

Shieldfill CG1



General Purpose, Cement-based, Tile Grout for Joint Widths' up to 6 mm
(Formerly Shieldgrout CG1)

Description

Shieldfill CG1 is a general-purpose, cement-based tile grout, designed for all types of tiles and natural stone with joint widths of 1 – 6 mm. **Shieldfill CG1** provides a smooth finish with excellent color stability, it can be used in vertical or horizontal areas and is available in 33 standard colors.

Uses

- Commercial and public utility buildings.
- Internal and external applications.
- Ceramics tiles and natural stones.

Characteristics / Advantages

- Color stable.
- Fast return to service.
- Frost resistant.
- High adhesion strength.
- Available in a wide range of colors.

Standard Compliance

- EN 13888:2009 as CG1
- ISO 13007-3: 2010 as CG1
- GOST R 58271-2018

Shelf Life and Storage

Shieldfill CG1 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.

Typical Properties

Appearance	Fine powder
Mixed Density (@ 23°C)	1.75 ± 0.05 g/ml
Pot Life (@ 23°C)	60 – 90 minutes
Maturing Time	4 – 5 minutes
Initial Cure (Foot Traffic)	24 – 48 hours
Full Cure (Full Chemical Exposure)	28 days
Abrasion Resistance (EN 12808-2)	< 2000 mm ³
Flexural Strength after Dry Storage (EN 12808-3)	> 4 MPa
Flexural Strength after Freeze/ Thaw (EN 12808-3)	> 3 MPa
Compressive Strength after Dry Storage (EN 12808-3)	> 25 MPa
Compressive Strength after Freeze/ Thaw (EN 12808-3)	> 23 MPa
Shrinkage (EN 12808-4)	< 2 mm/m
Water Absorption (EN 12808-5)	< 1 g after 30 minutes < 2 g after 240 minutes

Packaging

Shieldfill CG1 is supplied in 1, 2, 5, and 20 kg packs.

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.

2. Mixing

Pour into a suitable container 6.0 liters of clean water for each 20 kg bag of **Shieldfill CG1** (1.5 liters for 5 kg bags or 0.6 liters for 2 kg bags).

Add the **Shieldfill CG1** 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

Apply the mixed material of **Shieldfill CG1** 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.

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.

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.

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