

CONSTRUCTION

FT-30

DRY-SPRAY CONCRETE

DESCRIPTION

FT-30 is a single-component material based on supersulfate cement, selected aggregates, as well as activators and modifying admixtures.

When mixed with water, the material sets within minutes. It creates a coating with instant resistance to pulling off and delamination caused by active leaks of water. It is particularly recommended for areas with high moisture content or highly watered.

APPLICATION AND USE

- Water stopping on sidewalls and roofs
- Isolation and reinforcing of sidewalls, floor and roof of mining excavations, reservoirs and tunnels
- Protection of support elements against corrosive environment
- Filling voids
- Reinforcing and sealing of sealing stoppings

ADVANTAGES

- Possible to apply on damp surfaces or even on an active water
- Superior resistance to aggressive environment XA3
- High water-and gas- tightness
- Rapid-setting
- Very low rebound
- Low heat of hydration
- Non-combustibility
- Ease and safety of use



TECHNICAL DATA

The data below are laboratory data. They may vary in practice due to surface properties of the substrate, humidity, pressure, and other factors.

PRODUCT CHARACTERISTICS

Performance characteristics	FT-30
Compressive strength @ 24h EN 196-1:2006	0.3 – 2.0 MPa
Ultimate compressive strength EN 196-1:2006	15 – 20 MPa
Depth of water penetration under pressure 12 bar EN 12390-8:2011	≤ 10 mm
Bond strength EN 1542:1999	> 0.4 MPa
Reaction to fire EN 13501-1:2007	A1

COMPONENT CHARACTERISTICS

Parameter	FT-30
Colour / form	light-grey powder with aggregates < 2 mm
Amount of water per 25 kg bag	4.0 – 4.5 litres
Pot life at 20 °C	2 minutes
Consumption	1.7 – 1.8 kg/m ² /mm
Ambient temperature and substrate during application	min.+5 °C; max +35 °C
Application thickness	> 5 mm

APPLICATION METHOD

1. Surface Preparation

The surface to be sprayed should be thoroughly cleaned to remove any dust and loose particles. After cleaning the surface should remain damp. If the area to be sprayed dries out then water should be re-applied to ensure that it is pre-wetted prior to application.

Spraying FT-30 onto active water leaks is possible but in case of major water leaks from the ground, eliminate them by injecting organic adhesives (eg. Ekopur HW, Krzemopur S). As the auxiliary method in case of large leaks, a water intake with drainage pipe may be used. Substrate and air temperature during spraying and 7 days after the application should be above 5°C.

2. Equipment

For the application of FT-30, use shotcreting equipment designed for dry-spray method.

3. Execution

Adjusted water/powder ratio should be between 0.16 and 0.18. For application the distance from the surface should be between 1.5 m to 2.5 m. The nozzle should be continuously moved in small circular movements which follow parallel strokes along the sprayed area to get a tight membrane with the correct, continuous thickness. In this way a systematic progressive coverage of the area is achieved with the required thick layer in one pass. Minimum thickness is 5 mm in order to achieve the best material properties. There are no limits regarding maximum thickness.

4. Cleaning

Clean tools with water. When hardened clean mechanically.

Cleaning of the nozzle with water should be done after each application. It is recommended that the nozzle be inspected and cleaned the after each 5 MT of dry-mix sprayed.

5. Curing

FT-30 requires curing, particularly under strong drying conditions. FT-30 should be cured immediately after finishing in accordance with good concrete practice for low heat concretes. In very fast drying conditions, supplementary curing with polythene sheeting taped down at the edges should be used.

In cold conditions, the finished repair must be protected from freezing.

SAFETY INSTRUCTIONS AND LIMITATIONS

It is recommended that gloves, eye protection and a dust mask are used when handle FT-30. For more details refer to our Material Safety Data Sheet.

The material should not be applied when the substrate and/or air temperature is 5°C and falling. At 5°C static temperature or at 5°C and rising, the application may proceed.

At ambient temperatures above 35°C, the material should be stored in the shade and cool water used for mixing.

PACKAGING AND TRANSPORTATION

25 kg valve sack, 40 bags per pallet. Other packing on request.

STORAGE AND SHELF LIFE

Shelf life 6 months when stored in dry and cool conditions.

DISPOSAL

Follow local regulations.

APPROVALS AND CERTIFICATES

1. Hygienic Certificate HK/B/1095/06/2015
2. Mining Certificate OBAC/0059/CB/17

DISCLAIMER

The Minova Logo is a registered trademark.

Copyright © 2019 Minova. All rights reserved

All information contained in this document is provided for informational purposes only and is subject to change without notice. Since Minova cannot anticipate or control the conditions under which this information and its products may be used, each user should review the information in the specific context of the intended application. To the maximum extent permitted by law, Minova specifically disclaims all warranties express or implied in law, including accuracy, non-infringement, and implied warranties of merchantability or fitness for a particular purpose. Minova specifically disclaims, and will not be responsible for, any liability or damages resulting from the use or reliance upon the information in this document.

ME-NS/TE/F/12-01/ FT-30 e01 (September 2008)

ADDITIONAL DOCUMENTATION

- FT-30 MSDS

LIST OF REPRESENTATIVES

- AUSTRIA: Minova MAI GmbH
- CZECH REPUBLIC: Minova Bohemia s.r.o.
- FRANCE / BELGIUM: Sales office Minova France / Belgium
- GERMANY: Minova CarboTech GmbH
- ITALY: Minova CarboTech GmbH Italy branch
- KAZAKHSTAN: Minova Kazakhstan LLP
- POLAND: Minova Ekochem S.A.; Minova Arnall Sp. z o.o.; Minova Ksante Sp. z o.o.
- RUSSIA: ZAO "Carbo-ZAKK"
- SLOVAKIA: Minova Bohemia s. r. o., organizačná zložka
- SOUTH AFRICA: Minova Africa (Pty) Ltd.
- SPAIN: Minova Codiv S.L.U.
- SWEDEN / NORWAY: Minova Nordic AB
- UNITED KINGDOM: Minova Weldgrip Ltd.; Minova International Ltd.
- APAC: Minova Australia Pty Ltd.
- AMERICAS: Minova USA Inc.

CUSTOMER SERVICE

For additional support options available at your area, contact our local offices.

www.minovaglobal.com