

CONSTRUCTION

Minobond HF

FLOWING RAPID SETTING MORTAR

DESCRIPTION

Minobond HF is a one-component material, ready for use after mixing with the batched water. It is a dry cement-based mortar with high quality aggregate up to 0.5 mm and modified with additives and polymers. The material is ideal for the reinstatement of small, structural sections of concrete as well as for many locations where difficulties of access make hand or trowel applied mortars impractical. The highly fluid nature of Minobond HF obviates the need for compaction and vibration even where access to the repair zone is restricted or where reinforcement is congested. Thanks to its rapid setting and further strength development, repairs can be quickly turned into operation.



APPLICATION AND USE

- Repair and reconstruction of concrete and reinforced concrete
- Anchoring metal elements in concrete
- Filling space between concrete and steel elements

ADVANTAGES

- Exceptional flow allows pumping or pouring into restricted locations
- Rapid setting allows to quickly turn the repair into operation
- Self-compacting nature eliminates honeycombing and displaces air without vibration
- Excellent bond to concrete substrates without independent primer
- Pre-bagged to overcome site-batched variations – only the site addition of clean water is required
- Non-combustibility

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

Product	Minobond HF
Compressive strength¹ after 2 hours after 24 hours after 28 days	≥ 8,0 MPa ≥ 20 MPa ≥ 60 MPa
Flexural strength @ 28 days	≥ 9.5 MPa
Pull-off strength	≥ 2.0 MPa
Chloride ion content	≤ 0.05%
Freeze –thaw resistance	F 200
Shrinkage @ 56 days	≤ 0.1 ‰
Fresh wet density	2200 ± 100 kg/m ³
Capillary absorption	≤ 0.5 $\frac{kg}{m^2 * h^{0.5}}$

1. 20 °C

COMPONENT CHARACTERISTICS

Parameter	Minobond HF
Colour / form	grey powder with aggregates < 0.5 mm
Single layer minimum/ maximum thickness	3 mm / 40 mm
Amount of water per 25 kg bag	4.75 liters
Pot life at 20 °C ¹	10 minutes
Output / Yield	18 kg/m ² / 10 mm

1. 20 °C

APPLICATION METHOD

1. Surface Preparation

Before application of Minobond HF, remove loose fragments of rock, concrete, dust, greasy stains, formwork release agent etc. In order to improve adhesion to the substrate surface it is recommended to dump it with water prior to application. For the best results, wet the concrete surface 24 hours before performing the repair.

2. Equipment

Small quantities can be mixed in a suitably sized drum using a spiral paddle with a slow speed (400/500 rpm) heavy-duty drill.

Greater quantities should be mixed using a forced-action mixer.

3. Execution

If mixing small quantities by hand, add one bag 25 kg of the Minobond HF powder to 4,75 litres of drinking quality water. This should be mixed vigorously for a minimum of 5 minutes.

For larger volumes, measure 4,75 litres of drinking quality water and pour ¾ into the mixer (per one 25 kg bag) and, with the machine in operation, add one full 25 kg bag of Minobond HF and mix for one minute before adding the rest of the water. Then mix for a minimum of 3 minutes. Do not subsequently re-temper with extra water.

Note: that in all cases Minobond HF powder must be added to water.

In case of use continuous mixing placers (e.g. MAI 4YOU, PFT G-4) follow equipment manufacturer’s guidelines.

Free-fall mixers must not be used.

4. Cleaning

Clean tools with water. When hardened clean mechanically.

5. Curing

Minobond HF requires curing, particularly under strong drying conditions. Minobond HF should be cured immediately after finishing in accordance with good concrete practice. 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 Minobond HF. 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 should be 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

- National Technical Approval IBDiM AT/2010-0302561
- Hygienic Certificate HK/B/0084/01/2017

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ADDITIONAL DOCUMENTATION

- Minobond HF 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"
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- UNITED KINGDOM: Minova Weldgrip Ltd.; Minova International Ltd.
- APAC: Minova Australia Pty Ltd.

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CUSTOMER SERVICE

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

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