

Material Testing Results

"Equipment for Grouting Since 1969" 805 E. 31st Street, P.O. Box 1140

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Hose (

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Date: NOV 5, 2009

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Fred Goodwin

Manufacturer: BASF - Masterbuilders **Contact:**

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Material: Masterflow 1341 Lot #

Material Application: Universal Post-Tensioning Grout

Mfg. Plant: N/A Std. Bag Weight: 55 #

Testing Conditions: Outside Temperature: 65.5*F Humidity: 33%

Equipment Used: Model: CG400 Pump: 2L4 Progressing Cavity

Mixer: Colloidal Shear Disk Power: Electric/Hydraulic

Std. Mix Ratios: 1.8-2.0 gal per 55 lb bag Water Temp: 61 *F

Batching Method: Quantity Material: 110 lbs. Quantity Water: 30 lbs

Mixing Time: Sampled every 120 Seconds Batch Temp: 61.5-74.5 *F

Specific Gravity: SG = N/A **Flow Cone** Seconds

Pumping Method: Recirculated through hose, recorded pressures at various flow rates.

Flow Rate/Pressure:	Pump Flow Rate Pressure	Mixing Time	Flow Cone
Hose (1" x 50')	1.05 GPM 6 PSI	6 MIN	33.7 SEC
Hose ()	1.81 GPM 9 PSI	8 MIN	27.6 SEC
Hose ()	2.00 GPM 10 PSI	10 MIN	25.2 SEC
Hose ()	2.46 GPM 11 PSI	12 MIN	21.0 SEC
Hose ()	3.15 GPM 12 PSI	14 MIN	15.8 SEC
Hose ()	4.10 GPM 15 PSI		
Hose ()	5.23 GPM 18 PSI		

Observations: Mixed for 14 minutes sampling every 2 minutes. Recorded flow cone times after mixing

For 6 minutes. Took about 45 sec after last bag to take all the material into suspension.

Estimate pumping distance over 250 feet.

19 PSI

5.48 GPM

Results: ChemGrout, Inc. rates the pumpability of this product as a "9" out of 10, with

10 being the easiest. ChemGrout, Inc. recommends the CG050 pump or higher.