



TWO-COMPONENT EPOXY POLYURETHANE ADHESIVE MODIFIED FOR INSTALLATION OF CERAMIC, MOSAIC AND STONE



PRODUCT DESCRIPTION

DCI PU 1000 is a two-component, PU adhesive with no vertical slip for ceramic tiles and stone material. DCI PU 1000 is a R2T class Reactive (R), improved (2), non-slip (T), adhesive. DCI PU 1000 can be used on walls and floors for thin bed and medium bed installations of tiles and stone material.

FIELD OF APPLICATION

- For interior and exterior use
- For floors and walls
- Suitable for bonding mosaics on swimming pool
- For thin-bed and medium bed installations of all types of tiles
- Suitable for installation of large format tiles
- Suitable for application over waterproofing products like Seal Master, Seal Master Elastic, Aquaprotect, etc.
- For heavy-duty and high traffic areas
- Over the existing wall and floor tiles
- For bonding heavy weight tiles
- For bonding marble and granite

SUITABLE SUBSTRATES

- Concrete
- Cement Mortar
- Cement Mortar Bed
- Cement Plaster/Render
- Cement Block

- CMU
- Gypsum Underlayment
- Gypsum Wallboard
- Liquid waterproofing membranes
- Uncoupling membranes
- Plywood
- Existing tiles
- Cutback adhesive

LIMITATIONS

- Do not mix with other elements.
- Do not apply on metallic or rubber substrate.
- Do not apply on substrate subject to significant movement or vibration.
- Do not apply on not sufficient cured substrate.
- Do not add water or solvent to improve workability
- Do not use in wet substrates

APPLICATION PROCEDURE

a) Preparation of the support

The support must be totally dried, mechanically hard, free of oils, grease, wax, paint, and loose particles. All substrates must not be subject to shrinkage after the installation of the tiles. During the spring and summer period, renders must be cured for at least one week for every centimeter of thickness, and cement screeds must be cured for at least 28 days unless they have been made with DCI special binders

for screeds such as Screed80, Level S10, or with Level S30. Gypsum substrates or anhydrite screeds must be perfectly dry (max. residual moisture 0.5%), sufficiently hard, and free of dust. They must be treated with DCI Grip Primer or Beton Contact, while areas subject to high humidity must be treated with PRIMER CTA. On ferrous surfaces, rust must be removed by sand-blasting. On gypsum, plaster-board and anhydrite surfaces, we recommend consolidating the surface by applying a coat of Epo Primer S or Primer D.

b) Preparing the product

DCI PU 1000 is supplied in two components which are supplied in pre-dosed buckets:

- Component A: 8 parts by weight;
- Component B: 2 parts by weight.

The ratio between the two components is compulsory, and any modification may cause the product to harden incorrectly. Pour the catalyst (part B) into the container with part A and mix well until a smooth paste is obtained. We recommend using a low-speed electric mixer to guarantee perfect bonding, and to avoid overheating of the mix which would reduce working times. Use the mix within 45 minutes of its preparation.

c) Applying the product

DCI PU 1000 is applied with a notched trowel onto the substrate. Choose a trowel that will give coverage to the back of the tiles at least 65-70% for walls or indoor light foot traffic. For heavy traffic, the coverage must be 100%. To obtain good adhesion to the substrate, the following system is recommended: first, apply a thin coat of DCI PU 1000 using the smooth side of the trowel and immediately after applying the desired thickness of DCI PU 1000 using the toothed side of the trowel.

d) Installing the tiles

It is unnecessary to wet the tiles before installation; however, the backs are

very dusty, they should be wiped in clean water. The tiles are installed under firm pressure to ensure good contact with the adhesive. DCI PU 1000 open time in normal temperature and humidity is 20-30 minutes. Unfavorable weather conditions (high temperature, strong sun, drying wind) or high absorbent substrate may shorten the open time and, in some cases quite drastically, to just a few minutes. For this reason, there should be continuous controls to see if the adhesive is still fresh to the touch or has formed a surface skin. Should a surface skin have formed, the adhesive should be re-troweling. It is inadvisable to wet the adhesive when it has formed a skin because a non-adhesive film will be formed instead of dissolving the skin. Adjustment of the tiles, if necessary, should be carried out within 60 minutes following installation, after which time adjustment will become problematic. Tiling installed with DCI PU 1000 must not be subject to rain for at least the first 24 hours and must be protected from frost and direct sun for at least 5-7 days after application.

e) Applying the grout

The grout installation can be done after a minimum of 8 hours hardening time at 23°C and 50% relative humidity for walls and after a minimum of 24 hours curing time at 23°C and 50% relative humidity for floors. Conditions may change the setting and curing time significantly.

COVERAGE / CONSUMPTION

- 1,5 kg/m² with a 4 mm notched trowel
- 3 kg/m² with a 8 mm notched trowel
- 3.5 - 4 kg/m² with a 10 mm notched trowel
- 7 - 8 kg/m² with a 20 mm notched trowel

PACKAGING

DCI PU 1000 is supplied in 5 and 15Kg plastic bucket.

SHELF LIFE

Original sealed bags of this product are

guaranteed to be of first quality for 24 months if stored off of the ground in a dry area. High humidity will reduce the shelf life of the bagged product.

SAFETY INSTRUCTION

DCI PU 1000 DCI PU 1000 component A is irritant for the skin and the eyes, both components A and B may cause sensitization in those subjects sensitive to such substances. DCI PU 1000 component B is corrosive and may cause burns. The product contains low molecular weight PU resins that may cause sensitization if cross-contamination occurs with other PU compounds. When applying the product, we recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products. If the product comes into contact with the eyes or skin, wash immediately with plenty of clean water and seek medical attention. DCI PU 1000 component A is also hazardous for aquatic life. Do not dispose of this product in the environment. For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet. **PRODUCT ONLY FOR PROFESSIONAL USE.**

TECHNICAL DATA

Product identity	Comp. A	Comp. B
Consistency:	thick paste	thick paste
Color:	white	beige
Density (Kg/Lt):	1.8	1.2
Dry solids content (%):	100	100
Brookfield viscosity (mPa.s):	800,000 (# F - 5 rpm)	550,000 (# F - 5 rpm)
Classification:	EN 12004 and EN 12002	
Application data (at +23°C and 50% R.H.)		
Mix ratio:	component A : component B = 80 : 20	
Brookfield viscosity of mix (mPa.s):	1,000,000 (# F - 2.5 rpm)	
Density of the mix (kg/Lt):	1,45	
Pot life of mix:	45 minutes	
Application temperature range:	from +10°C to +30°C	
Open time (according to EN 1346):	60 minutes	
Adjustment time:	120 minutes	
Set to light foot traffic:	after 10-12 hours	
Ready for use:	after 2 days	
Final performances		
Adhesion strength according to EN 1348 (N/mm²)		
– Initial adhesion strength (after 28 days):	6.4	
– Adhesion strength after heat:	5.8	
– Adhesion strength after water immersion:	6.7	
– Adhesion strength after freeze-thaw cycles:	6.7	
Temperature resistance after final cure:	from -30°C to +90°C	

WARNING

Danger. Contains Portland Cement: Chromium VI < 2 ppm within the validity period of the product. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF IN CONTACT WITH YOUR SKIN: Wash with plenty of water/... P305 + P351 + P338 IF IN CONTACT WITH YOUR EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor/...



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