

## **KINGANCHOR**

KingAnchor is a neat, high performance, shrinkage compensated, anchoring grout. It is an unsanded, Portland cement-based, expanding, shrinkage-compensated, anchoring grout containing various additives allowing controlled expansion in both plastic and hardened states. KingAnchor is ideal for anchoring cables, tendons or bolts in rock or soil media.

### **FEATURES & BENEFITS**

- Superior early strength gain allowing early tensioning of anchors
- Excellent pumpability
- Excellent cohesion and plastic stability
- Thixotropic properties reduce material loss in fractured ground
- · Non-corrosive, non-chloride, non-metallic
- Reduced bleeding
- 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.
- Contact your KING Technical Representative for recommendations or information on uses or conditions not listed above.

### **PROCEDURES**

Mixing: For a 30 KG (66 lb) bag, the recommended volume of water is 9.0 L (2.38 US gallons). Use potable water only. Introduce potable water into a high shear mixer and then add KingAnchor while operating at medium speed. Increase mixer speed and continue mixing at high speed for 2 to 3 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 30 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** 2000 kg/m<sup>3</sup> (125 lb/ft<sup>3</sup>)

**FLOW** 

**ASTM C 939** 15-30 seconds

### **COMPRESSIVE STRENGTH**

**ASTM C 109** 

1 Day	25 MPa (3625 psi)
3 Day	45 MPa (6500 psi)
7 Day	50 MPa (7250 psi)
28 Day	60 MPa (8700 psi)

**EXPANSION** 

**ASTM C 940** ≤ 2.0%

**BLEEDING** 

ASTM C 940 Nil

**SEGREGATION** 

Nil

# HARDENED HEIGHT CHANGE

**ASTM C 1090** 

1 Day	0.0%-0.2%
7 Day	0.0%-0.2%
14 Day	0.0%-0.2%
28 Day	0.0%-0.2%

### **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 19.5 L (0.69 ft³) of fluid grout.

### **PACKAGING**

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



## **KINGANCHOR**

### 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**

KingAnchor 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.

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.0001\_2458560.5]