

# ChemGrout®

"Equipment for Grouting Since 1969"

805 E. 31st Street, P.O. Box 1140

LaGrange Park, Illinois 60526

Phone: 708-354-7112 Fax: 708-354-3881

## Material Testing Results

Date: August 10, 2000

E-Mail: info@chemgrout.com

Web Site: www.chemgrout.com

**Manufacturer:** ChemRex- Master Builders, Inc.  
23700 Chargrin Blvd.  
Cleveland, OH 44122

**Contact:** Paul Abrahamson  
**Phone:** 612-496-6078  
**Fax:** 612-496-6078

**Material:** Shotpatch 21

**Lot #** 12/3/99 M166788779

**Material Application:** Sprayable Wet/Dry Shotcrete Structural Repair Mortar

**Mfg. Plant:** Houston, TX

**Std. Bag Weight:** 55 #

**Testing Conditions:** Outside Temperature: 82.5°F

**Humidity:** 61%

**Equipment Used:** Model: CG570  
Mixer: Paddle

**Pump:** 2TJ6 Progressing Cavity  
**Power:** Hydraulic

**Std. Mix Ratios:** 5.83 lbs. water per 55 lb bag

**Water Temp:** 77.5 \*F

**Batching Method:** Quantity Material: 165 lbs.

**Quantity Water:** 16.0 lbs

**Mixing Time:** 50-60 Seconds

**Batch Temp:** 88.1 \*F

**Specific Gravity:** SG = N/A

**Flow Cone** N/A Seconds

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

| <b>Flow Rate/Pressure:</b>      | Flow Rate | Pressure | Flow Rate | Pressure |
|---------------------------------|-----------|----------|-----------|----------|
| Hose (12.5' Long x 1 1/4" I.D.) | 2.53 GPM  | 0 PSI    | GPM       | PSI      |
| Hose ( )                        | 4.73 GPM  | 20 PSI   | GPM       | PSI      |
| Hose ( )                        | 6.99 GPM  | 40 PSI   | GPM       | PSI      |
| Hose ( )                        | 8.49 GPM  | 45 PSI   | GPM       | PSI      |
| Hose ( )                        | 10.75 GPM | 50 PSI   | GPM       | PSI      |
| Hose ( )                        | 12.63 GPM | 60 PSI   | GPM       | PSI      |
| Hose ( )                        | 14.51 GPM | 65 PSI   | GPM       | PSI      |
| Hose ( )                        | 16.45 GPM | 70 PSI   | GPM       | PSI      |
| Hose ( )                        | GPM       | PSI      | GPM       | PSI      |
| Hose ( )                        | GPM       | PSI      | GPM       | PSI      |

**Observations:** Dark Grey color, Gritty looking mix, Large particles 1/8" and larger, very thick very high discharge pressures,  
Estimate maximum pumping distance over 50 feet at 5 GPM

**Results:** ChemGrout, Inc. rates the pumpability of this product as a "5" out of 10, with 10 being the easiest. ChemGrout, Inc. recommends the CG2J6 pump or higher.