



# 6.01 XPERT Anchor Epoxy

## Epoxy Resin Based Anchoring Grout

### PRODUCT DESCRIPTION

XPERT Anchor Epoxy is a high strength epoxy paste for anchoring fixings into concrete and use as a general-purpose adhesive.

### ADVANTAGES

- High strength
- Durability
- Easy application
- Excellent adhesion

### TYPICAL PROPERTIES

CATEGORY	PARAMETERS
Pot Life @ 20°C	35 minutes
Initial Cure@ 20°C	24 hours
Full Cure	7 Days
Color	Grey when mixed

### STORAGE

XPERT Anchor Epoxy is an epoxy-based product which must be stored in the original unopened containers.

### PRECAUTIONS

Where temperatures less than 5°C or greater than 35°C are encountered, contact our Technical Staff for specific advice. XPERT Anchor Epoxy is nontoxic, but it is alkaline in nature. Any contact with eyes or skin should be washed off with soap and clean water. Do NOT use solvent. Protective gloves, goggles and clothing should be worn. Repeated contact with epoxy resins and hardeners can cause sensitization in some people handling this type of product. Where this occurs seek medical advice before continuing use.

### APPLICATION INSTRUCTIONS

**Preparation:** All contacted surfaces must be free of oil, grease or other contamination which may inhibit bond. Any loose concrete should be removed and repaired to provide a solid foundation.

**Mixing:** XPERT Anchor Epoxy is suitable for mixing using a drill and suitable paddle. Add the Hardener to the Base and mix for 3 to 5 minutes. Thoroughly mix the Base (white) and the Hardener (black) together to give an even streak free grey color. Only mix that quantity of material, (usually one kit at a time), that can be used within the setting time.

**Application:** Apply the XPERT Anchor Epoxy by trowel, spatula or gun depending on the application. Where the XPERT Anchor Epoxy is used as an adhesive ensure the components being adhered are firmly held together. Do not attempt to rework or retemper any partially set product. Avoid waste by using all the kit within 15 minutes of mixing.

**Note:** A large volume of epoxy product may exotherm and set prematurely if not used immediately.

**Curing:** XPERT Anchor Epoxy is suitable for light loads after 24 hours. Allow 7 days for full cure.

### TECHNICAL INFORMATION

#### Typical Engineering Data

The following results were developed under laboratory conditions.

Bar	Yield (tons)	Hole Diameter				
		Minimum Hole Depth (mm)				
12	5.2	20	280	250	225	200
16	9.3	20	490	445	400	355
20	14.5	25	615	555	500	440
25	22.5	32	750	675	615	540
32	37.0	38	1035	930	845	745
40	57.8	45	1365	1225	1115	980

#### Compressive Strength:

ASTM C-579 2" (50 mm) cubes @ 70F (21C)

#### Age Strength:

- 1 day 6090 psi (42 N/mm<sup>2</sup>)
- 3 days 10,800 psi (74 N/mm<sup>2</sup>)
- 7 days 13,000 psi (90 N/mm<sup>2</sup>)

#### Creep Data: ASTM C-1181

- 3 days 2.8 x 10<sup>-4</sup> in./in. (2.8 x 10<sup>-4</sup> mm/mm)
- 7 days 2.9 x 10<sup>-4</sup> in./in. (2.9 x 10<sup>-4</sup> mm/mm)
- 28 days 4.0 x 10<sup>-4</sup> in./in. (4.0 x 10<sup>-4</sup> mm/mm)

#### Thermal Expansion: ASTM C-531

- 2.6 x 10<sup>-5</sup> in./in./oF (4.5 x 10<sup>-5</sup> mm/mm/oC)

**Bond to Concrete:** Exceeds tensile and shear strength of concrete.

**Impact Resistance:** Greater than concrete.

**Chemical Resistance:** ASTM D-543, excellent resistance to most chemicals.

**Abrasion Resistance:** Greater than concrete.

#### Flexural Strength: ASTM C-580

- 1 day 3,500 psi (24 N/mm<sup>2</sup>)
- 3 days 3,700 psi (25 N/mm<sup>2</sup>)
- 7 days 3,800 psi (26 N/mm<sup>2</sup>)
- 28 days 4205 psi (29 N/mm<sup>2</sup>)

#### Modulus of Elasticity: ASTM C 580

- 1day 0.95 x 106 psi (6.5 x 103 N/mm<sup>2</sup>)
- 28 days 1.24 x 106 psi (8.5 x 103 N/mm<sup>2</sup>)

#### Tensile Strength: ASTM C 307

- 3 days 2,000 psi (14 N/mm<sup>2</sup>)
- 7 days 2,040 psi (14 N/mm<sup>2</sup>)
- 28 days 2,040 psi (14 N/mm<sup>2</sup>)

**Gel Time:** ASTM D2471@86F (30oC):90 minutes

**Packaging:** XPERT Anchor Epoxy is supplied in pre-weighed 1.5 and 6 liter kits comprising Base and Hardener.

