



Never compromise on quality!

Published: May 2007

ANCHOR BOND

Resin Mortar Anchoring System

Description

A polyester resin, 2-part, rapid curing, chemical anchoring system. Applied in one single action to produce a cost effective, tough chemical resistant fixing.

Uses

Suitable for setting bolts, studs, wall ties, starter bars or large screws, etc into a wide range of substrates. Compatible with brickwork, concrete, masonry, stone and PFA blocks. Hollow base materials can also be securely fastened using **ANCHOR BOND** in conjunction with a sleeve or sieve.

Ideal for close-to-edge applications (unlike expansion anchors) as no stress is placed on the surrounding substrate.

Preparation

Drill a hole to the correct diameter and depth (see chart over leaf), ideally using a rotary percussion machine. For optimum results the wall sides should be thoroughly roughened. Clean hole and remove all dust and debris using a hand air pump or a stiff rotary brush, if required.

All bars should be clean and free from oil or grease and all flaking rust should be removed. Threaded rods or studs should be chisel ended to prevent them being unscrewed from the cured resin.

Application

Screw the mixing nozzle on to the cartridge (hand tighten). Place the **ANCHOR BOND** cartridge into the dispensing gun. Squeeze the hand trigger a few times until material passes through the mixing nozzle. Allow the material to flow until an even colour is obtained (normally 5-6 inches). Insert the nozzle into the base of the hole and extrude material, half filling the hole with resin. Withdraw the nozzle then insert the fixing into the filled hole, slowly rotating to fully coat the surface. After application release the pressure from the dispensing gun. Remove the used mixing nozzle and wipe away excess material from the end of the cartridge. Once the resin has cured the fixture can be attached to the fixing and fully tightened. Do not over pressurise cartridge otherwise leakage may occur from rear pistons.

Curing

Dependant on temperature. As a guide @ 20°C - Gel Time: 5 minutes.

Full Cure: 2 hours.

Storage Conditions

Store in a dry area between 5°C and 25°C. Keep out of direct sunlight. Storage at higher temperatures will reduce the shelf life.

Shelf Life

Minimum shelf life 12 months.

Disposal of Containers

Do not leave empty containers where residue could be harmful to children, animals or the environment. Replace lids and remove any containers to a central disposal point in accordance with local regulations.

Health & Safety

Contains styrene.

- ◆ Flammable. Do not smoke and do not allow naked flames to come into contact with this material.
- ◆ Avoid breathing vapour. Ensure good ventilation.
- ◆ Avoid eye contact. Irritating to eyes, eye protection should be worn when handling this product. In the event of contact wash with running water for 15 minutes and seek medical attention.
- ◆ Avoid contact with skin. Wear protective overalls and gloves.
- ◆ Thoroughly wash hands with soap and water after use.
- ◆ Avoid breathing vapours.
- ◆ Keep out of reach of children.
- ◆ See separate material safety data sheet for full handling, use and storage.

Specification Summary

MIXING RATIO: 10:1 by volume as supplied in cartridge:

| Temperature (°C) | Temperature (°F) | Gel Time (Mins) | Cure Time (Mins) |
|------------------|------------------|-----------------|------------------|
| 5 | 41 | 12 | 240 |
| 10 | 50 | 9 | 180 |
| 15 | 59 | 6 | 150 |
| 20 | 68 | 5 | 120 |
| 25 | 77 | 3 | 60 |

Cure time quoted is the recommended minimum time before loading!

| | |
|---------------------------------|-----------------------|
| Compressive Strength (ASTM 695) | 48N/mm ² |
| Tensile Strength (ASTM 638) | > 10N/mm ² |
| Flexural Strength (ASTM 790) | 20N/mm ² |
| Elastic Modulus | 4206N/mm ² |
| Flexural Modulus | 3238N/mm ² |
| Mixed Density | 1.65g/cm ³ |

| ANCHOR SIZE (mm) | HOLE DIA (mm) | HOLE DEPTH (mm) | TENSION (kN) (Ultimate pull out) | FIXINGS PER UNIT (Holes filled 2/3 full) | |
|------------------|---------------|-----------------|-------------------------------------|---|-------|
| | | | | 150ml | 380ml |
| 8 | 10 | 80 | 22.56 | 32 | 86 |
| 10 | 12 | 90 | 29.40 | 20 | 53 |
| 12 | 14 | 110 | 31.72 | 12 | 32 |
| 16 | 18 | 125 | 72.45 | 6 | 17 |
| 20 | 22 | 170 | 78.76 | 3 | 8 |
| 24 | 26 | 210 | 106.06 | 1 | 5 |
| 30 | 32 | 280 | 179.54 | - | 2 |

Tension figures quoted are tested independently in accordance with BS 5080 Part 1 in approximately 30N/mm² 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 x the embedment depth, and 1.25 x the embedment depth for the minimum distance from edges.

Container Sizes:

| | EXTRUDER | | |
|--------------|-----------------|---------|--------|
| Code: | BDAB380 | BDAB150 | BDABG3 |
| Size: | 380ml | 150ml | 380ml |

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties rights and, if necessary clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.