

Anchorset®

Heavy duty chemical anchoring system

Factsheet: Anchorset 2209EN

Anchorset is a styrene-free polyester based chemical anchor for durable fixing of bolts, screws and studs in various solid building materials and hollow substrates.



Applications

- Securing bolts, screws and studs in concrete, aerated concrete, solid and hollow bricks (using perforated sleeve)
- For anchoring window frames, fencing, bars, rails, shutters, satellite dishes, machinery, handrails, etc.

Characteristics

- Styrene-free and practically odourless
- System for standard caulking gun
- Easy-flow technique
- Economical system with low losses
- Fast curing system
- Suitable for heavy loads

Specifications

- ETAG 001 part 1 and 5 Certification

Surface Preparation

Drill holes to the correct diameter and depth (see chart for guide), ideally using a pneumatic drill. Better not use diamond drills because of lack of adhesion. For optimum results the hole must be coarse sided. Remove dust and debris from the hole using a hand air pump or a stiff rotary brush. 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

Unscrew the lid and cut off the metal clamp from the bag. Attach the mixing nozzle to the cartridge (screw down hand tight). Place cartridge into the dispensing gun. Gradually pressurise the cartridge by activating the hand trigger a few times until material passes through the mixing nozzle and an even colour is obtained (approximately 5-6 inches of extruded material should be adequate). Once the desired fill is achieved release the pressure by pressing the slide release arm and pulling back the slide rail, wipe off excess material and insert the fixing slowly, with a rotating action, to the desired depth.

Technical data at 20°C and 60%RV

Compressive strength (ASTM D695):	60/70 N/mm ²
Tensile strength 7days (ASTM D638):	11,5-12,2 N/mm ²
Flexural strength 7days (ASTM D790):	28,3 N/mm ²
E-Modulus 7days (ASTM 638):	4500 N/mm ²
Mixed density:	1.8 g/cm ³

Performance data for rods in solid structures

Anchor size / mm	Hole diameter / mm	Hole depth / mm	Min. distance between edge / mm	Min. distance between holes / mm	Ultimate Pullout / kN	Shear Load / kN	Fixings per unit Holes 2/3 filled
8	10	80	120	80	25,6	8,5	68
10	12	90	135	90	31,5	10,5	42
12	14	110	165	110	43,3	14,4	25
16	18	125	190	125	49,7	16,6	13
20	22	170	255	170	86,6	28,9	5
24	26	210	315	210	94,0	31,3	2

Figures quoted are tested in concrete at approx 20/25 N/mm²

Performance data for rods in hollow structures

Sleeve	Anchor size / mm	Drill diameter / mm	Drill Depth / mm	Torque moment / mm	Reforated brick f _{cm} 4.50 MPa Shear / kN	Perforated brick f _{cm} 4.50MPa Shear / kN	ollow block of concrete f _{cm} : 6.0 MPa Tensile / kN	ollow block of concrete f _{cm} : 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

Limitations

- Do not use in non-porous substrates i.e. metal, PVC.
- Do not use on wet surfaces.
- As the manufacturer cannot know all the uses its product may be put to, it is the users responsibility to determine suitability for use. If in doubt, contact technical services department for advice.

Storage and use

Store dry and cool between +5°C and +25°C, in its original sealed packing. Use best before 12 month after production.

Health & Safety

Avoid long lasting contact with skin. In case of contact with the eyes, rinse with plenty of water and consult a doctor. Avoid any contact with food as long as the product is not fully cured. Keep away from children. The product is not hazardous when applied properly and correctly. Material Safety Data Sheets (MSDS) can be obtained upon request.

Transportation classification

No special measures required