

FSW 140

MORTAR FOR FIRE BRICKS

M40 - A1 ACCORDING TO
EN 998-2

DESCRIPTION

FSW 140 is a cement-based grout modified with polymer additives adequate for building, mounting and repairing firebricks. It consists of fire resistant cement, lime fillers and improvement additives.

FSW 140 presents strong resistance to fire, up to 1000°C. It is adequate for both interior and exterior applications. It is produced and inspected as per EN 998-2.

FIELDS OF APPLICATION

It is suitable for:

- adhesion of all types of firebricks
- mounting of all types of firebricks
- great temperature variations, preventing cracking
- repair of worn joints and firebricks

It is recommended for applications such as:

- fireplaces
- ovens
- chimneys, etc

ADVANTAGES - CHARACTERISTICS

- Produced with quartz sand
- High resistance to fire
- Strong adhesion – Fast application
- Excellent workability and thixotropic behavior
- Resistance to humidity and frost
- CE certified- as per the European standard EN 998-2

SUBSTRATE PREPARATION

The substrate must be free from any brittle and foreign bodies such as for example plaster residue, paint, oils, etc. and must not have any cracks. Moreover the substrate must be stable and free from any shrinkage and distortion forces

Further more it should not be subject to vibrations. The firebricks must be free from dust or mud.

APPLICATION

In a clean container add 4.5-5.0 liters of clean water and gradually empty the content of a 25 Kg sack of product FSW 140, mixing continuously with an electric mixer in order to acquire a uniform grout mass. Let the resulting mixture age for 5 minutes and mix again. The mixture is ready to be used within the next 1.5 hours. Following the preparation of the mixture do not add more water in order to correct the workability of the slurry. This would lead to the reduction of its tolerances and the increase of its shrinkage. The open time for application is 10min. Following completion of the application clean the surface with a wet sponge. The open time for application is 10min.

Any excess adhesive must be removed from the joints. After the lapse of 1-2 hours from the application of the grout on the firebricks, perform mounting using the same product. Prior to the initial usage of the fireplace, oven, etc, the grout must be fully dried. It is recommended that the initial operation is performed after 10 days. During application and for the next 24 hours the environmental and substrate temperature must be between +5°C and +35°C. The adhesive is cleaned with water while still wet. When it hardens it is removed mechanically



CONSUMPTION

The consumption of FSW 140 depends on the type of the firebricks, the joint thickness, the tools, the application method and the substrate. It is approximately 4-6 kg/m²

Indicative the consumption of dry grout of a wall built with firebricks of 22*11cm and 3cm thick with 1cm joint, is 4,7 kg/m².

PACKING - STORAGE

The product is packed in plastic bags of 5Kg and paper bags incorporating a valve of 25Kg. It is preserved stored on wooden pallets and in dry

environment under temperatures greater than 0°C for 12 months since the production date.

NOT RECOMMENDED

The usage of the material under frost or heat-wave environmental conditions

PRECAUTIONS

FSW 140 contains cement that reacts with water producing an alkaline solution. For this reason protect your eyes and skin. In case of contact wash with plenty of water. In case of contact with the eyes seek immediately medical advice. Read

the information contained on the label and the Technical Sheet of the product before use. Use adequate protective clothing and gloves. The Safety Sheet of the product is availed to professionals upon request

The technical information and instructions contained in the present brochure and referring to the application and end use of Thrakon products are based on the up to now know-how and experience of the Company with regards to the products and are provided in good faith as long as such products are stored, used and applied as per Thrakon recommendations. Due to the inability, on our part, to directly inspect the conditions prevailing at the worksite as well as the application procedures of the product, the Company does not provide any guarantee with regards to the adequacy of its products for specific purpose while the Company shall not bear any legal responsibility based on the information stated in the present brochure or any other written, oral, or otherwise provided recommendations and instructions. The users of the products are advised to perform a limited surface testing of the products adequacy for the eventual application and use intentions. Thrakon reserves the right to modify the features of its products without prior notification. All orders shall be approved only following acceptance of the above and under the eventual Commercial Policy terms of the Company. The issuance of the present brochure voids any prior version

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TYPE ACCORDING TO EUROPEAN STANDARD EN 998-2 CATEGORY M40 - A1

| TECHNICAL CHARACTERISTICS | UNITITS | STANDARD | VALUE |
|------------------------------|-----------------------------------|-------------|--------------|
| Form | | | dry powder |
| Color | | | grey |
| Application thickness | (mm) | | 20 |
| Dry bulk density | (gr/cm ³) | | 1,5-1,7 |
| Bulk density of fresh mortar | (gr/cm ³) | | 1,9-2,1 |
| Maturing time | (min) | | 3 |
| Skin formation | (min) | | 5 |
| Resistance to temperature | (°C) | | -30 to +1000 |
| Maximum grain size | (mm) | | 1,25 |
| Working time | (h) | EN 1015 - 9 | 1,5 |
| Correction time | (min) | EN 1015 - 9 | 10 |
| Open time | (min) | EN 1015 - 9 | 10 |
| Compressive strength | (N/mm ²) | EN 1015-11 | ≥40 |
| Flexural strength | (N/mm ²) | EN 1015-11 | ≥6 |
| Resistances development time | (days) | | 10 |
| Heat loss | (%) | | 63 |
| Consumption | (Kg/m ²) | | 4 - 6 |
| Water demand properties | (ml water /100g of dry mortar) | | 18 - 20 |

Note: The measurements were taken in laboratory environment under a temperature of +23°C, Relative humidity 50% and without ventilation. It is possible for them to vary depending on the conditions prevailing at the worksite such as temperature, humidity, ventilation, substrate and frame absorbance.