



# Insulating and Finishing Cements

## Product Data Sheet

### Product Description

Thermal Ceramics Insulating Cements are used for insulating irregular surfaces where it would be impractical to apply block or pipe insulation. Thermal Ceramics Finishing Cement is used to give insulation a hard, smooth surface which can be painted or weather-proofed.

### Types Available

#### JM 460

A soluble glass fibre based, air-setting insulating cement for service up to 980°C. It has excellent adhesion qualities on cold surfaces and can be applied in heavy layers. The insulating cement JM 460 is used for insulating flanges and other irregular surfaces where the application of pipe or block insulation would be impractical.

#### JM 375

A hydraulic-setting insulating and finishing cement especially designed for one-coat application. Because of extremely low drying shrinkage, it hardens in a few hours to a smooth, crack-free surface. It may be painted with a water-base paint as soon as firm, thus permitting completion of job in one operation.

The cement JM 375 is used as a finishing product over other insulation, such as block insulation in a number of applications (e.g. steam turbines in power plants). It is not recommended for use over non-absorptive insulating surfaces or under very slow drying conditions.

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Properties	JM 460	JM 375
Region of Manufacture	EMEA	EMEA
Maximum Continuous Use Temperature, °C	980	760
Basic Raw Material	soluble glass fibre	soluble glass fibre
Density, kg/m <sup>3</sup> (oven dried @105°C)	470	750
Loss on ignition, %	2.0	6.7
<b>Permanent Linear Change, %</b>		
oven dried @105°C	-4	-0.5
after 5 hours @650°C	-2.5	-2.1
815°C	-2.8	-
<b>Modulus of Rupture, MPa</b>		
oven dried @105°C	0.5	0.8
after 5 hours firing @650°C	0.9	1.2
after 5 hours firing @ 815°C	0.8	-
<b>Thermal Conductivity, W/m•K</b>		
at mean temperature of 200°C	0.14	0.13
@400°C	0.16	0.14
@600°C	0.19	-
Estimated Weight of Dry Material/m <sup>3</sup> of Construction, kg	460	850
Estimated Weight of Water/100kg of Dry Material, kg	170	100

Chemical Composition, %		
Al <sub>2</sub> O <sub>3</sub>	13.2	13.6
SiO <sub>2</sub>	59.4	50
Fe <sub>2</sub> O <sub>3</sub>	0.76	1.3
TiO <sub>2</sub>	0.2	0.1
CaO	20.5	26.9
MgO + K <sub>2</sub> O + Na <sub>2</sub> O	6.6	4.4
Packaging in bags, kg	18	18

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