

DURAFUG® NT

Mastertile® 560 NT

Cement Based Grouting With High Resistance for Surfaces Under Intensive Traffic

Description of Product

DURAFUG® NT is a cement based, easily applied fluent grouting material that is used for the grouting of coatings like ceramics, marble, granite, antacid ceramics and natural stone with high mechanical resistance and that can resist various chemicals.

Complies with TS EN 13888 - CBG2 class

CBG=Cement based grouting, 2=Enhanced grouting materials (fulfilling additional properties)

Fields of Application


- Indoor and outdoor spaces, horizontal applications,
- In filling the grouting holes of coating materials like ceramics, marble, granite, antacid ceramics and natural stone existent on surfaces.

- In terraces and balconies,
- On industrial floors under intensive traffic,
- On surfaces where mechanical or chemical cleaning is performed,
- In ceramics and granite coating grouting of areas like kitchens, washing areas, sale and exhibition halls.
- In vertical applications, the application may be made by using the reduced water proportions in the Mixing Ratios table.

Features and Benefits

- Attains an excellent resistance to mechanical loads with its high technology.
- Reduces dirt penetration to a minimum with its high density structure.
- Resistant to neutral and alkali cleaning substances.

Technical Data

Structure of the material	It contains high technology fillings, synthetic additives and special cement.	
Pressure Resistance	> 50 N/mm ²	
Bending Resistance	> 3,50 N/mm ²	
Contraction Value	< 2 mm/m	
Abrasion Resistance	<1000 mm ³	
Water Absorbption:		
30 minutes	<2gr	
240 minutes	<5 gr	
Application Surface Temperature	+5°C +25°C	
Service Temperature	-20°C +250°C	
Maturation Period	3 - 5 minutes	
Usage Duration	60 minutes	
Regimentation Duration:		
Walking Over Duration	6 hours	
Exposure to Water	24 hours	
Duration for Opening to Traffic	7 days	

All figures are at +23°C with a relative humidity of 50%. High temperatures cause shorter cure times and vice versa.

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- When compared to other cement based interliners, its endurance against acidic cleaners has been increased.
- It can endure +150°C and being cleaned with a water jet with a high pressure of 100 bars.
- It is suitable for grouting hole widths from 3 mm up to 20 mm.
- It solidifies without cracks.
- It is freeze-thaw cycle resistant.
- It has one component. It is easily applied and cleaned like other cement based interliners.

Application Procedure

Preparation of Substrate

Before filling ceramics and tile grouting holes, it must be waited for the used adhesive to achieve sufficient hardness. Just before applying **DURAFUG® NT**, the surface must be cleaned with methods that will not be harmful to the surface and must be dampened with a wet sponge.

Mixing

Pour the amount of water indicated in the Mixing Ratios table into a clean mixing container with the assistance of a measuring cup. Add **DURAFUG® NT** slowly while mixing with a mixer that has a revolving frequency of 400 - 600 rev/min for about 3 - 5 minutes until a homogeneous mixture without pellets is obtained. Set it aside for about 3 - 5 minutes and the material becomes ready to use after it is mixed again for 30 more seconds.

Mixing Ratios

DURAFUG® NT		For 1 kg of Powder	For 20 kg Bag
Mixture Water Amount	Horizontal	Max. 0,17 liter	Max. 3,40 liter
	Vertical	Max. 0,14 liter	Max. 2,80 liter
Mixture Density		~2,22 kg/liter	

Application Method

Spread **DURAFUG® NT** over the ceramics with a rubber trowel and fill the grouting interspaces. Skim the excessive material off the grouting holes diagonally. In deep grouting holes, first wait for the settling of the material and repeat this procedure. Wait until the material can withstand the pressure of a finger and upon cleaning the whole surface with a wet sponge, give the life water that is necessary for the completion of the hydration. Clean the remaining materials on the surface of the ceramics with a wet sponge and give the final shape to the interlines. After the material gets dry (the day after by the latest) , polish up the ceramics with a dry and clean oakum.

Coverage

Ceramic Dimensions	Coverage Table For Cement Based Grouting, Grouting Hole Depth: 8 mm					
	Grouting Widths					
	3 mm (gr/m²)	4 mm (gr/m²)	5 mm (gr/m²)	6 mm (gr/m²)	8 mm (gr/m²)	10 mm (gr/m²)
20 x 20	550	725	900	1100	1450	1800
20 x 25	500	650	850	1000	1350	1650
20 x 30	450	600	750	900	1200	1500
30 x 30	350	500	600	700	850	1200
60 x 60	180	250	300	350	475	600
60 x 120	150	180	225	275	350	450
100 x 100	180	250	300	350	475	600

Coverage Amounts are theoretical. They show powdered product Coverages.

Watchpoints

- **DURAFUG® NT** must be mixed with the assistance of mechanical mixers, it definitely must not be mixed with a trowel.
- Avoid application under excessive heat or wind and/or when the ambient and/or substrate temperature is below +5 or above +25.
- Do not add water and/or new material to a

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DURAFUG® NT mixture which has started getting dry under any circumstances.

- Ceramics with high water absorbing capacity must be saturated with water before the application.
- About 10 - 20 minutes after the application of the material a test must be made by exerting pressure with a finger.
- If no material is getting smudged on the fingers in the finger test, the process of giving life water to the interlines must be started. Thus dust extraction of the interlines, or their getting cracked is prevented and a perfect surface regularity is achieved.
- The surface cleansing procedure must not be carried out by using sawdust.
- **YKS - Epofuga®** must be preferred in areas where more aggressive chemicals are being used.

Cleaning of Tools

Used tools and equipment must be cleaned with water after the application. Once cured, **DURAFUG® NT** can be removed off of a surface only mechanically.

Standard Colors

Bahama Beige	No:2
Gray	No:21

Packaging

20 kg polyethylene reinforced kraft bag.

Storage

Store in an unopened, original container, under dry and cool conditions and protect against frost. For short term storage, do not stack more than 3 palettes on top of each other and dispatch them on a first come - first go basis. Palettes should not be stacked on each other on a long term basis.

Shelf Life

12 months in original unopened packaging if stored in appropriate conditions. Opened Packagings should be consumed in one week.

Health and Safety Precautions

The following protective measures should be taken when working with the material: Wear safety gloves, goggles and protective clothing which comply with the Occupational Health and Safety Rules. Because of the irritation effect of the uncured material, component should not come in contact with the skin or eyes. Under such circumstances, the effected area should be washed with plenty of water and soap. If swallowed, seek medical attention immediately. Do not drink or eat at the application site Keep out of reach of children. Please, refer to the Material Safety Data Sheets for detailed information.

Chemical Resistance Table

Organic Acids		Solvents	
Formic acid	(+)	Acetone	+
Acetic acid	(+)	Butil alcohol	+
Lactic acid	-	Ethanol	+
Oxalic acid	+	Isopropanol	+
Tartaric acid	+	Petroleum ether	+
Sitric acid	(+)	Formaldehyde	+
		Ksilen	+
Alkalis		Other	
Ammonia	+	Petroleum	+
Calcium hydrate solution	+	Enhanced Solution	+
Hypochlorite	+	Glycerin	+
Koltic potassium solution	+	Whey acid	(+)
Kostic soda solution	+	Hydorgen peroxide	+
Oils			
Diesel Oil	+		
Paraffin Oil	+		
Hydraulic Oil	+		
Silicone Oil	+		
Salad Oil	+		
Turpentine Oild	+		
Marks: + Resistant, (+) Limited Resistance, - Not resistant			

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