ChemGrou

Material Testing Results

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"Equipment for Grouting Since 1969"

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Manufacturer: CTS Cement Mfg. Corp.

> 1731 W. Beecher-Peotone Rd Phone: 800-929-3030 Fax: 708-946-2845

Contact:

Beecher, IL 60401

Material: UltraFlow 4000/8 Lot# N/A

Material Application: Non-Shrink Grout - precision

Mfg. Plant: Blue Island, IL Std. Bag Weight: 55 #

Testing Conditions: Outside Temperature: 72*F % Humidity:

Equipment Used: Model: CG570 2TJ6 Progressing Cavity Pump:

> Mixer: Paddle Power: Hydraulic

Std. Mix Ratios: 72 *F 1 - 55 lb bag to 5.25 qts water Water Temp:

Batching Method: Quantity Material: 165 lbs. Quantity Water: 31 lbs

60 Seconds **Mixing Time: Batch Temp:** 80 *F

Flow Cone **Specific Gravity:** SG = 2.0850 Seconds

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

Flow Rate/Pressure:	Flow Rate	Pressure	Flow Rate	Pressure
Hose (1 1/4" x 25')	2.5 GPM	8 PSI	GPM	PSI
Hose ()	4.3 GPM	14 PSI	GPM	PSI
Hose ()	6.9 GPM	23 PSI	GPM	PSI
Hose ()	8.7 GPM	28 PSI	GPM	PSI
Hose ()	10.8 GPM	34 PSI	GPM	PSI
Hose ()	13.7 GPM	37 PSI	GPM	PSI
Hose ()	15.9 GPM	42 PSI	GPM	PSI
Hose ()	18.3 GPM	46 PSI	GPM	PSI
Hose ()	20.4 GPM	48 PSI	GPM	PSI
Hose ()	22.2 GPM	51 PSI	GPM	PSI

Observations: Mixed easy, pumped with low pressures, light gray color, smooth material

Max hose length: between 100 - 150 feet

Results: ChemGrout, Inc. rates the pumpability of this product as a "8" out of 10, with

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