

# TileOX™



## हर दीवार और फ्लोर टाइल की मांग

# Tile Adhesives



Weatherproof and highly flexible



Tile-On-Tile Application



Extreme Shear bond strength.



Large Tiles & Natural stones



Extended Open Time



Versalite all-purpose Adhesive



Available in 20Kg.

## Product Description

**TILEOX™ 405 Tile Adhesive** is a highly polymer modified, cement-based all-purpose tile adhesive for highly diversified and versatile usage of large format of ceramic, vitrified tiles, granite, marble & all types of stones on floors and walls on both interior & exterior walls and floors in both dry and wet areas.

## Suitable Areas

### Material:

Large format high porosity ceramic, fully vitrified, mosaic tiles, granite, marble and all types of stones.

### Area of application:

For both floor & walls in internal & external dry and wet areas. Excellent for elevation purposes and exterior requirements.

### Substrate:

Cement based screed, mortar beds, gypsum & cement plaster, insulation panelling systems, fibre slabs, waterproofing products & other cement based concrete surfaces.

### Packing:

20 kg PP Bag with Liner.

## Technical Data:

Conforms to IS 15477:2019- TYPE 4 'T'S1 & EN 12004 'C2TE S1'

## Application Properties

SPECIFICATIONS	RESULTS
Colour	Grey
Form	Powder
Mixing Ratio	4-5Ltr Water per 20kg Bag Adhesive
Bulk Density	1.3-1.5 gm/cc
Mixing Density	1.7-1.9 gm/cc
Open Time (IS 15477:2019)	Approx. 30 minutes
Adjustment Time (IS 15477:2019)	Approx. 30 minutes
Pot Life	Approx. 180 minutes
Setting Time	24 Hours
Allowed Adhesive Thickness	3-15 mm
Time to Light Foot Traffic	16-24 Hours
Ready for use	14 days

\* Properties measured at 70° F (21° C).

## Performance Properties

### AS PER IS 15477:2019 (TYPE 4 'T' S1)

Testing Properties	Requirement	Results	Test Methods (IS 15477:2019)
Tensile Adhesion (Dry Condition 28 Days)	1.50 N/mm <sup>2</sup>	2.50-2.80 N/mm <sup>2</sup>	Annexure A Clause 5.1
Tensile Adhesion (Wet Condition 28 Days)	1.0 N/mm <sup>2</sup>	2.50-2.70 N/mm <sup>2</sup>	Annexure A Clause 5.2
Shear Adhesion (Dry Condition 28 Days)	1.50 N/mm <sup>2</sup>	2.50-2.70 N/mm <sup>2</sup>	Annexure B Clause 5.2
Shear Adhesion (Heat Aging Condition 28 Days)	1.00 N/mm <sup>2</sup>	1.85-2.10 N/mm <sup>2</sup>	Annexure B Clause 5.2
Shear Adhesion (Wet Condition 28 Days)	1.00 N/mm <sup>2</sup>	1.85-2.10 N/mm <sup>2</sup>	Annexure B Clause 5.2
Slip Resistance	< 0.5 mm	0.15-0.20 mm	Annexure E Clause 5.5
Transverse Deformation	>2.5mm to <5mm	2.50-4.00 mm	Annexure F Clause 5.6

### EN 12004

### As per EN 12004 'C2TE S1' / ISO 13007

Testing Properties	Requirement	Results	Test Methods (IS 15477:2019)
E- Extended open time (≥ 30 minutes)	≥ 0.5 N/mm <sup>2</sup>	1.00-1.15 N/mm <sup>2</sup>	EN 1346
T-Slip Resistance	≤ 0.5 mm	0.35-0.50 mm	EN 1308
Transverse Deformation (S1)	≥ 2.5mm - <5mm	2.60-3.00 N/mm <sup>2</sup>	EN 12002
Tensile Adhesion Strength (C2)	≥ 1.0 N/mm <sup>2</sup>	2.50-2.70 N/mm <sup>2</sup>	EN 1348 Clause 8.2
Tensile Adhesion Strength (After Water Immersion)	≥ 1.0 N/mm <sup>2</sup>	1.50-1.60 N/mm <sup>2</sup>	EN 1348 Clause 8.3
Tensile Adhesion Strength (Heat Ageing)	≥ 1.0 N/mm <sup>2</sup>	1.80-2.00 N/mm <sup>2</sup>	EN 1348 Clause 8.4
Tensile Adhesion Strength (Freeze & Thaw)	≥ 1.0 N/mm <sup>2</sup>	1.80-2.00 N/mm <sup>2</sup>	EN 1348 Clause 8.5

