

# technostuk 2-12

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## TECHNOSTUK 2-12

Cementitious grouting compound for 2 to 12 mm gaps.

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.

## groutings and sealants





23%



15



5-35°C



2 h



2-12 mm



with Te-Stuk



# technostuk 2-12



## MAIN FEATURES

Vast range of colours  
 High degree of hardness  
 Water repellent  
 Resistant to UV rays  
 Frost proof

Mould-inhibiting  
 Fungicide  
 Sanitizing  
 Bacteriostatic  
 Abrasion resistant

## ASPECT

Fine powder in 15 colours (see card)

## STORAGE

12 months in a dry place

## FIELDS OF USE

- Grouting all types of ceramic tiles for both interiors and exteriors.
- Grouting natural stone
- Grouting compound for 2 to 12 mm gaps
- Swimming pool grouting
- Fixing on heating floors

## TECHNICAL SPECIFICATIONS OF THE PRODUCT

TECHNOSTUK 2-12 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.



**TCA:**  
 Tile Council of America,  
 Inc.048-01



## RECOMMENDED ACCESSORIES



**TKW 452**  
Applicator



**TKW 481**  
Sponge



**TKW 182**  
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

TECHNOSTUK 2-12 should be blended with 5.75 l. of clean water per 25 kg bag and 1.15 l. of clean water per 5 kg bag (23%) until a creamy mixture is obtained.

It is of vital importance for the paste be lump-free and perfectly uniform in colour. Use perfectly clean tools and a low speed blender (approx. 500 rpm) when preparing the mixture. Small quantities of TECHNOSTUK 2-12 can also be mixed by hand but bear in mind that varying amounts of water between one batch and the next can result in slightly different colour gaps. It is advisable to use TC-STUK instead of water to blend the mixture if the flooring is subjected to intensive traffic, on elastic surfaces or when applying to façades.

### GROUTING OPERATION

Apply TECHNOSTUK 2-12 with a suitable rubber squeegee, and make sure that the gaps are filled completely. Wipe off any excess material with the edge of the applicator. Once the grouting begins to harden, the surface can be wiped clean with a clean, damp sponge. After this operation, the gaps should be homogeneous. Traces of grouting that remain on the tile surfaces can be removed easily the next day using a soft, dry cloth. If TC-STUK is used instead of the water, this operation must be done immediately after the surfaces have been cleaned with a sponge. A whitish layer, that mainly consists of calcium carbonate and is commonly called bloom, sometimes forms on the surface of grouting made with cementitious products. 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 fixing, such as adhesives or substrates that are not yet fully dried. 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

00 WHITE	04 ANTHRACITE	08 BEIGE	12 DARK BROWN
01 MANHATTAN	05 BLACK	09 SAND	16 CARMEL
02 ICE	06 JASMIN	10 BROWN	24 PERGAMON
03 ASH	07 ANEMONE	11 COTTO	

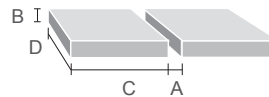
### AMOUNT OF grouting compound required g/m<sup>2</sup>

TILE in cm	JOINT in mm					
	2	3	4	6	8	10
Vitreous mosaic 2x2x0.38	1500					
2x2x0,4	1300					
5x5x0,4	500	770	1000			
10x10x0,6	380	580	770	1150	1550	1900
7,5x15x0,7	450	680	900	1350	1800	2200
15x15x0,9	380	580	770	1150	1550	1900
20x20x0,9	290	430	580	900	1150	1400
12x24x0,9			720	1100	1400	1800
12x24x1,4			1100	1700	2200	2800
20x20x0,9	290	430	580	870	1150	1400
20x30x0,9	240	360	480	720	960	1200
30x30x1	210	320	430	640	850	1100
30x60x1	160	240	320	480	640	800
40x40x1	160	240	320	480	640	800
50x50x1	130	190	260	390	510	640
60x120x1,1	90	130	180	270	350	440

### HOW TO CALCULATE THE AMOUNT REQUIRED

$$A \times B \times \left[ \frac{C+D}{C \times D} \right] \times 160 = \frac{\text{gr}}{\text{m}^2}$$

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 conduct a cleanability test if a dark colour is used on light polished refined porcelain stoneware or on natural stone.
- Do not 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
- It is advisable to use Tc-Stuk in the mixture instead of water for grouting in swimming pools

# technostuk 2-12

TECHNICAL SPECIFICATIONS	VALUE	REQUISITE	STANDARD
Aspect	fine powder		
Temperature during application	min. +5°C, max +35°C		
Water used for mixing	5.75 l. – 25 Kg bag (23%)/1.15 l. – 5 Kg bag (23%)		
Curing time	3 min		
Pot life	*2 h		
Thermal resistance	from -30 °C to +80°C		
Abrasion resistance	800 mm <sup>3</sup>	≤ 1000 mm <sup>3</sup>	EN 12808-2
Flexural strength after dry storage	8,5 N/mm <sup>2</sup>	≥ 3,5 N/mm <sup>2</sup>	EN 12808-3
Flexural strength after freezing/thawing cycles	9,0 N/mm <sup>2</sup>	≥ 3,5 N/mm <sup>2</sup>	EN 12808-3
Compressive strength after dry storage	51,0 N/mm <sup>2</sup>	≥ 15 N/mm <sup>2</sup>	EN 12808-3
Compressive strength after freezing/thawing cycles	52,0 N/mm <sup>2</sup>	≥ 15 N/mm <sup>2</sup>	EN 12808-3
Shrinkage	1,7 mm/m	≤ 2 mm/m	EN 12808-4
Water absorption after 30 min.	0,7 gr	≤ 2 gr	EN 12808-5
Water absorption after 240 min.	1,5 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 cementitious powder grouting compound with the addition of Microshield system, which helps to prevent the growth of bacteria, fungi and mould, such as Technokolla's Technostuk 2-12, which can be used to fill gaps up to 12 mm.

**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.

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