



www.multicretesystems.com

# MULTICRETE™ FLASH-SET SHOTCRETE

## TECHNICAL DATA SHEET

For Applications Requiring Rapid Set Times

### DESCRIPTION

Multicrete™ Flash-Set shotcrete is a dry shotcrete based on a modified hydraulic cement for a very rapid set. "Flash-Set" Shotcrete also has greatly enhanced shooting characteristics and physical properties due to specially selected ad-mixtures.

### CAUTION

"Flash-Set" Shotcrete is not intended for use as a structural support lining. Its unique properties make it ideal as a sealing coat to enable additional shotcrete to be applied.

### USES

"Flash-Set" Shotcrete is designed to be used with the Dry Process. It was specifically developed for the following applications:

- Sealing a raveling surface.
- Spraying onto wet areas to contain and direct the water flow.
- Providing "instant" temporary support in wet or unconsolidated ground.

"Flash-Set" Shotcrete may be used in combination with steel fibre reinforcement to enhance load carrying capacity. It can be blended to meet ACI 506 gradation #1 or 2.

### ADVANTAGES

**Instant Set:** "Flash-Set" Shotcrete sets within moments of application to create a sealing membrane and provide limited immediate support.

**Stickiness:** "Flash-Set" Shotcrete has vastly improved cohesion characteristics compared to conventional shotcrete. Rebound is significantly reduced, resulting in lower material usage;

- Rebound is significantly reduced, resulting in lower material usage.
- Sagging and sloughing are eliminated.

**Physical properties:** Silica fume in "Flash-Set" Shotcrete creates a higher strength shotcrete with low permeability and excellent freeze/thaw durability.

**Resistance to water washout:** "Flash-Set" Shotcrete in the plastic state has tremendous resistance to washout by flowing water. This allows it to be applied to moderately wet surfaces.

### PACKAGING

Multicrete™ Flash-Set Shotcrete can be custom blended with or without steel fibre reinforcement. It is normally packaged in bulk bags up to 1680 kg (one cubic yard), with double shrink-wrap on wooden pallets.

### SAFETY PRECAUTIONS

Flash-Set Shotcrete contains Portland cement, silica fume and other carefully selected additives. Normal safety wear such as rubber gloves, dust mask and safety glasses used to handle conventional cement based products should be worn. Material Safety Data Sheets are available on request.

### TECHNICAL DATA

|                            | TEST METHOD              | RESULTS       |
|----------------------------|--------------------------|---------------|
| Compressive Strengths:     | CAN3-A23-14C<br>ASTM C42 | Mpa (PSI)     |
| 2-day:                     |                          | 33 (4757)     |
| 14-day:                    |                          | 54 (7775)     |
| 28-day:                    |                          | 58 (8363)     |
| Boiled Absorption:         | ASTM C842                | 5.0 per cent  |
| Volume of Permeable Voids: | ASTM C842                | 14.0 per cent |
| Rebound:                   | Contractor's Test        |               |

8.0 per cent  
**Vertical**  
<20.0 per cent  
**Overhead**