

## Complex additive for shotcrete mix preparation, applied using dry method

# ShotRock 505CA



#### **KEY BENEFITS**

- Perfectly regulates setting time
- Reduces losses of shotcrete mix
  - Has a long-shelf-life

#### **DESCRIPTION**

ShotRock 505 CA is a highperformance dry complex polymer-mineral fine grained additive that is created for shotcrete mix preparation, applied using the dry method. Change the amount of ShotRock 505 CA CA allows to adjust the setting time, the rebound and thickness in one shotcrete layer pass.

## AREA OF APPLICATION

SShotRock 505 CA should be used for applying concrete mix by dry shotcreting and concrete spraying.

Use of ShotRock 505 CA allows for significant reduction of the concrete mixture setting time, increasing the initial strength of concrete spraying, applying substantially thick layer in a single pass.

ShotRock 505 CA is used in shotcrete preparation for:

- Shotcreting in mining;
- Shotcreting and concrete spraying of cement, bricks, stone and other reinforced and non-reinforced surfaces;
- -Repairing of building constructions

### **Technical Description**

#### **PROPORTIONING**

The average consumption of ShotRock 505 CA ranges from 1,2% to 2,5% of the cement weight. Use of ShotRock 408CA additive allows to reduce the cement dosage in shotcrete mix preparation at 10-12%. The amount of the dosage will depend on the setting time requirements, the rate of gaining early strength and thickness of the shotcrete layer, which must be applied in one pass. It should be noted that the setting time, early strength and, consequently, the dosage of additives will be affected by the ambient temperature and gauged water, as well as the activity of utilised cement. A significant excess of the recommended dosage may lead to lower final strength at the of 28 days age.

#### **SPECIFICATION**

appearance dry fine-drained powder color grey

dense loaded

density  $1200-1300 \text{ kr/m}^3$  water content less than 5%

#### TECHNOLOGY OF APPLICATION

When preparing the shotcrete mix, thorough and uniform mixing of additives must be provided. Use of cement stored for extended period of time may lead to changes in the shotcrete mix's setting time. It is recommended to conduct a pretest to verify setting time and daily strength of those cement types, which are planned to be used in this project.

#### SAFETY

Avoid ShotRock 505 CA contact with your eyes. If contact occurs - rise with large amount of clean running water and immediately seek medical advice. Use rubber gloves and protective goggles during operation.

#### PACKAGE TYPE

Comes in 3-layered paper valve bags with polyethylene liner weighing 25 kg (± 0.5 kg).

#### STORAGE SHELF LIFE

Store ShotRock 505 CA in sealed bags in dry ventilated place with relative humidity of 60%, temperature from -50 up to +50°c. Storage period in the manufacturer's packaging is 12 months from the date of manufacture.

The provided information is based on our experience and present knowledge. Due to numerous factors (characteristics of cement, aggregates) having effect on the final result, a selection of recipes is required. For more information please contact to a manufacturer's representative.

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