

TITELOCK 400

Pure Epoxy Anchoring Grout in Cartridge

Description

TITELOCK 400 is a two-component, thixotropic, pure epoxy adhesive for use as a high strength, non-shrink anchor grouting material. It is used for anchoring rebars and studs in horizontal and vertical surfaces in rock, concrete, bricks or solid masonry.

TITELOCK 400 is designed for most adhesive, demanding structural applications and rebar connections.

Features & Benefits

- Excellent bond strength with high load resistance.
- Shrinkage free hardening.
- Good resistance to chemicals and vibrations.
- Used in dry and damp concrete.
- Eco-Friendly, low VOC (meet LEED limits).
- High durability and service life.
- Fire resistance.

Uses

TITELOCK 400 can be used for 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	Thixotropic paste
Color	Grey
Density	1,500-1,600 Kg/m ³ approx.
Gel time	20-30 minutes @ 20 °C
Compressive Strength	≥ 55 N/mm ² @ 7 days
Bond Strength	10 MPa @ 14 days
Water Absorption	0.1% @ 24hrs
Linear Coefficient of shrinkage	0.003
VOC content	A+ rating (very low)

All values are subject to 5-10% tolerance

Standard Compliance

ASTM C-881 specification for Type I, II, IV and V, Grade 3, Class B and C

Application Procedures

Surface preparation:

Holes should be drilled using rotary percussive drilling techniques. If diamond drilling is used, holes should be scabbled. 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 400 consists of two components, resin and hardener which are supplied pre-weighed ready to use cartridge.

The cartridge has self-mixing nozzle that will mix the two parts during the application. Remove the threaded cap from cartridge. Tight the mixing nozzle and insert the cartridge into the dispenser gun. Initial trigger pulls of adhesive. Discard the first 10ml of resin before use.

Application Instructions

The mix should be injected to the bottom of the hole to avoid air entrapment. Fill approximately 2/3 of the hole. 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.

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.

Consumption

Material consumption per anchor in ml :

Anchor Ø mm	Drill Ø mm	Drill hole depth in (mm)																	
		80	90	110	120	130	140	160	170	180	200	210	220	240	260	280	300	350	400
		Material consumption in (ml)																	
8	10	3	4	4	5	5	5	6	6	7	7	7	8	8	9	9	10	11	12
10	12	4	5	5	6	6	6	7	8	8	8	8	9	10	10	11	12	14	15
12	14	5	6	6	6	7	7	8	8	9	10	10	11	11	12	13	14	16	18
14	18	9	10	11	14	14	15	18	19	20	22	23	24	26	28	30	32	37	42
16	18	9	10	11	13	14	15	17	18	19	21	22	23	26	28	30	32	36	40
16	20	10	12	12	15	16	17	20	21	22	24	25	26	29	31	33	35	40	46
20	24	12	13	14	15	16	18	22	24	26	28	30	23	36	38	42	48	58	66
20	25	18	19	21	23	24	26	30	31	32	36	38	40	44	46	50	54	64	72
24	26	24	25	28	30	33	35	40	43	45	50	55	58	60	65	70	75	100	125

Packaging

TITELOCK 400 is available in 400ml two-Component cartridge.

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 12 months.

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.

SBI products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. All SBI datasheets are updated on a regular basis. It is the user's responsibility to obtain the recent version.

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