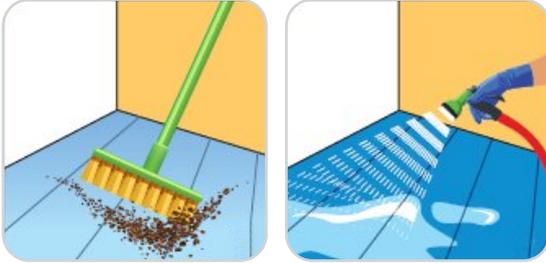
\*Test results are indicative as per testing method specified in standard. Test results may vary as per substrate, site condition & testing machine etc. Actual field performance will depend on installation methods and site conditions.

## Limitations & Precautions:

- It is a ready to use tile adhesive, do not add sand or cement further.
- To avoid lumps, always add powder to water and mix it slowly with low-speed mixer not with hands.
- Surface should be dry, clean and free from all the dirt, oil etc. before application.
- Use of notched trowel is mandatory to achieve required thickness of adhesive.
- Protect it from rainfall and foot traffic for at least 24 hours.
- Designer/Applicator must evaluate the use of an additional mechanical fastening system for extra security for more than 3m height (such as steel hooks fastened to the substrate).
- Don't use on surfaces which are subject to vibrations.
- Use of gloves and goggles is recommended. In case of contact, rinse with clean water.
- Keep out of reach of children.

## Method of Application

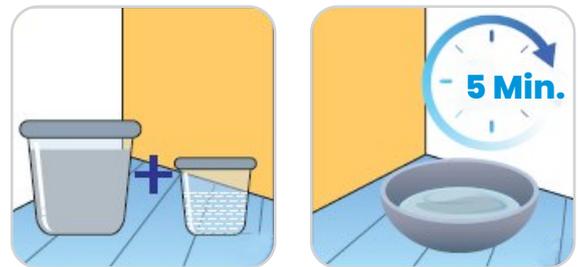
### SURFACE PREPARATION



- Surface should be clean and free from all the dirt, oil, grease, concrete sealer or curing compounds.
- They should be structurally sound, leveled, properly cured, undamaged, rigid, resistant, pre-wet and protected against damp rising.
- Expansion joints to be filled properly with suitable sealants (not with tile adhesive).
- Installation should be done on a dry surface. New Concrete slabs should be damp cured and at least 28 days old prior to application.

### MIXING

- Add 4-5 liters of potable water into a clean mixing bucket/container.
- Then gradually add 20kg Tileox™ 405 slowly in mixing bucket/container (not vice versa) and mix it gradually with slow speed mixer (<500 rpm) to get a uniform, lump-free paste in workable consistency. Add additional water if necessary.
- Allow paste to settle for 5-10 minutes.
- Remix the paste for 15-20 seconds before using and use the mixture within 90-120 minutes.



### APPLICATION

- Apply the mixed material uniformly on the surface with the help of flat side of notched trowel.
- Use proper size of notched trowel to ensure full bedding of tile.
- For larger size tiles with sides > 2 feet, apply mortar on the back of the tile as well with flat sided notched trowel.
- Then press the tile firmly and hammer gently with soft mallet to ensure the perfect bond.
- Check the adhesive ribs periodically and if a skin has formed, removed the dried adhesive and apply fresh adhesive.
- Use Suitable support along with adhesive for fixing tiles on vertical surfaces.
- Clean the surplus adhesive from the joints.
- As required, use tile spacer to provide grout joints between tiles/stones and leave the tile applied untouched for 24 hours.
- Remove the tile spacers after 24 hours when tiles are firmly set.



- Then **Grout with Tileox™ 204** cementitious tile grout and for stain resistance use **Tileox™ 402 Epoxy Tile Grout**.



- Clean any excess adhesive/grout/Epoxy grout with **Tileox™ Tile Cleaner** and then wipe with a damp sponge/cloth.



## Coverage

A coverage of 45-55 Sq.ft per bag of 20Kg is received with a bed thickness of 3mm (using a 6mmx6mm square notched trowel).

