

TG480

TILE GROUT (EPOXY CARTRIDGE)

LUXURY TILE DECORATION WITH MINIMUM WASTE

PRODUCT DESCRIPTION

OPTIMIX TG480 is an epoxy based highly decorative pointing mortar for interior tile grouting and joint filling. The product is supplied in convenient 2-component pre-packed cartridges with automatic mixing at the nozzle.

The nozzle also allows for precise filling of grout joints and avoids overspill associated with trowel installations, plus the grout remains workable for around 90 minutes while any excess grout can be wiped away with clean water for up to 2 hours after installation.

OPTIMIX TG480 achieves a flexible, hard wearing and waterproof finish suitable for vertical and horizontal tiling and can accept full service within 3 days of installation. It is available in a luxurious range of simple pastel colours plus highly distinctive flecked and metallic options to match any architectural preferences.



TYPICAL USAGE

- For general purpose interior works
- Ideal for post grouting of medium and large format tiles.
- Suitable for use around Wall and Floor Tiles
- Will give excellent results with natural stone, Terrazzo, Reconstituted & Homogeneous tiles
- Ideal for MiC factory and on site works
- Useful in household and places with high cleanliness requirements.

FEATURES AND BENEFITS

- High Hardness and Highly Decorative
- Durable & Easy to Clean Surface Finish
- Consistent Colour, Quality and Performance
- Waterproof and Resistant to Mould Growth
- Simple to use, mess- and waste-free cartridge system
- Suitable for joints widths 1-4 mm
- Low VOC – complies with HKEPD regulation
- Local Production – can contribute to BEAM Plus

TECHNICAL DATA

Mixing

Automatic dosing and mixing cartridge system.

Performance ¹⁾

Product Characteristics ¹⁾	OPTIMIX TG480	Test Method
Tensile Adhesion Strength (MPa)	> 4.0	EN1348:2007 ⁽²⁾
Extent of Mould Growth	No Growth	BS5980

Approximate Curing Times

Hard Surface	3-4 hours
Light Pedestrian Traffic	~ 24 hours
Fully Cure	~ 3 days

Environmental Data

Volatile Organic Compounds (VOC)	≤ 4%
Potential BEAM points	Product is manufactured within 800km of Hong Kong project sites

Packaging and Consumption ³⁾

Packing Size (per double cartridge)	~ 525 g
Wet Density	~ 1,500 kg/m ³
Shelf Life	12 months



Notes

- 1) Typical results achieved in laboratory conditions and for reference only. Actual results on site will vary with ambient, substrate and tile conditions.
- 2) Test method modified for cartridge mixing and installation.
- 3) Approximate figures make no account for wastage of any kind.

Consumption of Double Cartridge ⁴⁾

$$\text{Consumption Calculation (Units)} = \frac{\left\{ 1.5(\text{g/cm}^3) \times \text{Joint Width(mm)} \times \text{Joint Depth(mm)} \times \frac{[(\text{Tile Length(m)} + \text{Tile Width(m)})]}{\text{Tile Length(m)} \times \text{Tile Width(m)}} \right\} \times 1.3 \times \text{Area(m}^2\text{)}}{525 \text{ (g per set)}}$$

Notes

- 4) Please note that this formula is intended as a rough guide, assuming a wastage rate of approximately 30%, and should only be used for estimation purposes. Site practices, site conditions, user techniques including water addition, wastage and other factors outside of Optimix's control will influence the actual consumption achieved.

INSTALLATION GUIDE

(Refer to Method Statement for more details)

SURFACE PREPARATION

Tile surface and joint must be clean and dry, free from loose particles, dust, oil, grease and other contaminants which may affect the bond or the appearance of the material.

Be sure to remove any tile adhesive present at the surface of the joint as this may remain visible after grouting, especially if there is a big contrast in colour between the grout and the adhesive.

Grouting should not be started until the tile fixing has achieved enough strength. Unless a fast set adhesive has been used then a minimum of 24 hours is acceptable.

Joints may be taped with masking tape to assist with post grouting clean up, this may be particularly helpful when grouting porous, textured or otherwise easily stained / hard to clean tiles.

