



**Insulaster** is the first of its kind to be locally manufactured within Pakistan. It is a ready to use plaster made of inorganic substances providing your house and buildings with thermal, fire and acoustic insulation together. The plaster can be applied on both interior and exterior surfaces of old and new buildings allowing them to breathe. **Insulaster** is ideal for the following places:

- ✓ Commercial buildings.
- ✓ Residential buildings.
- ✓ Public buildings.
- ✓ Industrial buildings.
- ✓ Institutional buildings.
- ✓ Fire escape zones and equipment rooms.

## ADVANTAGES

- ✓ Long lasting.
- ✓ Easy application.
- ✓ Protection from thermal shocks.
- ✓ Saves energy.
- ✓ Does not contain carcinogenic material.
- ✓ Natural and harmless to environment.
- ✓ Ready to use.
- ✓ A1 classification; can beat 1000°C for 3 Hours.
- ✓ Provides superior sound proofing.
- ✓ Does not allow heat transfer thus not affected by hot or cold temperatures.
- ✓ Allows the building to breath naturally.
- ✓ Does not have emission of green house gases.

## SURFACE PREPARATION

For hot climatic conditions, the surface may be dampened with potable water. All loose particles and oil shall be cleaned off the surface prior to application.

Note: Over RCC and smooth concrete surfaces, a base coat of Ressi BRC 7000 may be used if required.

## PRODUCT PREPARATION

For manual application it is important that water is pre-measured in accordance with the amount of material used. Generally, 800 milli liter –1.2 liter of water is required for the preparation of 1KG of **Insulaster**. The mortar powder should be added over the water to avoid settlement of the material at the bottom of the mixing container. The mixing container should be uncontaminated, non-corrosive and clean using only potable water. It is recommended to use an automatic drill machine mixer for the mixing of **Insulaster** with water. However, **Insulaster** can also be sprayed over the surface using a plaster / render spray machine recommended by Ressichem.



## APPLICATION

With proper surface preparation and mixing of the material, conventional plastering techniques can be used to apply **Insulaster**. However, for speedy application it is strongly recommended to do proper surface preparation and spray the material using a plastering/ rendering spray machine for higher output of work. **Insulaster** can be applied in multiple layers of 18mm to 4mm. The time between both the layers can be anywhere from 24 hours to 72 hours depending on temperature & humidity.

## CURING

No curing is required in general however maximum curing of 72 hours where hot climate conditions prevail.

## SHELF LIFE

Expiration of **Insulaster** is 12 Months after production under dry and sheltered conditions. High levels of humidity and moisture may reduce shelf life.

## HEALTH AND SAFETY

**Insulaster** is regarded as non-hazardous for transportation. Do not re use bags and containers and dispose them off as per local rules and regulations. Gloves and suitable masks can be worn during application.



## TECHNICAL DATA

Property	Test Method and / or compliance standard	Result
*DRY DENSITY	BS EN 1015-10	500 ± 150 kg/m <sup>3</sup>
*THERMAL CONDUCTIVITY	PCSIR Lab developed Method Similar to BSEN 1745	0.15 w/mk
*R Value	BSEN 1745	3.7022 ft <sup>2</sup> k/w @ 2 inches
*U Value	BSEN 1745	0.2701 w/ft <sup>2</sup> K
*COMPRESSION STRENGTH	BSEN 998-1 & BSEN 1015-11	CS II
*BOND STRENGTH	BSEN 998-1 & BSEN 1015-12	0.5 N/mm <sup>2</sup>
*WATER ABSORPTION	BSEN 1015-19 & BSEN 1015-18	W2 0.195Kg/m <sup>2</sup> min <sup>1/2</sup>
*VAPOUR DIFFUSION	BSEN 1015-19 & BSEN 1015-18	%U=6.0(after 120 days)
*FIRE ENDURANCE	BSEN 1636-1 & BSEN 1350-1	1000°C for 3 hours
*READINESS FOR PAINTING	Internal Lab developed Method by Manufacturer @ 24°C	Drying time 72 hours at appropriate environment
*ACOUSTIC	BS 8233 & BSEN ISO 354	15-22 dB
*RETENTION PERIOD	Internal Lab developed Method by Manufacturer	06 months at appropriate environment
APPLICATION TYPE	Internal Lab developed Method by Manufacturer	Plaster machine or steel trowel

\*Typical results under laboratory conditions.

## PACKAGING

Insulaster is available in 20 KG Bags.

## SPECIAL NOTE

Before the application of any product like wall putty, paint, wallpaper, decorative plaster, or any other coating, **Insulaster** must be dried out completely with no moisture content inside of it.