

TECHNICAL DATA

DESCRIPTION: **HP Grout 15** is a very fast setting, high early strength, non-shrink grout. Utilizing the latest in fast setting cement chemistry, **HP Grout 15** yields a flowable, non-shrink grout with structural strength less than 3 hours after mixing. Special admixtures give **HP Grout 15** exceptional durability. **HP Grout 15** can be mixed from a dry pack to flowable consistence. For applications over 2 inches, **HP Grout 15** can be extended with gravel.

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

- ADVANTAGES:**
- Very fast setting
 - High early strength
 - Best bond to concrete substrates
 - Excellent compressive and bond strength
 - Expansive
 - Durable
 - Can be extended

	3 HOURS	6 HOURS	1 DAY	7 DAYS	28 DAYS
Compressive Strength (ASTM C 109 Modified)	3200 psi (22.1 MPa)	3500 psi (24.13 MPa)	5100 psi (35.17 MPa)	6800 psi 46.57 (MPa)	7800 psi (53.4 MPa)
Flexural Strength (ASTM C 293)	500 psi (3.4 MPa)	650 psi (4.5 MPa)	900 psi (6.2 MPa)	1000 psi (6.9 MPa)	1200 psi (8.3 MPa)
Fluid 192 ounces/80 lb bag	1500 psi	4000 psi	6800 psi		
Set Times			Initial 15 min	Final 22 min	
Freeze Thaw Resistance (ASTM C 666)	99.2% @ 300 cycles				
Length Change	+ .0025 %				
Yield	55 lb bag = .42 ft ³ Extended with 20 lb gravel = .52 ft ³				
Chloride Permeability	< 1000 Coulombs				

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MIXING:

For each 55 lb bag of **HP Grout 15** add up to 110 to 115 ounces of potable water. In a clean, appropriate, mechanical mixer add 75% of pre-measured water. With the mixer operating, add the **HP Grout 15**. 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 three minutes. Materials 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 mix and water accordingly.

LIMITATIONS:

HP Grout 15 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:

HP Grout 15 is packaged in 55 lb Kraft multi-wall, polyethylene lined bags. Yield when mixed with 110-115 ounces of water is approximately .42 ft³. When extended with 20lb of gravel yield is approximately .52 ft³.

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.