

## 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(SiO<sub>2</sub>) reinforcement aggregate. 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
- ✓ Industrial floor
- ✓ Concrete walls
- ✓ Sumps
- ✓ Pump base
- ✓ Concrete channels
- ✓ Drains
- ✓ Chemical processing floor
- ✓ Pits
- ✓ Heavy traffic floor
- ✓ 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/cm <sup>2</sup> (28.9 MPa)	4,200 psi
Tensile Strength	(ASTM C 307)	200 kg/cm <sup>2</sup> (19.6 MPa)	2,850 psi
Compressive Strength	(ASTM C 579)	655 Kg/cm <sup>2</sup> (64.2 MPa)	9,320 psi
Flexural Modulus	(ASTM C 580)	9.8 x 10 <sup>4</sup> kg/cm <sup>2</sup>	1.4 x 10 <sup>6</sup> 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 72°F	
Vertical SAG Resistance at 21C (70F) and 6mm (240mils)		No sag (With Krete-Seal 800 Primer)	
Coverage	81sf @240mils per kit	7.5m <sup>2</sup> @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 55-95°F (13-35°C)		

## 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 reprimed. 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.

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