 12 hours
Temperature resistance	up to approx. + 80 °C
Classification DIN EN 12004 – C2 TE 1348	C = cement-based 2 = adhesion > 1.0 N/mm <sup>2</sup> according to DIN EN 1348 T = high stability E = longer workable time (> 30 minutes)
Classification DIN EN 12002 – S1	Directive for flex mortar, Minimum malleability: > 2.5 mm



### BOSTIK HOTLINE

Smart help  
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