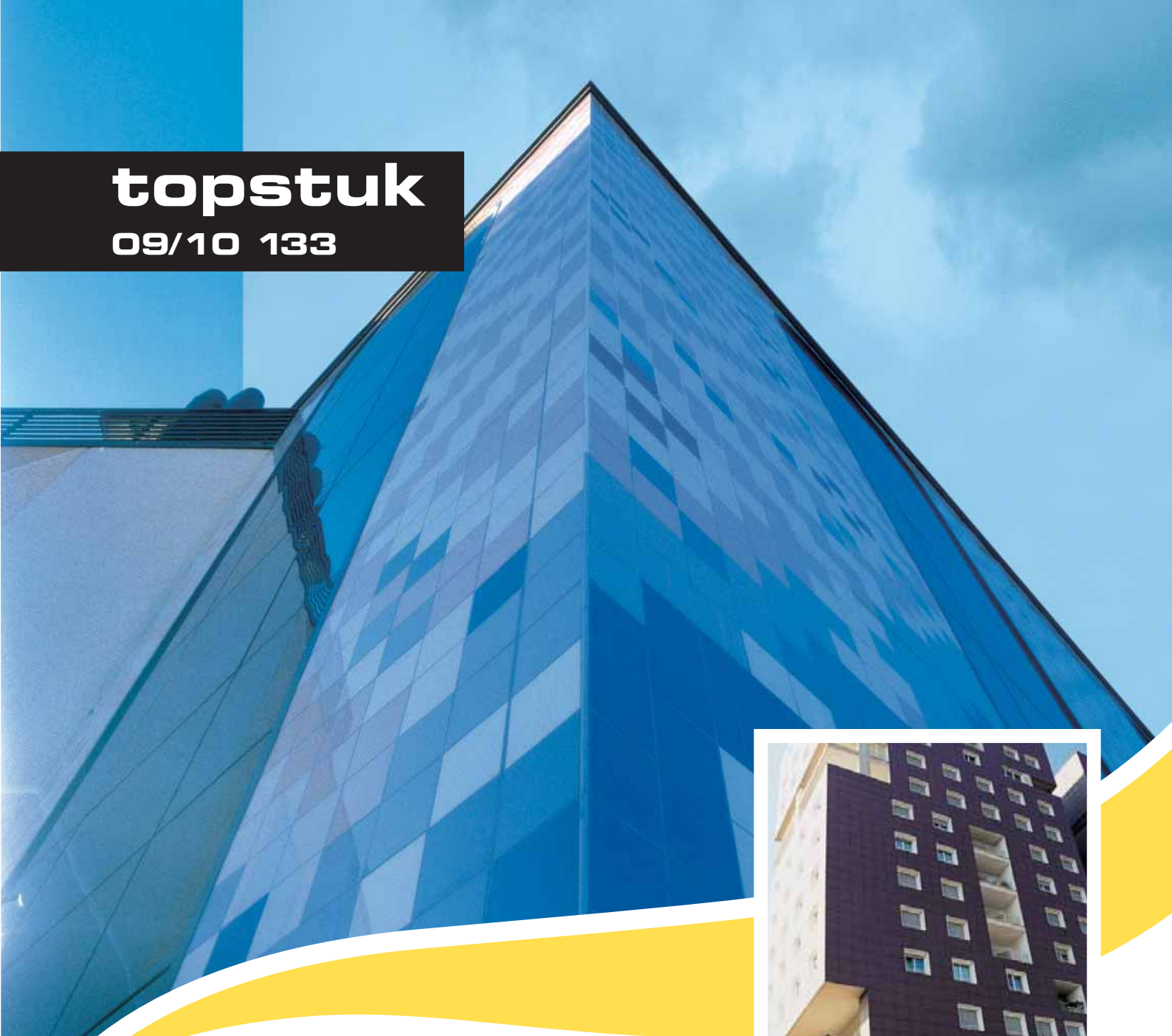


topstuk

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groutings and sealants

TOPSTUK

Cement-based grouting compound containing a high percentage of elastomeric resins, for joints 3 to 15 mm in width. Microshield system provides active protection that helps to prevent the growth of bacteria, fungi and mould, which can cause stains and damage the grouting. Highly sanitizing.





