

PRODUCT DESCRIPTION

CoreBond Fire Resistant Ceramic Mortar

is a dry, preblended ceramic mortar ideally suited for steel protection against fire, corrosion and chemicals.. This specially-engineered blend of specific ceramic materials and aggregates gives the ceramic become lightweight, excellent heat-resistance, electrical isolator and corrosive protection. **CoreBond** has multi advantages system compare conventional cementitious an intumescent fireproofing materials, including resistance to extreme heat upon 1400°C. It can decompose as intumescent in high temperature. **CoreBond** has an additional resistance to acids, solvents, chlorides and sulfates.

FEATURES & BENEFITS

- Fire Resistant up to 2552°F (1400°C)
- Lightweight and good impact properties
- Excellent corrosion protection for steel
- Excellent resistance to hydrocarbon and acids
- Good bonding and mechanical properties
- Environmental friendly
- High durability in aggressive environmental

USES

CoreBond should be specified where long lasting fireproofing with high abrasion, impact and chemical resistance is required. **CoreBond** is ideal for use in a wide variety of commercial, institutional and industrial environments where sufficiently rugged fireproofing is needed. Aluminate, Metasilicate and some Zirkonium are components of our ceramic mortar that act as corrosion inhibitors. **CoreBond** withstands weathering and chemical exposure and is highly recommended for use on :

1. Offshore drilling platforms
2. Petrochemical plants
3. Power plants
4. Industrial Plant
5. Smelters

PHYSICAL PROPERTIES

Properties	Standard	Results
Dry Density	ASTM E605	1600-1800 Kg/M ³
Compressive Strength	ASTM E761	35 MPa (28 D)
Bond Strength	ASTM E736	> 2 MPa
Deflection	ASTM E759	PASS
Bond Impact	ASTM E760	PASS
Flexural Strength	ASTM E761	4.5 MPa
Flame Spread	ASTM E84	0

APPLICATION PROPERTIES

Properties	Values
Colour	Grey Brown
Gloss	Opaque
Solids	100%
Type	2 Components
Typical Thickness	6 – 15 MM (Up on Design Req)
Application	Trowel
Coverage	Primer 0.3 – 0.5 Kg/M ² Reactive Coat 1.6 Kg/M ² /Mm
Substrat Cleaning	Power Tools or Blasting

SURFACE PREPARATION

Prepare the surface according to SSPC, SP-2 and/or SP-3 guidelines. Remove any existing prime coat materials which are not alkali resistant.

Where corrosion has occurred due to the presence of chlorides, the steel should be high-pressure washed with clean water immediately after grit-blasting to remove corrosion products from pits and imperfections within its surface .

MIXING

Mixing CoreBond may occur in a mechanical paddle type mixer if a continuous mixing apparatus is not used. Hardener should be added to the mixer first.

Mixing should continue for a minimum of 60 seconds. CoreBond has the strength is produced from alumino silicate, magnesium, calcium silicate, pozzolans, and other materials with very minimum Portland cements contains. Accordingly, variable water chemistry may increase or decrease the water demand of CoreBond and not encourage to add additional water.

APPLICATION

Apply the **Corebond FR primer** at dosage 0.3 – 0.5 Kg/M² prior application the reactive layer. Wait until Corebond Primer until full dry approximately 5 – 6 hours.

Apply the mixed CoreBond to the prepared substrate by gloved hand or trowel. Thoroughly compact the mortar on to the primed substrate and around the exposed reinforcement. CoreBond can be applied up to 25 mm thickness in vertical and 10mm in overhead sections in a single application without the use of formwork. Thicker sections should be built up in layers, but are sometimes possible in a single application depending on the actual configuration of the repair area and the volume of exposed reinforcing steel.

If sagging occurs during application to vertical surfaces, the CoreBond should be completely removed and reapplied at a reduced thickness on to the correctly reprimed substrate

FINISHING

CoreBond is finished by striking off with a straight edge and closing with a steel trowel. Wooden or plastic floats, or damp sponges may be used to achieve desired surface texture. The completed surface should not be overworked.

Allow the applied CoreBond to stiffen before attempting to finish off - this will minimise slumping. After spray application, the mortar may need to be 'cut back' to the required profile using a steel trowel and then finished with damp sponges as described above.

High temperature working

At ambient temperatures above 35°C, the material should not be used as this will cause premature setting.

LIMITATIONS

CoreBond should not be used when the temperature is below 5°C and falling. Do not mix part bags. The product should not be exposed to moving water during application. Exposure to heavy rainfall prior to the final set may result in surface scour. If any doubts arise concerning temperature or substrate conditions, contact GourBech.

STORAGE

CoreBond has a shelf life of 12 months from date of manufacture if kept in the original, unopened bags. Do not use if there are lumps in the product, or a loss of workability (requiring more water to be added) is experienced.

If stored at high temperatures and/or high humidity conditions the shelf life may be reduced.

HEALTH & SAFETY

Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye/face protection. Barrier creams provide additional skin protection.

Should accidental skin contact occur, remove immediately with a resin removing cream, followed by washing with soap and water
- do not use solvent.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages here under, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder

