Heat Guard Refractory Coating

Heat guard Refractory Coating is water based refractory coatings. It seals the crack on the inside wall of the kiln, furnace or combustion chamber to prevent heat loss**.** It reflects radiant heat to the hot zone from the insulation surface that reduce the energy needed to achieve the target temperature thus it saves fuel and power. It is used for coating of refractories, castable & ceramic fiber lining to protect them against heat, flue gasses and fumes. Hence it considerably prolong the life of refractories.

Temperature Grade   : 3270°F (1800°C)

Characteristics

- Good adhesion to refractory bricks, monolithics, castables and ceramic fibre, molten Metal, graphite /carbon crucibles etc.
- Resistance to severe attack & sand blasting effect of burning fuel oil
- Excellent resistance to powdering
- Reducing in slag adhesion
- Excellent dry strength
- Easy to apply by trowelling, brushing, spraying
- Good chemical resistance
- Increase in service life of refractory lining & heating systems
- Resistant to the influence of steam, acids, alkalies, fumes of sulphur and Vanadium Compounds and molten metals.

Chemical Properties

Content	Typical Value
ZrO_2	65.20 %
SiO_2	31.09 %
B_2O_3	0.75 %
Al_2O_3	1 %
TiO_2	0.4 %
Fe_2O_3	0.08 %
CaO	1.08 %
MgO	0.40 %

Mixing

Thoroughly dry mix Heat Guard Powder, add 50% of clean tap water to it for Spraying / brushing applications.

Application

Apply 1.5mm to 2 mm thick Heat Guard coating over refractory lining.

Precaution

After coating the area with Heat Guard coating, the first firing should be carried out slowly to avoid development of any surface cracks or other defects due to the moisture content in the coating material.

Curing

The applied Heat Guard coating should be air dried for minimum 24 hours and then slowly raise the temperature up to 1112°F by increasing temperature 68 to 77°F / hr. and then reach to operating temperature at around 122°F / hour. For large coating thickness adequate air dying is required to avoid cracks the Heat Guard coating.

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