23%



2



5-35°C



2 h



3-15 mm



topstuk



MAIN FEATURES

- | | |
|-------------------------|--------------------|
| Good flexibility | Mould-inhibiting |
| One-pack product | Fungicide |
| Water repellent | Bacteriostatic |
| High degree of hardness | Abrasion resistant |
| UV resistant | |
| Frost proof | |

APPEARANCE

Powder in 2 colours (see color card on www.technokolla.com)

STORAGE

12 months in a dry place

FIELDS OF USE

- Grouting the joints between all types of ceramic tiles, both indoors and outdoors. Ideal for tile laying with joints 3 to 15 mm in width.
- TOPSTUK has been formulated for grouting joints on façades or on outdoor terraces. Thanks to its special formula, which makes it highly flexible, the product provides an optimum resistance to the dimensional variations caused by the thermal shocks to which outdoor ceramic cladding is subjected.

TECHNICAL SPECIFICATIONS OF THE PRODUCT

TOPSTUK mainly consists of high-strength cements, mineral charges, synthetic resins and specific additives. The active protection provided by MICROSHIELD SYSTEM prevents the growth of bacteria, fungi and mould, which can cause stains and damage the grouting.

Moreover, the new COLOR SAVE SYSTEM prevents the colors of the grouting from fading over time, ensuring a colorfast and extremely bright finish. Lastly, thanks to WATER REPELLENT SYSTEM Technokolla's grouting range becomes water repellent and can therefore be used for swimming pools, tanks and so forth without being damaged by the water they contain.

Ask our technical department for the safety brief containing further information.



RECOMMENDED ACCESSORIES



TKW 451
Applicator



TKW 184
Washing trough

LABORATORY TESTS

The laboratory tests performed by Centro Ceramico of Bologna on Technokolla's cement-based grouting compounds with the MICROSIELD SYSTEM active protection additive have established that: the bacterial survival rate is 0, while colonization by mould and fungi is inhibited.

Resistance to fungal growth test in accordance with standard: BS 5980



PHOTO 1

PHOTO 2

Photo 1 shows the sample of a conventional grouting product that has just been inoculated by colonies of mould spores.

Photo 2 shows the same sample after 14 days of incubation, with mould growth index 4 visually detected coverage (31-70%).



PHOTO 3

PHOTO 4

In **photo 3**, a sample of Technokolla's grouting compound with the addition of Microshield system active protection additive has just been inoculated by colonies of mould spores. **Photo 4** shows the same sample after 14 days of incubation where no mould appears to have grown, thus corresponding to mould growth index 0 (no visible growth).

HOW TO PREPARE THE MIXTURE

TOPSTUK should be blended with about 5.75 l. of clean water per 25 kg bag (23%) until a creamy mixture is obtained.

It is vital that the paste be lump-free and uniform in colour. Use perfectly clean tools and a low speed blender (approx. 500 rpm) when preparing the mixture. Small quantities of TOPSTUK can also be mixed by hand but bear in mind that varying amounts of water between one batch and the next can result in joints of slightly different colours.

GROUTING OPERATION

Apply TOPSTUK with a suitable rubber squeegee, and make sure that the joints are filled completely. Wipe off any excess grouting compound with the edge of the applicator. Once the grouting begins to harden, the surface can be wiped clean with a clean, damp sponge. Traces of grouting that remain on the tile surfaces must be removed immediately, as TOPSTUK's high percentage of resin would make them difficult to remove the day after. A whitish layer, that mainly consists of calcium carbonate and is commonly called bloom, sometimes forms on the surface of grouting made with cement-based materials. Bloom is caused by many factors that may interact with each other as the grouting dries. The water used for the mixture is one of these, and becomes a harmful factor if too much is used or when various mixtures are prepared with different amounts of water. The drying time also affects the colour shade to a considerable degree, as it is influenced by the temperature and humidity of the air, and by the residue humidity in the materials

used for laying, such as adhesives or substrates that have not dried completely. Our advice is: dose the water used for the mixture in compliance with the instructions on the pack; avoid making lots of different mixtures; never stop grouting a room halfway and then continue with it the day after; always wait until the substrate and adhesive have completely dried before grouting.

