



1.22 XPERT CRETE POWDER 105

Powder Shotcrete Accelerator Admixture

PRODUCT DESCRIPTION

XPERT CRETE 105-P is a fast accelerator that reduces the set time of shotcrete. Designed for use in dry shotcrete mixes in applications that are subject to freeze/thaw cycles, making it an economical accelerator for warmer climates and also for many underground applications.

FIELDS OF APPLICATION

It is useful for the concrete of:

- Tunnels
- Mines
- Retaining Walls
- Reservoirs
- Water Treatment Plants

BENEFITS

- Speed's strength development
- Allows thicker build per pass
- Does not accelerate corrosion of reinforcing steel.
- Permits rapid sealing of humidity and water inflow from concrete.

PACKAGING

XPERT CRETE 105-P is packaged in (20 kg) bags.

SHELF LIFE

1 year in original, unopened container.

DIRECTIONS FOR USE

Mix XPERT CRETE 105-P with other dry components of the shotcrete mix before introduction to the shotcrete gun. For other than dry shotcrete applications as herein stated, contact your XPERT's representative.

TECHNICAL SERVICE

XPERT offers a comprehensive range of high performance, high quality repair, maintenance and construction products. In addition, XPERT offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the world.

DOSAGE

XPERT CRETE 105-P is normally dosed at a rate of 2% to 10% by weight of cementitious material. For dosages other than specified, trials are necessary.

SPECIFICATION

Performance Data

The following test results were achieved from samples that were sprayed using industry standard equipment in a laboratory environment under controlled conditions. The water addition was set to obtain the consistency normally used in typical shotcrete applications.

Composition of Shotcrete

| MIX | Lbs / Yd3 | Kg/m3 |
|----------------------------|---------------|------------|
| Type 1 (10) Cement | 700 | 424 |
| Silica Fume | 70 | 42 |
| Xpert Crete 105-P | 6 | 306 |
| Agg 1.0-2.5mm | 2920 | 1770 |
| Water | 308 | 187 |
| Results on fresh Shotcrete | Without Admix | With Admix |
| Initial set (Minutes) | 72 | 5 |
| Max build thickness in mm | 4.5 (115) | > 10 (250) |

Typical results on hardened shotcrete

| COMPRESSIVE STRENGTH | PSI | MPA |
|----------------------|------|------|
| 1 Day | 2900 | 20.0 |
| 7 Days | 4525 | 31.2 |
| 28 Days | 6115 | 42.5 |