

# **TITELOCK 200**

### **Fast Setting Anchoring Grout**

### Description

TITELOCK 200 is a high strength, fast curing, corrosion resistant, polyester based anchoring grout. It is composed of two components, pre-packed polyester resin and fillers with special catalyst. The product has been designed to give high tensile strength when cured. TITELOCK 200 is available in two different grades:

**TITELOCK 200-H** is self-levelled for horizontal application

**TITELOCK 200-V** is thixotropic for vertical applications and over heads.

#### Features & Benefits

- > Economical, can be applied easily.
- > Fast curing, early high strength.
- > Dynamic vibration resistance.
- Corrosion resistant.
- > Resistant to chemicals attack.
- > Cure under damp conditions.
- > Resistant to immersion underwater.

#### Uses

**TITELOCK 200** can be used for the fixing of non-expanding anchors in the following:

#### Structural work:

- ✓ Rebar / steel reinforcement anchoring in new and refurbishment works
- ✓ Threaded rods
- ✓ Bolts and special fastening / fixing systems
- ✓ Mechanical and electrical services installation
- ✓ Anchoring of supports for ducting and equipment

#### **Metalwork:**

- ✓ Fixing of handrails, balustrades and supports
- ✓ Fixing of railings
- ✓ Fixing of window and door frames

#### In the following substrates:

- ✓ Concrete
- ✓ Hard natural and reconstituted stone
- ✓ Solid rock
- ✓ Hollow and solid masonry
- ✓ Steel

### **Technical Properties**

Appearance	Resin paste
Color	Grey
Density	1,850-1,950 Kg/m <sup>3</sup>
Gelling time	25-30 minutes @ 25 °C
Compressive Strength	
After 3 hours	75 N/mm <sup>2</sup>
After 24 hours	80 N/mm <sup>2</sup>
After 7 days	90 N/mm <sup>2</sup>
Flexural Strength	23 N/mm <sup>2</sup> @ 7 days
Tensile Strength	12 N/mm <sup>2</sup> @ 7 days
Slant Shear Strength	120 N
Solid Content	100%

All values are subject to 5-10% tolerance

### **Standard Compliance**

BS 6319

# **Application Procedures**

#### **Surface preparation:**

Holes should be drilled using rotary percussive drilling techniques. If diamond drilling is used, holes should be scrabbled. If these precautions are not taken the smooth finish which obtained from diamond drilling can lead to reduce pull-out strengths. Pre-cast holes should be of dovetail configuration and have roughened sides.

After drilling, holes should be brushed and blown out twice, to remove all drilling debris. Bars and bolts should be degreased, and any mill scale or rust should be removed.

Bar reinforcement should be clean and free from rust.

#### **Mixing Instructions:**

**TITELOCK 200** consists of two components, resin and hardener which are supplied pre-weighed in correct proportions.

Mix the two components well, preferably using a mechanical stirrer until a uniform consistency is obtained.



# **Application Instructions:**

The mixed grout should be poured or pumped steadily into the prepared holes well within the gel time. The mix should be injected to the bottom of the hole to avoid air entrapment. The bar or bolt should then be inserted into the hole to the required depth using a twisting motion. This will assist in ensuring a complete bond. The assembled bar should be left undisturbed till the grout hardens.

### Consumption

Table 1: Showing the minimum hole depth of installation for type – 1 bar block.

Concrete strength (N/mm²)			20	30	≥ 40	
Concrete shear	stress (N/mm²)		2.0 2.2 2.5		2.5	
Bar Diameter	Yield	Hole Diameter	Minimum Hole Depth			
(mm)	(Tons)	(mm)	(mm)			
12	5.4	20	270	215	190	
16	9.6	20	470	385	345	
20	14.7	25	590	480	425	
25	27.9	32	720	600	530	
32	37.6	38	1000	830	720	
40	57.5	45	1300	1100	960	

Table 2: Showing the approximate Volume of TITELOCK 200 required (ml) per 100 mm of bond length.

Hole Diameter		Bolt Diameter					
mm	12	16	20	25	32	38	40
20	25						
25	50	40	25				
32	80	70	60	40			
38		100	95	75	45		
45			140	130	100	70	45
50				175	140	100	90
62						260	225

#### **Packaging**

**TITELOCK 200** is available in 1 Liter Two-Component Kits.

### **Storage**

Keep the product in dry and sheltered place at temperature between +5°C to +35°C. In these conditions and in closed original containers, the product will have a shelf life of at least 3 months.

# **Health and Safety**

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor.

For further information or particular use, contact SBI Technical Department.

# **Quality & Care**

All products produced in SBI facilities are manufactured under a management system certified to conform to the requirements of the quality and environmental health & safety standards ISO 9001 & ISO 14001.

**REV 00-6005** 

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