

TECHNICAL DATA

DESCRIPTION: **US Anchor Grout** is a blend of portland cement, polymer modified and a proprietary expanding agent specially formulated to be used for grouting of anchor bolts, rebar, pipe or wooden posts. It has a fluid consistency and sets rapidly. **US Anchor Grout** develops good bond and high strengths. It is free of gypsum or chlorides.

USE ON: Bolts, dowels, guard rails, heavy machinery, pipes in concrete, railings and ornamental iron

- ADVANTAGES:**
- Very fast setting
 - High strength
 - Good bond
 - Excellent freeze thaw resistance
 - Non-shrinking
 - Non-corrosive

	1 HOUR	1 DAY	7 DAYS	28 DAYS
Compressive Strength (ASTM C 109 Modified)	2500 psi (17.1 MPa)	4000 psi (27.4 MPa)	6000 psi (41.1 MPa)	7200 psi (49.3 MPa)
Tensile Strength (ASTM C 307)			350 psi (2.4 MPa)	
Fluid 192 ounces/80 lb bag	1500 psi	6800 psi		
Set Time (ASTM C 191)	initial set will be approximately 15 minutes at 70°F (21°C)			
Expansion (ASTM C 157) (ASTM C 827)	0.35% 0.12%			
Length Change	+ .0025 %			
Yield	55 lb bag = .42 ft ³ Extended with 20 lb gravel = .52 ft ³			
Chloride Permeability	< 1000 Coulombs			

BOLTS AND REBAR: Drill hole into concrete a minimum of 1" larger in diameter than anchor bolt or rebar to be set. Dampen the sides and bottom of the hole, but do not leave standing water. Place bolt or rebar in hole. Support bolt or rebar until grout has taken initial set. Mix grout to pourable consistency and fill hole.

TECHNICAL DATA

WOOD, FIBERGLAS OR STEEL: Dig hole in a minimum of 6" larger in diameter than the post in hole. Support the post and then fill the hole with **US Anchor Grout**. To increase coverage in large holes, 25%, 3/8" pea gravel can be added for each 50 lb bag of **US Anchor Grout**.

SURFACE PREPARATION: Prepare holes based on design requirements. Clean area and remove all unsound concrete and any other foreign materials that will inhibit bond. Soak the hole and remove standing water prior to application. Anchor cement can be used in contact with most materials. Installation subject to corrosive and cathodic environments require a protective coating to the bolts or rails; such as HP Bondit III to components prior to installation.

Bolt Diameter	(3X) Hole Diameter	(8 to 12X) Hole Depth	# of holes per 9 # pail
1/4"	3/4"	2" to 3"	90
1/2"	1 1/2"	4" to 6"	11
3/4"	2 1/4"	6" to 9"	3
1"	3"	8" to 12"	1
1 1/2"	4 1/2"	12" to 18"	1-25 # bags

MIXING: For each 50 lb. bag of **US Anchor Grout** add, not more than, 7.7 quarts of potable water. In a clean, appropriate mechanical mixer add 75% of pre-measured water. With the mixer operating, add the **US Anchor Grout**. 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 3 minutes. Should small quantities be required, be sure to proportion admixture, water and Portland cement accordingly.

ANCHOR CEMENT	WATER
25 lbs	1/2 gallon
50 lbs	1.5 gallon

LIMITATIONS: Store in a cool (Approximately 70°F), dry place. Lowest application temperature: 40°F and rising at the time of application. Materials should be store at a minimum temperature of 50°F. For first 24 hours, protect from freezing. Do not exceed specified water addition.

PACKAGING/ YIELD: **US Anchor Grout** is packaged in 50 lb Kraft multi-wall, polyethylene lined bags. Each 50 lb bag yields approximately .45 ft³ of grouting mortar at a pourable consistency.

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.