

Material Testing Results

"Equipment for Grouting Since 1969"

805 E. 31st Street, P.O. Box 1140 **Date**: 10-25-2001

Manufacturer: L & M Construction Chemicals

L & M Construction Chemicals
14851 Calhoun Road
Omaha, NE 68152
Phone:
800-362-3331
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Material: Crystex **Lot** # 0902-1249-08

Material Application: Structural, Fluid, non-shrink cement grout

Mfg. Plant: Omaha, NE Std. Bag Weight: 55 #

Testing Conditions: Outside Temperature: 61.7*F Humidity: 42%

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

Mixer: Paddle Power: Hydraulic

Std. Mix Ratios: 4.375 qts water per 55 lb.bag Water Temp: 62.5 *F

Batching Method: Quantity Material: 165 lbs. Quantity Water: 27.3 lbs

Mixing Time: 20-30 Seconds Batch Temp: 68 *F

Specific Gravity: SG = 2.16 **Flow Cone** 85 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')	1.7 GPM	9 PSI	17.7 GPM	43 PSI
Hose ()	3.2 GPM	14 PSI	19.4 GPM	47 PSI
Hose ()	5.0 GPM	21 PSI	21.0 GPM	55 PSI
Hose ()	6.7 GPM	25 PSI	22.5 GPM	64 PSI
Hose ()	8.0 GPM	29 PSI	GPM	PSI
Hose ()	9.7 GPM	32 PSI	GPM	PSI
Hose ()	11.2 GPM	35 PSI	GPM	PSI
Hose ()	12.8 GPM	36 PSI	GPM	PSI
Hose ()	14.5 GPM	41 PSI	GPM	PSI
Hose ()	16.2 GPM	42 PSI	GPM	PSI

Observations: Mixed very easy, low discharge pressures even at high flow rates

dark, smooth, plastis state in pump hopper

Estimate maximum pumping distance over 150 feet at 20 GPM.

Results: ChemGrout, Inc. rates the pumpability of the product as a "7" out of 10 with

10 being the easiest. We recommend the CG050 pump or higher.