ANCHORSET GREEN 150

Colour	Product Code	Pack Size	Box Qty
Grey	ANCHGREEN150	150ml	10

Product Description

Anchorset is a rapid curing "one shot" two-part chemical anchoring cartridge system based on an unsaturated polyester resin in Styrene. Applied in one single action to produce a cost effective, tough, chemical resistant fixing. Anchorset is ideal for close-to-edge applications (unlike expansion anchors) as no stress is placed on the surrounding substrate. Versatile in use, Anchorset is suitable for fixing wall ties, starter bars, studs, bolts or large screws in a wide range of substrates including brickwork, concrete, masonry, stone and PFA blocks. Hollow base materials can be securely fastened into by using Anchorset in conjunction with a sleeve or sieve.

Surface Preparation

1. Drill hole to the correct diameter and depth (see chart for guide), ideally using a rotary percussion machine. For optimum results the hole must be coarse sided. If the holes are produced by diamond drilling, the surfaces should be thoroughly roughened.
2. Remove all dust and debris from the hole using a hand air pump or a stiff rotary brush.
3. All bars should be clean and free from oil or grease and all flaking rust should be removed.Threaded rod or studs should be chisel-ended to prevent them being unscrewed from the cured resin.

Application

1. Attach the mixing nozzle to the cartridge (*screw down hand tight*).
2. Place cartridge into the Anchorset dispensing gun.
3. Open the cartridge by pressing the green end of the colour coded valve. Gradually pressurise the Cartridge by activating the hand trigger a few times until material passes through the mixing nozzle. Stop pressurising and allow the material to flow until an even colour is obtained (approximately 5-6 inches of extruded material should be adequate).
4. Press the red end to close the valve. Insert the nozzle into the base of the hole. Open valve again by pressing the green end and activate the trigger, withdraw the nozzle slowly as the hole fills.
5. Once the required fill is achieved shut off the valve and wipe off excess material. Insert the fixing slowly with a rotating action to the desired depth. Once all applications have been carried out, release the pressure by pressing the slide release arm on the back of the trigger stop and pulling back the slide rail.

NB Once material has started to extrude through the nozzle over pressurising the system will not increase flow rate, and can cause leakage from the rear of the cartridge.

Specific Data

Compressive Strength (ASTM D695)	63 N/mm²
Flexural Strength (ASTM 790)	20 N/mm²
Elastic Modulus (ASTM D695)	6300 N/mm²
Mixed Density	1.8 g/cm³
Mixing Ratio	10:1 by volume as supplied in cartridge

Performance data for rods in concrete

ANCHOR SIZE (mm)	HOLE DIAMETER (mm)	HOLE DEPTH (mm)	TENSION (kN) (Ultimate pull out)	Tensile Load (kN)	Shear Load (kN)	FIXINGS PER UNIT (Holes filled 2/3 full) 150ml
8	10	80	14.7	4.9	5.8	32
10	12	90	20.5	6.8	9.2	20
12	14	110	34.6	11.5	13.4	12
16	18	125	47.9	16.0	24.9	6
20	22	170	81.4	27.1	39.2	3

Performance data for rods in hollow structures

Sleeve	ANCHOR SIZE (mm)	DRILL DIAMETER (mm)	DRIL DEPTH (mm)	TORQUE MOMENT (N.m)	Perforated brick fcm: 4.50 MPa Tensile (kN)	Perforated brick fcm: 4.50 MPa Shear (kN)	Hollow block of concrete Fcm:6.0 MPa Tensile (kN)	Hollow block of concrete Fcm:6.0 MPa Shear (kN)
16/85	8	17	90	4	0.4	1.1		
16/85	10	17	90	4	0.4	1.1		
16/85	12	17	90	4	0.4	1.1		
16/130	8	17	135	4			0.7	1.5
16/130	10	17	135	4			0.7	1.5
16/130	12	17	135	4			0.7	1.5

Tension Figures quoted are tested in approximately 20/25 N/mm^2 concrete.
The ultimate pull out strength is varied by:

1. The strength of both the substrate and bar/stud
2. The length of the resin bond to bar
3. Hole preparation
4. Anchor separation

Safety factors should be considered depending on the strength and nature of the substrate. Due to the inconsistent nature of hollow blocks and bricks, tension figures may vary. Site testing should be carried out where necessary to establish particular suitability. In order to achieve maximum performance the distance between the centres of the anchors should be a minimum of 2.0 x the embedment depth, and 1.25 x the embedment depth for the minimum distance from edges.

Health & Safety

Consult MSDS for full list of hazards.

Storage

Store in a dry area between 5°C and 25°C. Do not expose to direct sunlight. Storage at higher temperatures will reduce the shelf life.

Shelf Life

12 months from date of manufacture.