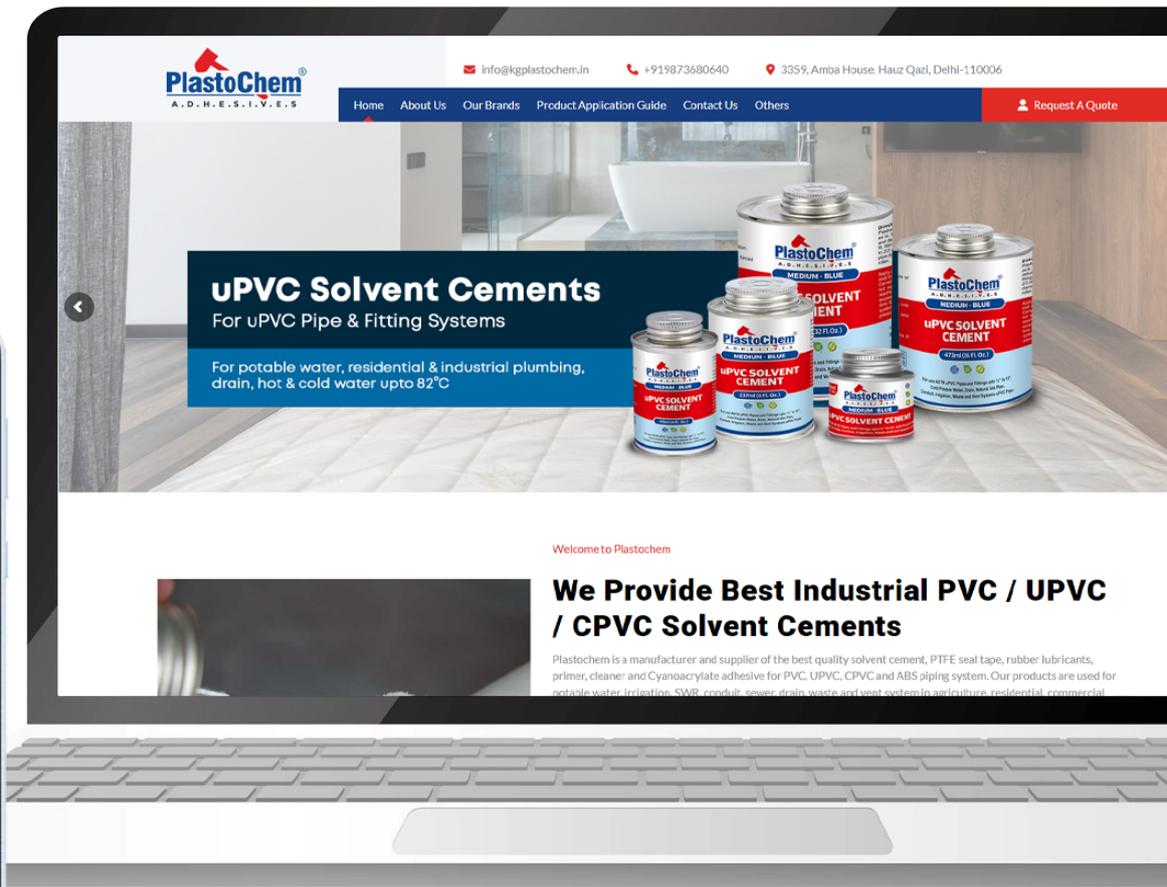
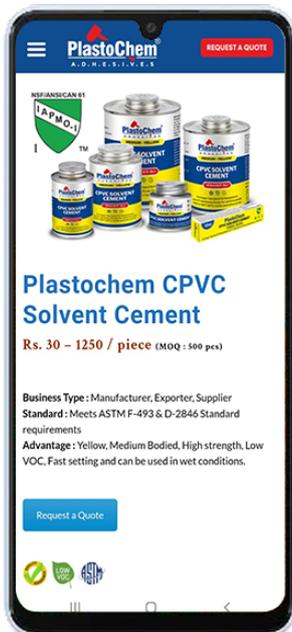
**Note:** Coverage is based on smoothness and evenness of the substrate and the thickness of the mortar.



## Storage & Shelf Life

Store in cool and dry place, preferably away from direct sun light.

**Shelf Life:** 12 Months from the date of manufacturing when stored in originally sealed bag.



Manufacturer:

**KG Plastochem (I) Pvt. Ltd.**

An ISO 9001: 2015 Certified Co.

H.O.: 3359, Amba House, Hauz Qazi, Delhi- 110006

Follow us :

91-11- 49091506, 23271908

info@kgplastochem.in

www.kgplastochem.in