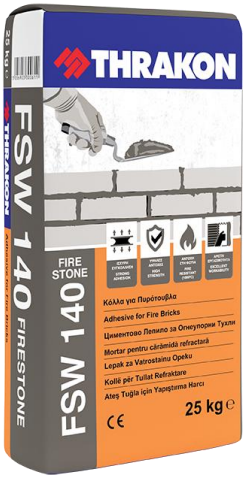
FIRE STONE FSW 140

Mortar for fire bricks



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

Advantages:

- 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.

TECHNICAL CHARACTERISTICS

Packaging:

- 25kg paper bags
- 5 kg plastic bags

Application:

Suitable for the adhesion and mounting of all types of firebricks. Recommended for application such as fireplaces, ovens, chimneys etc.

Color:

Grey.

Storage:

Stored on wooden pallets in a dry environment at temperatures higher than +0°C for 12 months from the production date.

Consumption:

~ 4-5 kg/m^2

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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 joint and firebricks.

It is recommended for applications such as:
- Fireplaces
- Ovens
- Chimneys etc.

SUBSTRATE PREPARATION

The substrate must be flat, free from any brittle and foreign bodies such as 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 and not subject to vibrations. The firebricks must be free from dust or mud.

CONSUMPTION

The consumption of FIRE STONE FSW 140 depends on the type of the firebricks, the joint thickness, the tools, the application method and the substrate. It is approximately 4-5 kg/m^2. Indicatively, the consumption of dry grout of a wall built with firebricks of 22x11 cm and 3 cm thick with 1 cm joint width, is 4.7 kg/m^2.

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 FIRE STONE FSW 140, mixing continuously with an electric stirrer in order to acquire a uniform slurry 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 10 min. Following completion of the application clean the surface with a wet sponge. The open time for application is 10 min. 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 +5ºC and +35ºC. The adhesive is cleaned with water while still wet. When it hardens it is removed mechanically

NOT RECOMMENDED

The usage of the material under frost or heat environmental conditions is not recommended.

PRECAUTIONS

FIRE STONE 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 medical advice immediately. 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 available to professionals upon request.

Technical characteristics	Units	Standard	Value
Form			Dry powder
Color			Grey
Application thickness	mm		20
Dry bulk density	g/cm^3		1.5 - 1.7
Bulk density of fresh mortar	g/cm^3		1.9 – 2.1
Maturing time	min		3
Skin formation	min		5
Resistance to temperature	^oC		-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
Resistance development time	d		10
Heat loss	%		63
Consumption	kg/m^2		4 – 5
Water demand	(ml water/ 100 g dry mortar)		18 - 20

*Note: The measurements were taken in laboratory environment under a temperature of +23^{o}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, absorbability of the substrate.

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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