

### TECHNICAL DATA

**DESCRIPTION:** **US Construction Grout PM** is a specifically formulated combination of portland cement, fine sands, admixtures and a dry polymer for added bonding characteristics, durability and freeze-thaw resistance. When mixed properly, **US Construction Grout PM** yields a durable non-shrinking (expansive), non-staining grout. Mix **US Construction Grout PM** to any consistency from plastic to flowable at the jobsite.

**USE ON:** Tunnel cavities, machine plates, anchoring systems and cavity filling

- ADVANTAGES:**
- Excellent compressive and bond strength
  - Low permeability
  - Best bond to concrete substrates
  - Easy placement by hand or pump
  - Expansive
  - Durable
  - Formulated to inhibit alkali silica

	1 DAY	7 DAYS	28 DAYS
<b>Compressive Strength</b> (ASTM C 109 Modified)			
<b>Plastic 128 ounces/80lb bag</b>	3500 psi	8000 psi	10000 psi
<b>Flowable 160 ounces/80 lb bag</b>	2500 psi	6000 psi	8000 psi
<b>Fluid 192 ounces/80 lb bag</b>	1500 psi	4000 psi	6800 psi
<b>Flow @ 160 ounces per bag</b> (ASTM C 1107)	30 seconds		
<b>Chloride Permeability</b> (ASTM C 1202)	940 Coulombs		
<b>Setting Times</b>		<b>Initial</b> 2 hours	<b>Final</b> 2.5 hours
<b>Open Time</b>	35 minutes		
<b>Length Time</b>	+ 1.0% (maximum)		
<b>Density</b>	140 lb/ft <sup>3</sup>		

## TECHNICAL DATA

### MIXING:

For each 80 lb bag of **US Construction Grout PM** add water according to the chart above for desired consistency. In a clean, appropriate, high speed, mechanical mixer add 75% of pre-measured water. With the mixer operating, add the **US Construction Grout PM**. Add remaining water as needed to achieve the desired consistency. Continue to mix until a homogeneous consistency has been achieved. Do not add additional water and do not mix more than six minutes. Material should be continually re-circulated prior to placement to avoid thickening and settlement. Do not over mix. Should small quantities be required, be sure to proportion admixture, water and portland cement accordingly.

### LIMITATIONS:

**US Construction Grout PM** should be used when ambient temperatures are at 40°F (4°C) and rising. Lower temperatures produce a slower set; higher temperatures produce a faster set. For temperatures below 40°F (4°C) consult with the manufacturer for special cold weather placement provisions which include but are not limited to conditioning of the materials, use of heated mix water and thermal protection. In hot weather use chilled water for mixing.

### PACKAGING:

**US Construction Grout PM** is packaged in 80 lb Kraft multi-wall, polyethylene lined bags. Yield when mixed with 160 ounces of water is approximately .63 ft<sup>3</sup>.

### CAUTION:

**WARNING! CONTAINS FREE SILICA & PORTLAND CEMENT. DO NOT BREATHE DUST.** May cause delayed lung injury (silicosis). Follow OSHA safety and health standards for crystalline silica (quartz). Cement powder or freshly mixed concrete grout or mortar may cause skin injury. Avoid contact with skin and wash exposed skin areas promptly with water. If any cement powder or mixture gets into the eyes, rinse immediately and repeatedly with water and get prompt medical attention.