Dura-Coat Strong-Krete 830

Technical Data Sheet

DESCRIPTION AND RECOMMENDED USES: 100% solids, **Dura-Coat Strong-Krete 830** is a three component ambient-temperature curing epoxy coating with quartz(SiO2) reinforcement agregate. It is designed particularly as rebuild and protection for concrete from chemicals and heavy traffic service. **Dura-Coat Strong-Krete 830** is convenient-to-use, non-sagging with excellent high chemical resistance and high mechanical strength.

- ■ It can be easily applied by trowel 240 mils without slump
- ■ Ideally suited for concrete protection for corrosion
- ■ Suitable for and abrasion protection
- ■ Suitable for immersion and non-immersion service.

Application Areas:

✓Secondary containment	✓Sumps	✓Drains	✓Pits
✓Industrial floor	✓Pump base	✓Chemical processing floo	✓Heavy traffic floor
✓Concrete walls	✓Concrete channels		✓Equipment bases

TECHNICAL DATA

Maximum Temperature (Dependent on service)	Wet Service Intermittent Service	50°C 60°C	122°F 140°F
Chemical Resistance	Water Alkalis Inorganic Acids Organic Acids Organic Solvents	Excellent Excellent Good Good Good	
Flexural Strength	(ASTM C 580)	295 kg/cm2 (28.9 MPa)	4,200 psi
Tensile Strength	(ASTM C 307)	200 kg/cm2 (19.6 MPa)	2,850 psi
Compressive Strength	(ASTM C 579)	655 Kg/cm2 (64.2 MPa)	9,320 psi
Flexural Modulus	(ASTM C 580)	9.8 x 10^4 kg/cm2	1.4 x 10^6 psi
Thermal compatibility to concrete	(ASTM C 884)	Pass	
Taber Abrasion CS-10, 1000g, 1000 Cycles	(ASTM D 4060)	65mg	
Pot life		45 MIN / KG at 72ºF	
Vertical SAG Resistance at 21C (70F) and 6mm (240mils)		No sag (With Krete-Seal 800 Primer)	
Coverage	81sf @240mils per kit	7.5m2 @6mm per kit	
Mix Ratio	2:1 by Weight	Base:Activator 1:5 by weight	Resin mix:Quartz
Color	Grey as standard and Red optional.		
Shelf life (unopened containers)	3 Years at 55-95ºF (13-35ºC)		

Application Sheet

Surface Preparation

Proper surface preparation is critically important for the long-term performance of the Dura-Coat Strong-Krete 830. The prepared concrete surface must be structurally sound, free from all contaminants and roughened to an >ICRI CSP 3 profile (similar to #60 grit sandpaper). If using with Dura-Coat Krete-Seal 800, surface may be damp, but not wet i.e. no free-standing water. A vapor barrier (Krete-Seal 800) is required for slab on grade application. If no vapor barrier is present, check for vapor transmission.

Surface Cleaning & Profiling Methods

Hydro-Blasting	Scarifying
Steel Shot-Blasting	Dry Abrasive Blasting

Mixing

To facilitate ease of mixing and application, all material temperatures should be between 21°-32°C (70°-90°F) prior to mixing.
Strong-Krete 830 should be applied shortly after application of Krete-Seal 800 primer. The primer must still be tacky prior to applying Strong-Krete 830; otherwise the area must be reprised. This is optimally within 2 hours of application, depending on ambient conditions. Premix the Base to disperse pigments. Thoroughly mix Base and Activator in a suitable pail, using a slow speed mixer.
Next, transfer the blended resins to an epoxy mortar mixer containing one bag of Quartz and gradually add in remaining bags. Total mixing time should be a minimum of 3 minutes or until uniformly blended.

Application

The mixed Strong-Krete 830 may be distributed on the floor surface using screed guides and rigid bar, or screed box, not exceeding 1.2 m (3.93 ft) wide.

- Apply a minimum of 6 mm (240 mil) and finish the surface using steel trowels.
- **IMPORTANT**: During application, press Strong-Krete 830 firmly on to the substrate to promote contact with the primer and to ensure thorough compaction. Trowel-finish the surface to a smooth closed surface texture.

Curing Schedule

	16°C (60°F)	25°C (77°F)	32°C (90°F)
Tack Free	4 hrs.	2 hrs.	1 hr.
Light Load	12 hrs.	6 hrs.	3 hrs.
Overcoat End	16 hrs.	10 hrs.	5 hrs.
Full Load	24 hrs.	12 hrs.	6 hrs.
Full Chemical	48 hrs.	24 hrs.	12 hrs.

Clean Up

Use commercial solvents (Acetone, Xylene, Alcohol, Methyl Ethyl Ketone) to clean tools immediately after use. Once cured, the material would have to be abraded off.

Safety

Before using any products, review the appropriate Safety Data Sheet (SDS) or Safety Sheet for your area. Follow standard confined space entry and work procedures, if appropriate.