

Shieldfill CG2



**Premium, Cement-based, Tile Grout for Joint Widths' up to 6 mm
(Formerly Shieldgrout CG2)**

Description

Shieldfill CG2 is a high-quality, cement-based tile grout, designed for all types of tiles and natural stone with joint widths of 1 – 6 mm. **Shieldfill CG2** provides a smooth finish and excellent color stability, with mold resistance when used in wet areas, such as toilets and kitchens. It can be used in vertical or horizontal areas (walls and floors) and is available in 33 standard colors.

Uses

- Commercial and public utility buildings.
- Wet areas such as toilets and kitchens, in addition to swimming pools.
- Terraces and balconies.
- Underfloor heating and facades.
- Food packaging areas.
- Interior and exterior applications.
- Suitable for ceramics, porcelains, marble, natural stones, and terrazzo.

Characteristics / Advantages

- Anti-mould with regular maintenance.
- Easy to clean.
- Frost resistant, flexible, durable, and color stable.
- High abrasion resistance and reduced water absorption, with very low shrinkage properties.
- Fast return to service.
- Superior adhesion strength with excellent adhesion to dry and wet surfaces, in addition to good compressive and flexural strength in dry conditions and after freeze/ thaw cycles.
- Water, wind, and moisture resistance over aluminum, wood, PVC frames and windows.
- Alkali resistant.
- Superior performance without the need for the addition of additives.

Standard Compliance

- EN 13888-1 as CG2WA
- ISO 13007-3: 2010 as CG2WA
- GOST R 58271-2018

Typical Properties

Appearance	Fine powder
Bulk Density	1.15 g/ml
Consistency of mixed material	Paste
Mixed Density (@ 23°C)	1.70 ± 0.1 g/ml
Solid Content	100%
Pot Life (@ 23°C)	~ 90 minutes
pH	13
Initial Setting (time for finishing)	15 – 30 minutes
Initial Cure (Light Foot Traffic)	24 hours
Ready for Use	48 – 72 hours 7 days for swimming pools
Full Cure (Full Chemical Exposure)	28 days
Abrasion Resistance (EN 12808-2)	< 800 mm ³
Flexural Strength after Dry Storage (EN 12808-3)	> 4 MPa
Flexural Strength after Freeze/ Thaw (EN 12808-3)	≥ 2.5 MPa
Compressive Strength after Dry Storage (EN 12808-3)	> 20 MPa
Compressive Strength after Freeze/ Thaw (EN 12808-3)	≥ 18 MPa
Shrinkage (EN 12808-4)	≤ 2 mm/m
Water Absorption (EN 12808-5)	< 1 g after 30 and 240 minutes
VOC (ASTM D2369)	< 10 g/L
Temperature Resistance	- 5 to + 80 °C

Packaging

Shieldfill CG2 is supplied in 5 kg buckets and 20 kg plastic bags.

Application Instructions

1. Surface Preparation

Tile edges and joints must be clean from dust, oils, dirt, etc. Do not start grouting unless the tile adhesive has sufficiently been set (after 24 hours at least). Remove any spacers between the tiles and make sure to clean the surface of the tiles from any dust or debris.

For tiles and natural stones that are sensitive to color change, a reference sample should be made to ensure suitability. The application temperature is from 5 to 35 °C.

2. Mixing

Pour into a suitable container 6.0 liters of clean water for each 20 kg bag of **Shieldfill CG2** (1.5 liters for 5 kg buckets or 30% by weight).

Add the **Shieldfill CG2** powder to the water and mix using a low-speed mixing drill (300 – 500 rpm) fitted with a suitable mixing paddle, for 2 – 3 minutes until a smooth, even, lump-free consistency is achieved. Allow the mixed material to stand for 2 – 3 minutes, then re-stir slightly with no extra water to be added to the mix. The mixed material is now ready for use.

3. Application

Shieldfill CG2 should be installed on walls after 8 hours of tile adhesive application, and after 24 hours of tile adhesive application on floors.

Apply the mixed material of **Shieldfill CG2** to joint gaps using a rubber base pointed trowel/ float, or a hard rubber-ended mop diagonally, and press the material firmly into the joints to make sure that joints are filled completely. Wipe away excess grout from the surface of the tiles immediately with a damp sponge.

As the material starts to initially set (15 – 30 minutes), begin the initial cleaning across the tiles using a damp sponge. Any remaining grout traces on the tile surfaces can be easily removed the next day by wiping with a clean, soft dry cloth. Avoid using excess water while cleaning to prevent the grout from washing away from the joints.

The applied grout should not be cleaned using cleaning agents within 5 days of application. Only clean water is allowed during this time.

4. Cleaning

All mixing equipment and application tools should be cleaned immediately with clean water. Hardened material should be mechanically removed.

Consumption

Grout consumption depends on the tile dimensions and joint width. Please refer to the consumption rate table on page no. 3 for details.

Note: The coverages shown are theoretical and may vary due to site wastage and actual joint depth/width.

Shelf Life and Storage

Shieldfill CG2 has a shelf life of 12 months when stored in its original unopened packaging in cool and dry conditions, protected from direct sunlight, heat, and moisture. Shelf life may be reduced if the recommended storage conditions are not followed.

Limitations

- Do not apply the product if the ambient temperature is less than 5°C.
- Certain tile types, such as natural stone, are porous in nature and may discolor after grouting. We recommend that the compatibility of grouting materials with the tiles should always be confirmed with a trial test area.
- Hot weather practices should be adopted during application and curing if the temperature is above 35°C. In hot conditions, store the material in a cool environment prior to mixing and use chilled mixing water.
- Ensure proper mixing and never add an extra amount of water to the mix to avoid weakening the grout, which leads to more shrinkage, and affects the overall durability and adhesion strength.

Technical Support

Refer to technical information, method statement, or contact technical support team for any inquiry.

Consumption Rate

Based on theoretical calculations, actual consumption and coverage may vary due to substrate profile, site conditions, and wastage rate

Tile Dimensions (mm)			Consumption (kg/m ²)					
Length	Width	Thickness	Joint Width (mm)					
			1	2	3	4	5	6
20	20	3	0.53	1.05	1.58	2.10	2.63	3.15
50	50	6	0.42	0.84	1.26	1.68	2.10	2.52
100	100	6	0.21	0.42	0.63	0.84	1.05	1.26
150	150	6	0.14	0.28	0.42	0.56	0.70	0.84
200	200	7	0.12	0.25	0.37	0.49	0.61	0.74
200	300	7	0.10	0.20	0.31	0.41	0.51	0.61
300	300	8	0.09	0.19	0.28	0.37	0.47	0.56
400	400	10	0.09	0.18	0.26	0.35	0.44	0.53
450	450	10	0.08	0.16	0.23	0.31	0.39	0.47
500	500	10	0.07	0.14	0.21	0.28	0.35	0.42
600	600	10	0.06	0.12	0.18	0.23	0.29	0.35