

MATERIAL **FIRECRETE FP HT** (CAST VERSION)

data sheet May-2014 ver 1

	TYPICAL VALUES
MAX ALLOWABLE TEMP. (°C)	1400
MAXIMUM GRAIN SIZE (mm)	3
MIXING WATER (%)	11-13
NET MATERIAL REQUIREMENT (kg/m ³)	2010
BULK DENSITY after drying (kg/m ³) (TM C-MP-PF 217-218-219 / ASTM C-134)	2180
BULK DENSITY After Firing at 815°C (kg/m ³) (TM C-MP-PF 217-218-219 / ASTM C-134)	1990
COLD CRUSHING STRENGTH (MPa) (TM C-MP-PF-218 / ASTM C-133)	
Curing	50
After drying at 110°C	80
After 5 h firing at 815°C	70
After 5 h firing at 1000°C	60
After 5 h firing at 1200°C	40
THERMAL CONDUCTIVITY (W/mK) (ASTM C201/417)	
200°C	0,55
400°C	0,57
600°C	0,59
800°C	0,61
PERMANENT LINEAR CHANGE (%) (TM C-MP-PF-219 / ASTM C-210)	
After 5 h firing at 815°C	-0,2
After 5 h firing at 1200°C	-0,2
After 5 h firing at 1400°C	+/-0.5

CHEMICAL COMPOSITION (%)
(TM MI-CAS-PF 225)

Al_2O_3	57,0
SiO_2	32,0
Fe_2O_3	0,8
CaO	8,0

- (●) The data are obtained from the representative production sample and tested in our laboratory using the approved Test Method

INSTRUCTIONS FOR USE:

This is a self-flowing monolithic material, no need to vibrate.

It is very important to follow the water addition stated in this data sheet; in case of higher water addition the product will remain soft.

Vibration should not be used during casting to avoid segregation.

Mixing instructions:

1. Put the dry powder in a paddle mixer
2. Add water as per data sheet; use potable water from 5°C to 35°C
3. Mix for 3 min
4. Use watertight moulds painted with releasing agent
5. Cast the product in the mould without vibration
6. Keep the mould on a horizontal surface and let the product set for at least 4 hours
7. Remove moulds at complete setting only, typically 24 hours after casting