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# COMPACT MORTAR HEAVY M100/600 WINTER




**Product description**

Fescon Compact mortar Heavy Winter is a cement-based mortar for burnt and sand-lime brick masonry for facades exposed to harsh and extremely harsh winter weather in the temperature range -15°C...+5°C. Especially suitable for coastal sites where structures will have to withstand wind and weathering. Suitable for brickwork repointing and for repairing mortar joints. Contains additives to improve density, weather resistance and workability.

- Masonry mortar for sites exposed to extremely harsh weather conditions
- Extremely low water absorption value
- Weatherproof
- Good workability
- Compressive strength M 5
- Available in 20 standard colours. Colored products are custom-made products, see delivery terms and conditions
- Special colours can be tinted to match the project requirements

**Applications**

- Especially suitable against wind and harsh weather in coastal areas
- For repointing of brickwork
- For repairing existing mortar joints

**The product is listed in the portal for building products that can be used in Nordic Swan Ecolabelled buildings.**

**Instructions**

## Base

- The temperature of the masonry brick or structure is above > 0°C
- Brick
- Brick pallets are protected from rain. The bricks must not be wet or covered with snow or ice.

## Priming

- Masonry structures are not primed

## Mixing and application of the product

- Masonry work should not be carried out in direct sunlight, in the rain or during strong winds.
- The working temperature should be between -15°C and +5°C. The joint effect of wind and frost must be taken into account.

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- A bag (25 kg) of dry powder is mixed with 3.7 to 4.2 litres of clean water.
- Do not add all the water at first. The mixture contains the correct amount of water when the mortar holds its shape and no water rises to the surface.
- The amount of water must be as instructed in the product card. Deviating from the recommended amount of water lowers the mortar's strength properties, increases the risk of separation, affects the strength development and reduces workability.
- Product is mixed with a mortar stirrer, in a concrete mixer, or with a pan-mixer or a continuous mixer to a smooth consistency. The maximum mixing time is approx. 10 minutes.
- If the working conditions are very dry or warm, it is possible to improve the adhesion by dampening the masonry joints or bricks. There should not be water drops on the substrate.
- Keep the amount of water the same during jointing, because any variations in the amount of water will show as colour differences in the joint.
- The jointing technique affects the density of the mortar joint. Finish the jointing by sealing them with a brick jointer and removing any excess mortar from the brickwork by brushing diagonally over the joints with a masonry brush.
- The expansion joints are provided as defined in the structural plans.
- The working time of the compact mortar is about 3 hours.
- When finished working, wash the tools immediately with water.
- Remove any dried mortar mechanically.
- After casting, you should keep the mortar joints moist at temperatures below 0°C by fog spraying for about 3 days, depending on the conditions or the site.

## Repointing to a previously masonry joint

- Available in 20 standard colours. Special colours are subject to order.
- When repointing, the old mortar must first be removed to a depth of at least 20 mm, but no more than 15% of the masonry depth or according to the designer's instructions.
- The joint is cleaned of dust and dampened.
- When repointing, add the dry powder to the instructed amount of water and let it stand for about 10 minutes. After that, remix the paste and add masonry mortar to make the paste semi-dry. This mixing method ensures the sufficient air content of the mortar.
- When repointing, start first with vertical joints and after that work with the horizontal ones. Repoints that are over 20 mm are done in two phases.
- The working time of a semi-dry mortar for repointing is 1 to 2 hours.
- After casting you should keep the mortar joints moist by fog spraying for about 3 days depending on the conditions or the target.
- Bases or masonry units with low water absorption are repointed with Repairing plaster KL 1.2 or Facade coating JSP 1.5.

## Other points to note

- Construction planner instructions and official regulations are to be followed in all masonry work.
- Not suitable for masonry of the inner shells of fireplaces or wood-burning stoves nor masonry of chimney flues indoors.
- After casting, you should keep the mortar joints moist at temperatures below 0°C by fog spraying for about 3 days, depending on the conditions or the site
- Masonry mortars may have slight differences in shade between small and big bags, as well as between the mortars intended for winter and summer time masonry, so it is not advisable to change the type of mortar in the middle of the wall.
- Meets the requirements of Annex 4 of the national standard SFS 7001.

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- Winter products will be available in the winter season, from 15 September to 1 March. At other times, the products must be ordered separately.

**Waste handling**

Storage and handling of waste
See the separate storage and disposal instructions https://www.fescon.fi/en/material-bank

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# Technical information

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|---|---|
| **Water requirement** | 3.7 - 4.2 l/25 kg |
| **Type** | Powder |
| **Binder** | Cement |
| **Colour** | Available in 20 standard colours. Special colours subject to order |
| **Maximum grain size** | 2,0 mm |
| **Package size** | 1000 kg |
| **Storage** | Storage time in a dry location approx. 1 year |
| **Additives** | Additives to improve density, workability and weather resistance, and reduce the freezing point of water |
| **Usage temperature** | -15°C...+5°C |
| **Workability time** | 1 h |
| **Compressive strength** | M 5 |
| **Adhesion strength** | ≥0,16 N/mm$^2$ (SFS-EN 998-2, 5.4.2 a) |
| **Reaction to fire** | A1 |
| **Heat conductivity** | 0,77 [w/(m•K)], P=50% |
| **Chloride content** | < 0,1 % (EN 998-2:2016) |
| **Frost resistance** | Frost-resistant |
| **Water absorption by capillarity** | 0,02 kg/(m$^2$ · min$^{0,5}$) (EN1015-18) |
| **GWP A1 raw material** | 0,0828 |
| **GWP A2 transport** | 0,00493 |
| **GWP A3 manufacturing** | 0,0269 |
| **GWP A1-A3** | 0,115 |
| **GWP A4 transport** | 0,0158 |
| **GWP A5 assembly** | 0,00279 |
| **GWP unit** | kg CO2e/kg |
| **Method for calculating the GWP value** | EPD |

Limitation of liability, product use notes and restrictions: Please familiarize yourself with Fescon Oy's general terms of delivery and the design and work instructions related to the product.