

# DRACOFLEX TR

## TWO-COMPONENT FLUID POLYURETHANE MORTAR FOR TRAM AND METRO BUS RAIL ANCHORING

*Ideal for "unconventional" anchoring of above ground tracks*

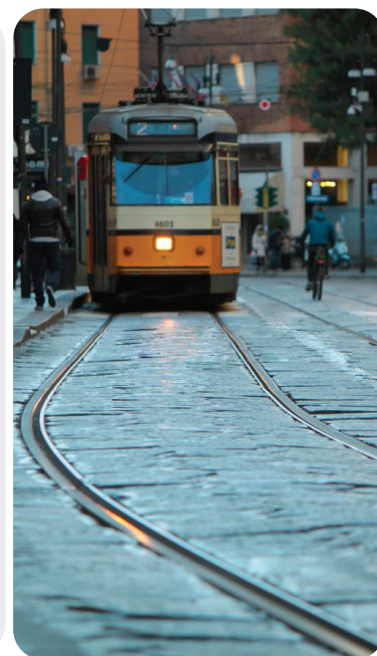


**DRACOFLEX TR** is a two-component fluid mortar made of polyurethane resins, special admixtures and selected aggregates of various particle size for fixing and anchoring "unconventional" tracks and elements exposed to stresses and dynamic loads. **DRACOFLEX TR** provides dielectric, vibration and noise-reduction properties.

### ADVANTAGES

**DRACOFLEX TR** is a two-component polyurethane resin-based mortar for "unconventional" anchoring of tracks. The product has the following characteristics:

- ✓ **HIGH BOND STRENGTH:** **DRACOFLEX TR** is shrinkage-free and specifically formulated to ensure strong bonding to the substrate.
- ✓ **SOUND-ABSORBING:** **DRACOFLEX TR** has high sound-absorbing properties.
- ✓ **EXCELLENT CHEMICAL RESISTANCE:** **DRACOFLEX TR** is resistant to industrial environments, elements and aggressive chemicals.
- ✓ **VIBRATION-DAMPING:** when subjected to impulsive loads, **DRACOFLEX TR** has an excellent ability to absorb energy elastically.
- ✓ **STRENGTH AND DURABILITY:** **DRACOFLEX TR** has excellent mechanical strength and is resistant to friction and abrasion; it is ideal for precision anchoring of elements exposed to stresses and impacts, while ensuring low maintenance costs.
- ✓ **EASY TO APPLY:** **DRACOFLEX TR** can be poured on the substrate; it has good workability (60 minutes) and strength.



### USES

**DRACOFLEX TR** is used for:

- ✓ "unconventional" fixing and anchoring of tram and metro bus tracks

### SUBSTRATE PREPARATION

Prior to application, **clean the surface and remove any oil, dust and loose material which could interfere with adhesion**. Clean the metal parts by sandblasting or brushing. The surfaces must be dry; remove any water on the surface and dry off any damp areas. Before applying the resin, make sure that the tracks have been properly fixed.

**PRIMER APPLICATION** - Primer application is required to guarantee proper bonding of **DRACOFLEX TR** resin-based mortar to the surface. Apply by brush approx. 350 ÷ 400 g/m<sup>2</sup> of PRIMER ES40 on cured concrete (max moisture content 4.5%).

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## PRODUCT PREPARATION

Separately mix contents of each container before use. Pour component B and component A in a suitable container and mix them using a low-speed mixer for at least 1-2 minutes until a homogeneous mix with no lumps and air bubbles is achieved. Using only part of the components is advised against: an incorrect mix ratio can result in improper curing.

## APPLICATION

- ▶ Immediately after mixing, pour **DRACOFLEX TR** on the substrate which has been previously treated using PRIMER ES 40 as stated in the paragraph above. Wait for the primer to be touch dry, then apply **DRACOFLEX TR**.

## PRECAUTIONS

- ▶ Polymerisation time depends on temperature and humidity conditions; the higher the temperature and relative humidity, the shorter the setting time.
- ▶ Use rubber gloves and safety goggles both during application and when cleaning tools.
- ▶ Do not apply the resin in case of fog or if rain is expected.

## PACKAGING AND STORAGE

**DRACOFLEX TR** is available in:

- metal pails: 10 kg (A) + 1 kg (B) = 11 kg
- metal pails: 5 kg (A) + 0.5 kg (B) = 5.5 kg

If stored properly in original, undamaged packaging in a dry, sheltered place, at a temperature of at least +10°C, the product retains its properties for one year.



## PRODUCT CHARACTERISTICS

APPEARANCE	Paste
COLOUR	Black
DENSITY	1.05 kg/l ± 0.1
PACKAGING	Metal pails: 10 kg (A) + 1 kg (B) = 11 kg Metal pails: 5 kg (A) + 0.5 kg (B) = 5.5 kg

## APPLICATION SPECIFICATIONS

MIX RATIO	A:B=10:1
APPLICATION TEMPERATURE	+5°C to +35°C
WORKABILITY - POT-LIFE (+20°C - 50% R.H.)	approx. 20 minutes

Times vary depending on substrate temperature and ambient temperature and humidity.

Unless otherwise stated, the values given in the table are indicative and calculated at a temperature of 20°C and relative humidity of 50%.

## PERFORMANCE CHARACTERISTICS

BOND STRENGTH TO CONCRETE after 7 days	UNI EN 1542	approx. 1 MPa
	UNI EN 12615	approx. 3 MPa
BOND STRENGTH TO STEEL after 7 days	UNI EN 1542	approx. 1 MPa
	UNI EN 12615	approx. 1 MPa
SHORE A HARDNESS (ASTM D2240)	- after 7 days	approx. 45
	- after 100 hours UV radiation - UNI 7097	approx. 45
	- after 200 hours UV radiation - UNI 7097	approx. 45
	- after 75,000 dynamic fatigue cycles at 1.0 MPa in tension - UNI 6356	approx. 50
COMPRESSIVE MODULUS OF ELASTICITY (ASTM D695)	- after 7 days	approx. 4.2 MPa
	- after 100 hours UV radiation - UNI 7097	approx. 4.4 MPa
	- after 200 hours UV radiation - UNI 7097	approx. 4.7 MPa
	- after 75,000 dynamic fatigue cycles at 1.0 MPa in tension - UNI 6356	approx. 4.4 MPa
LINEAR DEFORMATION UNDER COMPRESSION at 0.6 MPa in tension (ASTM D695)	- after 7 days	approx. 16%
	- after 100 hours UV radiation - UNI 7097	approx. 16%
	- after 200 hours UV radiation - UNI 7097	approx. 16%
	- after 75,000 dynamic fatigue cycles at 1.0 MPa in tension - UNI 6356	approx. 16%
TENSILE MODULUS OF ELASTICITY after 7 days	ASTM D 638	approx. 2.8 MPa
TENSILE STRENGTH after 7 days	ASTM D 638	approx. 1 MPa
ELONGATION AT BREAK after 7 days	ASTM D 638	approx. 85%
TEAR STRENGTH after 7 days	DIN 53515	approx. 7 kN·m <sup>-1</sup>
COEFFICIENT OF THERMAL EXPANSION after 7 days	UNI EN 1770	approx. 174·10 <sup>-6</sup>
DIELECTRIC PROPERTIES	INSTRUCTION FS 44/E	> 30 GΩ (insulating)