## HS CABLE



A SIKA COMPANY

HS Cable is a neat, high performance, shrinkage-compensated, anchoring grout. It is an unsanded, Portland cement-based, expanding, shrinkage-compensated, anchoring grout containing silica fume and other carefully selected components. HS Cable resists water washout, making it ideal for anchoring cables, tendons or bolts in rock or soil media containing sulphates.

### **FEATURES & BENEFITS**

- · Excellent resistance to sulphate attack
- Cementitious content meets the Type HS requirements of CSA A 3001
- Superior early strength gain, allowing early tensioning of anchors
- Resistant to water wash-out and dilution by water in wet ground conditions
- Excellent pumpability
- Reduced bleeding
- Very low permeability
- All KING products are manufactured using ISO 9001:2015 Certified Processes

#### USES

- For most grouted anchor requirements including, cable bolting , earth tie-backs for excavation or soil stabilization, grouting anchors in tunnel support systems, re-bar grouting and grouting soil or rock tendons for anchoring piles or foundation structures
- Infill of pipe piles
- Structural grout medium for injection-bored micropiles
- Grouting conventionnally bored micropiles
- · Post-grouting of micropile installations

### PROCEDURES

Mixing: Mix HS Cable to the consistency required for placement.

For a 30 KG (66 lb) bag, the recommended volume of water is 9.0 L (2.38 US gallons) to 11.0 L (2.9 US gallons). For a 30 KG (66 lb) bag, a lower water:material ratio (9.0 L, 2.38 US gallons) should be used for pumpable consistencies while a higher water:material ratio (11.0 L, 2.9 US gallons) should be used for flowable consistencies.

HS Cable's thixotropic properties make the grout appear thick and cohesive when it is in fact very pumpable. Introduce potable water into a high shear mixer and then add HS Cable while operating at medium speed. Increase mixer speed and continue mixing at high speed for 2 minutes. Mortar style mixers are not recommended for this purpose. Decrease mixer speed to low and continue mixing while placing the grout. The time between mixing and pumping of the batch should not exceed 15 minutes.

## TECHNICAL DATA

The following data is representative of typical values achievable under laboratory conditions. Results in the field may vary.

MASS DENSITY

**ASTM C 109** 1875 kg/m3 (117 lb/ft3) FLOW **ASTM C 939** 20-30 seconds **COMPRESSIVE STRENGTH ASTM C 109** 1 Day 28 MPa (4060 psi) 40 MPa (5800 psi) 3 Day 7 Day 45 MPa (6525 psi) **28 Day** 60 MPa (8700 psi) **EXPANSION ASTM C 940** 3-6% (Volume unconfined) BLEEDING **ASTM C 940** Nil SEGREGATION Nil CHLORIDE ION PENETRABILITY ASTM C 1202 1500 Coulombs

## **OPTIMUM PERFORMANCE**

Not recommended for areas subjected to extremely high vibrations. Adhere to recommended water additions. Exceeding the recommended water:material ratio will result in reduced compressive strengths and inferior physical properties.

### YIELD

30 KG (66 lb) bag contains approximately 0.020 m<sup>3</sup> (0.7 ft<sup>3</sup>)

### PACKAGING

HS Cable is packaged in 30 KG (66 lb) bags and polywrapped on wooden pallets. All KING products can be custom packaged to suit specific job requirements.

### STORAGE AND SHELF LIFE

Material should be stored in a dry, covered area, protected from the elements. Unopened pails have a shelf life of 12 months.

### SAFETY PROCEDURES

HS Cable contains Portland cement. Normal safety-wear such as rubber gloves, dust mask and safety glasses used to handle conventional cement based products should be worn. Safety Data Sheets are available upon request.

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Warranty: This product is designed to meet the performance specifications outlined in this product data sheet. If the product is used in conditions for which it was not intended, or applied in a manner contrary to the written recommendations contained in the product data sheet, the product may not reach such performance specifications. The foregoing is in lieu of any other warranties, representations or conditions, expressed or implied, including, but not limited to, implied warranties or conditions of merchantable quality or fitness for particular purposes, and those arising by statute or otherwise in law or from a course of dealing or usage of trade. [REV.0004\_2459124.5]

**Oakville Office** 555 Michigan Drive, Suite 100, Oakville, ON L6L 0G4 Montreal Office & Plant 3825 rue Alfred-Laliberté, Boisbriand, QC J7H 1P7 Brantford Office & Plant 541 Oak Park Road, Brantford, ON N3T 5L8 Sudbury Office & Plant 644 Simmons Road, Dowling, ON P0M 1R0