Optimix strongly recommend carrying out installation trials in an inconspicuous area to confirm the best installation / cleaning method and to ensure that results are as expected.

MIXING

Mixing is achieved automatically in the nozzle, simply install the cartridge into the cartridge gun – hand or electric models are available. Break the seal on the epoxy cartridge, install a new mixing nozzle and cut the tip of the nozzle to match the joint being grouted.

It is recommended to eject a small volume of grout, approximately 10-20cm onto a test area to exclude the initial and partially mixed grout, to ensure the grout is mixing properly, to ensure that the nozzle is properly sealed on the cartridges and to assess / adjust the size and shape of the nozzle outlet.

APPLICATION

Apply the **OPTIMIX TG480** directly into the joint. Take care to apply the grout slowly and steadily to fill the joint to its full depth without leaving excess grout at the surface of the joint.

Apply a masking tape on both sides of the tile and the joint, and use a pointing tool to smooth out the surface of the grout. Remove any bubbles, low or high points and to conform with the profile of the tile before tearing off the tape in around 5 minutes.

If you need to pause during application by using the same cartridge, pull back the pressure rod of the cartridge gun and point the nozzle upwards. If the pause exceeds 30 minutes, remove the nozzle, clean the dispensing area on the cartridge, replace the nozzle and resume application.

FINISHING AND CURING

If necessary, use alcohol to clean the adhesive from the tile surfaces around the joint before it cures. Otherwise, use a heat gun to soften and scrape off the adhesive after it has cured.

After being cured at 20-30°C for 24 hours, it can be reopened for light pedestrian traffic. It takes more than 72 hours to fully cure and the curing time is shorter at high temperatures and longer at low temperatures.

Avoid application at temperatures below 5°C. After use, remove the nozzle from the remaining adhesive, seal the cartridge with the cap and store it for future use.

LIMITATIONS

Best suited to joint widths of 1mm and wider. Not suitable for installation outside or in directly sunlit areas (through closed glass windows is acceptable). Epoxy is liable to a degree of yellowing when exposed to UV. Longer exposure and direct strong sunlight will eventually lead to a weakening of the grout surface.

Epoxy bonds strongly to most materials, once the resin is hard it can be extremely difficult to remove from tiles and adjacent surfaces. This will be particularly relevant on textured or porous tiles so installation trials should be carried out to ensure that desired results can be achieved.













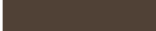

HEALTH AND SAFETY

OPTIMIX TG480 is largely inert once cured but while wet can cause irritations to persons with sensitive skin. Avoid contact with skin and eyes. Wear suitable protective gloves and masks while handling the product. If contact with eyes, rinse immediately with plenty of clean water and seek medical advice.

STORAGE

Store the products in a cool and dry place with the original packing. Protect from direct sunlight, rainfall and exposure to high temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging and reduce shelf life.

COLOUR CHART ⁵⁾⁶⁾

美縫劑色系 Colour Chart			
	A00 純淨白 Pure White		A40 象牙灰 Ivory Grey
	A11 優雅白 Elegant White		A45 亞麻灰 Farrow Grey
	A15 淡米黃 Light Beige		A50 幻影灰 Phantom Grey
	A20 曬沙土 Sandy Brown		A60 銀河灰 Galaxy Grey
	A25 蛋殼黃 Eggshell Yellow		A70 煙燻灰 Dim Grey
	A30 蜜糖啡 Honey Brown		A80 石墨灰 Graphite Grey
	A35 栗子啡 Chestnut Brown		A90 極致黑 Ultimate Black

*Price varies according to the colour.

ALTERNATIVE PRODUCTS

Other similar products in the Optimix range include:

- **TG410E** Tile Grout (High Performance)
- **TA314** Tile Adhesive (2-in-1 Fix and Grout)



Notes:

- The above colours are for general reference only. Final colour might vary because of various factors and conditions, e.g. site conditions, installation skills, tile characteristics, water dosage in mixing, cleaning steps and curing conditions.
- Trial is recommended to verify the application and final colour of the product prior to applying in large scale, especially for stainable tiles and stones.

Important Note: The information contained herein is, the best of our knowledge, true and reliable and is supported by the present state of our knowledge. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives as the conditions of use and any labour involved are beyond our control.



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