

5.2 Special building mortars

DUROSTICK D-8 Refractory adhesive and sealing mortar for fire (refractory) bricks



TECHNICAL SPECIFICATIONS *(Measurement conditions 20 °C and 65% R.H.)*

Form - Color	Cementitious mortar - Gray
Toxic	No
Bulk density of dry mortar	1.40±0.05 kg/lt
Bulk density of fresh mortar	2.00±0.05 kg/lt
Maximum grain size	0.6 mm
Water requirement	7.0lt in 25 kg mortar
Application temperature	From +5 °C to +35 °C
Temperature resistance	From -30 °C to +1.050 °C
Shrinkage, per ASTM C596	Negligible
Pot life	Up to 3 hours
Resistance to frost	Excellent

MECHANICAL STRENGTHS

Strength after 28 days, per EN 1015-11, to:	
• flexion	6.70±1.00 N/mm ²
• compression	30.00±1.50 N/mm ²
Adhesive strength after 28 days, per EN 1015-12	0.70 N/mm ²
Capillary water absorption (c), per EN 1015-18	≤0.35 kg/m ² min ^{0.5}

CONSUMPTION

Indicatively, for fire bricks with dimensions 20x10x3cm and joint width of 1cm, use 5kg/m².

STORAGE

- **25kg Paper bag with valve:** 12 months from production date
 - **5kg Plastic bag:** 18 months from production date
- Store in the factory sealed packages, in dry and shaded places.

SAFETY DIRECTIONS

The product contains refractory cement. Before use, refer to the cautions on the product packaging or the Material Safety Data Sheet.

NOTE

After hardening, the product is harmless to health and the environment.

PACKAGING

Carton box with 4 bags of 5kg each one
Paper bag of 25kg on 1,500kg pallet

PROPERTIES

Refractory cement based adhesive mortar with quartz aggregates and special additives, created for building fire (refractory) bricks.

Distinguished for its high strength and resilience at temperatures of up to 1.050 °C, as well as for its adhesive strength (pic.2).

It is resistant to temperature variations generated within fireplaces, without cracking. The mortar develops high strengths quickly.

APPLICATIONS

D-8 adhesive mortar is ideal for building and grouting firebricks in ovens, barbecues, fireplaces (pic.1) and chimneys etc.

It is suitable for the repair of damaged joints, filling the openings on cracked fire bricks (common occurrence), and for reinstalling detached fire bricks.

USE

1. Surface preparation

The fire bricks have to be clean, and dust free. It is also mandatory that the fire bricks and the substrate are both soaked with water before installing them or sealing any cracks.

2. Application

Empty 25kg of D-8 mortar in a clean container with 7.0-7.5lt of clean, cool water or 2 parts water to 5 parts mortar (1.4-1.5lt for 5kg). Mix with a low rpm electric mixer until a lump free, homogeneous mass is created. The mixture remains workable for 3 hours. Using a gauging trowel, apply the mixture on the fire bricks. For easier installation use the 5-7mm plastic spacers of DUROSTICK, during installation.

Use the product to also grout, within 20 minutes of the installation. Allow for 5-10 minutes to pass from the grouting completion, and clean with a damp sponge.

Any test for proper operation of the fireplace, must be performed after 24 hours from completion of the work. The same applies for any checks on repairs done to the refractory lining. Allow for 5 days to pass from the completion of the work and the test, before lighting up the fireplace or the stove.

Note: The core temperature within a fireplace does not exceed 600 °C.

CLEANING

Clean all tools with water, immediately after use.