AVAILABLE COLOURS

01 MANHATTAN

03 ASH

| AMOUNT OF grouting compound required g/m ² | | | | | | |
|---|-------------|------|------|------|------|------|
| TILE in cm | joint in mm | | | | | |
| | 3 | 4 | 6 | 8 | 10 | 15 |
| 10x10x0.6 | 540 | 720 | 1100 | 1450 | 1800 | 2700 |
| 7.5x15x0.7 | 630 | 840 | 1300 | 1700 | 2100 | 3200 |
| 15x15x0.9 | 540 | 720 | 110 | 1450 | 1800 | 2700 |
| 20x20x0.9 | 400 | 540 | 800 | 1100 | 1350 | 2000 |
| 12x24x0.9 | | 680 | 1000 | 1350 | 1700 | 2500 |
| 12x24x1.4 | | 1050 | 1600 | 2100 | 2600 | 4000 |
| 20x20x0.9 | 400 | 540 | 800 | 1100 | 1350 | 2000 |
| 20x30x0.9 | 340 | 450 | 680 | 900 | 1200 | 1700 |
| 30x30x1 | 300 | 400 | 600 | 800 | 1000 | 1500 |
| 30x60x1 | 225 | 300 | 450 | 600 | 750 | 1150 |
| 40x40x1 | 225 | 300 | 450 | 600 | 750 | 1150 |
| 50x50x1 | 180 | 240 | 360 | 480 | 600 | 900 |
| 60x120x1.1 | 120 | 165 | 250 | 330 | 410 | 620 |

HOW TO CALCULATE THE AMOUNT REQUIRED

$$A \times B \times \left[\frac{C + D}{C \times D} \right] \times 150 = \frac{g}{m^2}$$

in mm in cm



WARNINGS AND RECOMMENDATIONS

- do not exceed the recommended amount of water in the mixture.
- the mixture must never be fluid
- first perform a cleanability test if a dark colour is used on light polished vitrified stoneware or on natural stone
- if the tiles are very absorbent, it is advisable to wet the surface before grouting
- never interrupt the grouting operations for more than two hours in the same room or area
- do not add anything to the product that is not specified in this brief

| TECHNICAL SPECIFICATIONS | VALUE | REQUISITE | STANDARD |
|--|---------------------------|-------------------------|--------------------------------|
| Aspect | granular powder | | |
| Temperature during application | min. +5°C, max +35°C | | |
| Water used for mixing | 5.75 L. – 25 KG bag (23%) | | |
| Curing time | 3 min | | |
| Pot life | * 2 h | | |
| Thermal resistance | from -30 °C to +80°C | | |
| Abrasion resistance | 750 mm ³ | ≤ 1000 mm ³ | EN 12808-2 |
| Flexural strength after dry storage | 7,05 N/mm ² | ≥ 3,5 N/mm ² | EN 12808-3 |
| Flexural strength after freezing/thawing cycles | 7,1 N/mm ² | ≥ 3,5 N/mm ² | EN 12808-3 |
| Compressive strength after dry storage | 45,0 N/mm ² | ≥ 15 N/mm ² | EN 12808-3 |
| Compressive strength after freezing/thawing cycles | 45,0 N/mm ² | ≥ 15 N/mm ² | EN 12808-3 |
| Shrinkage | 1,7 mm/m | ≤ 2 mm/m | EN 12808-4 |
| Water absorption after 30 min. | 0 gr | ≤ 2 gr | EN 12808-5 |
| Water absorption after 240 min. | 0 gr | ≤ 5 gr | EN 12808-5 |
| Resistance to the growth of bacteria S% (survival) | 0% | | protocol CCB (RP 335/10/S CCB) |
| Degree of mould colonization C% (growth) | no visible growth | | BS 5980 (RP 332/10/S CCB) |

TIME TO WAIT BEFORE GROUTING

| | |
|-----------------------------------|----------|
| Floors with adhesive | *24 h |
| Floors with fast-setting adhesive | *4-6 h |
| Floor fixed with mortar | *8-10 gg |
| Walls with adhesive | *5-6 h |
| Walls with fast-setting adhesive | * 2 h |
| Ready for use | *7 gg |
| Can be walked on | *24 h |

* these times refer to a temperature of 23°C-50% R.H. They are shorter at higher temperatures and longer at lower temperatures.

SPECIFICATION

Ceramic floor and wall tiles should be grouted using a cement-based powder grouting compound such as Technokolla's TOPSTUK, which can be used to fill joints up to 15 mm in width.

Technokolla reminds you to examine the **"notes"** document that completes the information in this data sheet. The document can be downloaded in the pdf format.

The advice about technical matters and applications in the technical data sheets, or given verbally or in writing by our personnel as part of our customer assistance service, are the result of our best and most up to date experience. Since we are unable to personally modify the conditions in the building site or the way the work is carried out, this information is purely indicative and, thus, binds us neither legally nor in any other way in relation to third parties. This information does not relieve the end user from being responsible for testing our products so as to make sure they are fit for the required use. We therefore strongly advise the customer/user to subject Technokolla's products to preventive tests in order to ensure that they are suitable. The end user is also responsible for checking to make sure that this technical data sheet is not obsolete and that more recent editions have not replaced it. Thus, before using our products, you are advised to download the most up to date version of the technical data sheet from our web site www.technokolla.com.