TECGRIP V

POLYESTER RESIN ANCHOR GROUT SUMMER-WINTER



Product Code

TGR01s, TGR05s, TGR01w, TGR05w, TGR12s, TGR12w Packaging listed overleaf.

Description

Tecgrip V, part of the Tecgrip range of polyester resin anchor grouts, is used for the fixing of steel bolts and bars into predrilled holes within concrete, rock, brickwork, stonework, masonry or other substrates capable of supporting the required load. Formed anchors are high strength fixings which are resistant to corrosion and may be loaded quickly after installation. Placed anchors are resistant to vibration, do not exert expansive forces and may be designed for under water installation.

Tecgrip V consists of a low viscosity polyester resin plus a catalysed filler. The two components are mixed to produce a filled resin grout, which may be poured or pumped into suitably prepared anchor holes. The mixed grout is coloured dark grey and is used for downward facing holes where the hole diameter is up to 25mm greater than the bolt or bar diameter.

Uses include:

- Base plates.
- Rail tracks.
- Starter bars and dowels.
- · Safety fences and balustrades.
- · Reciprocating machinery.
- · High impact loads.

Specification Outline

Anchor grouting shall be carried out using Tecgrip V as manufactured by Parex Limited. The product must be stored handled and used strictly in accordance with the manufacturer's instructions.

Quality Assurance

Parex Limited has an integrated business management system. This is externally accredited by UK CARES to BS EN ISO 9001:2015, BS EN ISO 14001:2015, BS ISO 45001:2018 and BES 6001.

Typical Anchor Properties @ 20°C

Anchor Strengths

Length of Anchor Bond (mm)	Uniaxial Pull Out Load (tonnes)	
100	3	
200	8	
400	16	
600	24	

Deformed bar to BS 4449 in unreinforced 20N/mm² concrete, holes drilled by rotary percussive method on air flush.

Parameters controlling Uniaxial Pull Out Load: Type and strength of base material Length of resin anchor bond Hole forming or drilling method Type of fixing, bolt or bar

Safety Factors:

Non critical applications: 1.5 minimum Critical applications: 2.0 minimum

Compliance with relevant codes of practice and standards.

Working Time

Winter Grade 8 - 12 minutes

(above 20°C setting will be rapid)

Summer Grade 18 - 22 minutes

(below 10°C setting will be extended)

Compressive strength

Age At Test	2 Hours	1 Day	7 Days
Compressive Strength (N/mm²)	40	80	95

Tensile Strength 17N/mm² @ 7 Days **Compressive Modulus** 16kN/mm² @ 7 Days

Density 1800kg/m³

Standards

Tecgrip V has been tested in accordance with the appropriate parts of BS 6319, BS 5080.

Storage and Shelf Life

Tecgrip Products will have a shelf life of 6 months when kept in dry conditions at a temperature of 5°C to 35°C. Storage at higher temperatures or high humidity may reduce the shelf life.



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Anchor Installation

Holes and Bar Types

Holes should be drilled using rotary percussive drills with air or water flush. The drill bit should be of the integral type with an elliptical head. Holes which are diamond cored should be under-reamed or roughened. Holes which are drilled with a rotary percussive non-flushing drill bit should be cleaned using a steel rotary brush. Loosened dust should be blown out of the hole using compressed air through an extension tube reaching to the bottom of the hole. Cast holes should taper so that the hole diameter is smaller at the mouth than the bottom.

Steel bars used for anchoring should be deformed such as those manufactured to BS 4449. Threaded bars may be used. When using smooth bars an extra safety factor should be incorporated into the anchor design.

Grout and Bar Placing

Place contents of resin can into plastic container or pail. Slowly add catalysed filler whilst mixing. Continue mixing until a uniform colour is achieved. Correct mix proportioning must be used to achieve the designed anchor strength. Pour mixed grout into prepared holes, rodding if necessary to ensure grout flows to the bottom of the hole. Once grout has been placed insert bar into hole and gently twist and press home to the required depth. The bar should be left undisturbed until the grout has hardened.

Equipment should be cleaned with Solvent prior to grout hardening.

For installations under water please consult the Technical Service Department.

Precautions

Temperature in Use

Tecgrip Products may be placed at temperatures between 5°C and 35°C. Use in structural situations at temperatures above 60°C is not recommended. Consult the Technical Service Department for further advice.

Grout Volumes Required

The following table gives typical Tecgrip V grout volumes required for given bolt/bar and hole diameters. The volumes given are in cm³ per 100mm of bond length.

Hole (mm)	Dia Bolt (mm)				
16	10				
20	20	12			
25		35	25		
32			50	30	
40				75	50
48					100

Health and Safety

Tecgrip Polyester Anchor Grouts are resin based. Resins and solvents may cause allergic reactions in some people. Wear gloves, use barrier cream on unprotected skin and wear eye protection when mixing, using and cleaning. Ensure adequate ventilation to prevent inhalation of vapours. If skin contact occurs remove resin immediately with cleansing cream and wash with soap and water. Do not use Solvent. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. If swallowed do not induce vomiting. Seek medical advice.

Full health and safety details are given in Product Safety Data Sheet.

Fire

Tecgrip V Resin and Solvent are flammable. Should fire occur extinguish with CO² or foam.

Packaging And Ordering

Tecgrip V is supplied in the following pack sizes,

Summer and Winter Grades.

1.0 litre pack Summer Grade
1.0 litre pack Winter Grade
2.5 litre pack Summer Grade
2.5 litre pack Winter Grade
11.8 litre pack Summer Grade
11.8 litre pack Winter Grade
2.5 litre pack Winter Grade
3.5 litre pack Winter Grade
3.6 Product Code TGR01s
3.7 Product Code TGR01s
4.7 Product Code TGR01s
5. Product Code TGR01s
6. Product Code TGR01s
7. Product Code TGR01s

5 litre tin: Product Code TM02
1 litre tin: Product Code TM08

For further information and sales, please contact your local Parex office as listed below.

Parex Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Parex Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Parex Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.

