

# HERATECH FIRE

Refractory mortar with rapid setting and hydration, high thermal resistance, suitable for the assembly of fireplaces, stoves, barbecues, ovens for food, brick and refractory stone masonry. Resistant to high temperatures.

## **TECHNICAL FEATURES**

**HERATECH FIRE** is a refractory mortar, with rapid setting and hydration, composed of calcium aluminates, aggregates and special additives. Mixed with water, it transforms into an easy-to-work mixture, with a thixotropic effect and high adhesion to the substrate. Once hardened, it has excellent mechanical strength and high heat resistance.

### FIELD OF APPLICATION

**HERATECH FIRE** is used for all jobs where high resistance to high temperatures is required, such as for the masonry of refractory bricks and prefabricated refractory elements for the assembly of fireplaces, ovens, flues, hoods, stoves, etc. Its particular composition it allows to obtain high mechanical strength even after short curing.

#### **PREPARATION OF THE SUBSTRATE**

The substrates must be sufficiently dry and cured, mechanically resistant, flat, solid, compact, free from crumbly or inconsistent parts, free from dust, greasy substances, oils, paints, waxes or anything else that could affect the perfect adhesion of the product. Wet the substrate, the bricks and all the parts to be joined with water to saturation, eliminating any stagnation at the time of application.

#### **MIX PREPARATION**

To prepare the mixture, pour approximately 25% of clean water into a container and slowly add **HERATECH FIRE** while mechanically stirring. Mix thoroughly for a few minutes, until a homogeneous lump—free mixture is obtained. Prepare the amount of mortar needed for about 30 minutes of work.

#### **APPLICATION**

Manually apply the mortar with a trowel, in thicknesses from a minimum of 1 cm up to a maximum of 4 cm, then place the bricks or other parts to be joined. Remove the excess mortar before it hardens. During the hydration phase it is advisable to wet the parts treated with the mortar abundantly with water, in order to avoid cracking due to too rapid hydration. Gradually light the first fire after at least 2 weeks, avoiding direct contact with the flame. This operation must be repeated at least 2 or 3 times. At the end of this operation, the implementation will be fully efficient.

#### **CLEANING**

The tools used for laying must be cleaned with water before the mortar hardens; subsequently, cleaning can only take place by mechanical removal.

#### **ITEM OF SPECIFICATIONS**

Assembly of refractory elements with technical refractory super-mortar with rapid setting and hydration, high thermal resistance, with high alumina content, such as **HERATECH FIRE** by **HERAKEM**, guaranteed for all works that must resist heat for civil use.

#### WARNINGS

- HERATECH FIRE is a cement product and, as such, all the precautions for proper curing must be observed.
- Application temperature: from + 5 ° C to + 35 ° C. High temperatures decrease setting times, low temperatures increase them.
- Do not add foreign products to the original compound.
- The surface must be protected from too rapid evaporation
- It is important not to remix the product once it has begun to set: it would lose all its chemical and physical properties.



Consumption	from 14 to 16 kg/m <sup>2</sup> per cm of applied thickness	Packaging	deluxe pack: 5 kg boxed bag
Mixing water	25% about 2.5 liters per 10 kg of product		
Flammability	no	Application temperature (° C)	from +5 to +35
Storage	12 months in original dry packaging	Compressive strength after 28 days	≥ 10 N/mm <sup>2</sup>
Solid residue	100%	Pot life of the mix	approx. 30 min
PH of the mix	≥ 12	Hardening	approx. 6 hours
Density of the powder	approx. 1300 kg/m³	Time of end of setting	approx. 90 min (at 20°C)
Color	gray	Initial setting time	approx. 45 min (at 20°C)
Appearance	powder	Maximum grain size (mm)	0,7
TECHNICAL DATA *(at +22±1°C and 55±5% R.H.)			

#### PRODUCT FOR PROFESSIONAL USE ONLY

All the data and indications given in this technical data sheet, although resulting from laboratory tests carried out and from our direct application experiences, due to the infinite number of variables linked to the construction site conditions, are to be considered, in any case, purely indicative. Therefore, before applying the product, the user is required to establish whether it is suitable for the use envisaged by him, in the specific hygrothermal and application conditions foreseen at the time of use and, in any case, he assumes all responsibility for it. We are not liable for damage to people or things deriving from improper use of the product. We reserve the right to modify the data contained therein as a result of improvements and technical progress.