# **Talrakpolygrip**<sup>®</sup>

# Prepacked polyester anchor compound



#### Description

Talrakpolygrip® is a fast curing two part resinous prepacked anchor system that needs just mixing of two components together using a mechanical mixer. It produces mixes of consistencies suitable for horizontal, vertical and overhead situation. It provides a very high anchor strength greater than the tensile strength of the dowel material suitable for structural rehabilitation, foundation anchor bolt grouting and fixing of dowel bars directly to the concrete. It is also used to Anchor shear connectors to the concrete in repair projects.

#### **Features & Benefits**

- Fast curing
- Different consistency possible
- Excellent bond strength with most of the construction materials
- Non-corrosive
- High strength
- Vibration resistant
- > Can be placed under water

# **Primary Application**

Talrakpolygrip® is useful in the installation of foundation bolts for fixing steel stanchions to the foundations, dowel bars, anchoring of re-inforcing steel in columns for vertical expansion of buildings, rock anchors, fixing shear connectors in rehabilitation projects, fixing of fan hooks, etc.

# **Technical Properties**

Density of mixed material	1.8 ± 0.2 g/cc
Gel time	30 - 50 minutes
Compressive strength	50 MPa @ 1 hour 70 MPa @ 7 days

# **Design Criteria**

The design of the anchors depend on the strength of concrete to which the anchor has to be installed. The bond length for low strength concrete is larger than that for high strength concrete. The pullout test is recommended before deciding the length of embedment for the given combination of concrete and the anchor bar.

#### **Specification Clause**

The anchoring compound shall be a fast-curing two-part resinous pre-packed material. It provides a very high anchor strength greater than the tensile strength of the dowel material suitable for structural rehabilitation, foundation anchor bolt grouting and fixing of dowel bars directly to the concrete. It is also used to anchor shear connectors to the concrete in repair projects. The compressive strength of the cured material shall not be less than 70 MPa at 7 days.

# **Application Instructions**

### **Surface Preparation**

Optimum performance of Talrakpolygrip® requires rough side dust free holes. Uses of rotary percussive drills with air or water flushing is recommended. Diamond drilled holes should be under-reamed unless necessary safety factors are incorporated. Cast holes should preferably be inverse dovetail configuration. If parallel side holes are cast they should be rough to provide adequate keying. All bars should preferably be de-greased and all flaky rust removed.

#### Mixing

Talrakpolygrip<sup>®</sup> is supplied in two pre-weighed packs which are ready for immediate on-site mixing. Mixing should be carried out using a suitable mechanical mixer. The components should be mixed in a suitable sized mixing vessel. The process of mixing shall be continued until a uniform mix is obtained and should be placed well within the gel time of the grout.

Packs have been designed to produce practical and economic volumes of grout. Do not attempt to mix partial pack components.

# **Application**

The mixed grout should be poured steadily into the prepared holes. The anchor bar is then pressed into the hole to the required depth. Slight agitation of the bar will assist in achieving complete bond. The bar should then be left undisturbed in the required position until the resin is set.

#### Cleaning

Talrakpolygrip\* should be removed from tools and equipment with Talrasol GP immediately after use. Hardened material can only be removed mechanically.

# Estimating Packaging

Talrakpolygrip<sup>®</sup> is supplied in 1 kg combo packs.

#### Consumption

Hole diameter (mm)	Bolt diameter (mm)	Consumption ml/100mm Bond length
16	10	20
25	12	50
32	16	80
38	20	110
40	25	100

These figures allow for a 25% wastage factor.

If the anchor is in very old concrete, masonry or brickwork the wastage factor should be increased.

# Talrakpolygrip<sup>®</sup>



#### Storage

Talrakpolygrip® has a shelf life of 12 months if kept in dry store in original, unopened containers. If stored at high temperature and/or high humidity conditions the shelf life may be reduced.

# Precautions Health & Safety Instructions

Confined areas must be well ventilated and no naked flames allowed. Contact with the skin should be avoided as certain sensitive skins may be affected by contact with the polyester resin. In such cases if contact with the resin occurs, the skin should be washed immediately with soap and water-not solvent. Gloves and barrier creams should be used when handling these products. Eye contamination must be immediately washed with plenty of water and medical treatment sought.

#### Fire

Talrakpolygrip® polyester resin grout resin is flammable. Confined areas must be well ventilated and no naked flames allowed. Do not smoke during use.





Talrak Construction Chemicals Pvt. Ltd.

An ISO 9001:2015 Certified Company

#### Works

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#### Important note:

Talrak products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Talrak endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.

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