

## Acid and Heat Resistant Products

- [Acid Proof Bricks as per IS-4860](#)
- [Acid Proof Tiles as per IS-4457](#)
- [Postassium Silicate/Sodium Silicate Mortar](#)
- [EPOXY](#)
- [Bitumastic](#)
- [Primer](#)



### 1. ACID RESISTANCE BRICKS (CONFIRMING to IS:4860)

| Properties           | Unit                 | Class-I Bricks | Class-II Bricks | Application                                  |
|----------------------|----------------------|----------------|-----------------|--|
| Water Absorption     | % Max                | 2              | 4               | Chemical Process Floor, Chimneys, Tanks etc. |
| Flexural Strength    | Kg/cm <sup>2</sup>   | 100            | 70              |  |
| Compressive Strength | Kg/cm <sup>2</sup>   | +700           | +500            |  |
| Resistance to Acid   | Loss in weight % Max | 1.5            | 4.0             |  |

### 2. ACID RESISTANCE TILES (CONFIRMING to IS:4457)

| Properties           | Unit                 | Class-I Bricks | Application   |
|----------------------|----------------------|----------------|---|
| Water Absorption     | % Max                | 2              | Various Application specially in Chemical, Petrochemical and Fertilizer Industries. |
| Flexural Strength    | Kg/cm <sup>2</sup>   | 200            |   |
| Compressive Strength | Kg/cm <sup>2</sup>   | +700           |   |
| Resistance to Acid   | Loss in weight % Max | 1.5            |   |

### 3. SODIUM SILICATE MORTAR (CONFIRMING to IS:4832)

| Properties            | Unit               | Class-I Bricks | Application                         |
|-----------------------|--------------------|----------------|-------------------------------------|
| Working Time          | Minutes            | 20             | For laying of Fire Resistant Bricks |
| Flexural Strength     | Kg/cm <sup>2</sup> | 35             |                                     |
| Compressive Strength  | Kg/cm <sup>2</sup> | 100            |                                     |
| Bond Strength         | Kg/cm <sup>2</sup> | 5              |                                     |
| Absorption of Toulene | % Max              | 18             |                                     |

**POTASSIUM SILICATE MORTAR (CONFIRMING to IS:4832)**

| Properties            | Unit               | Class-I Bricks | Application                         |
|-----------------------|--------------------|----------------|-------------------------------------|
| Working Time          | Minutes            | 20             | For laying of Acid Resistant Bricks |
| Flexural Strength     | Kg/cm <sup>2</sup> | 40             |                                     |
| Compressive Strength  | Kg/cm <sup>2</sup> | 150            |                                     |
| Bond Strength         | Kg/cm <sup>2</sup> | 5              |                                     |
| Absorption of Toulene | % Max              | 18             |                                     |

**4. EPOXY**

- It is a Phenolic resin based, with silica filler, cold curing acid resistance cement. The advantage of this product is that it has good resistance towards acid and solvents.
- EPOXY carries ISI marking and conforms to ASTM C-395-80 and IS 4832 Part II.

**USES :**

- EPOXY is used for setting acid proof tiles / bricks. Various areas like floors, drains, neutralization pits, storage tanks, reaction vessels, filter notches, DM water plants are covered with brick lining using EPOXY Mortar.
- EPOXY Mortar is extensively used in industries like Dyestuff, Rayon, Metal Finishing, Fertilizers, Petrochemicals, etc.
- EPOXY is used for bedding and jointing of acid proof tiles / bricks when exposed to severe corrosive condition as prevailing in process tank / reaction vessels etc. for spillage conditions, EPOXY is used as pointing cement along with silicate mortar as the bedding cement.

**5. BITUMASTIC**

- Bitumastic consist of selected acid resistant siliceous fillers and bitumen, Blended homogeneously to form a butter like consistent mastic.

**USES :**

- Bitumasticis employed as an exposed lining for corrosion resistant floors where traffic is light or non-existent. It is employed as an impermeable chemical resistant membrane on floors, channels, manholes, sumps etc., which are constructed out of concrete and brick masonry. Bitumastic is used on vertical surface upto 600mm height.
- This is used in different industries like Dyes, Pigments, Chemicals, Automobiles, Petroleum and Petrochemicals, Fertilizers, Sulphuric, Phosphoric Acid plants etc.

**6. PRIMER**

- Primer is bitumen based corrosion resistant paint. It is a single component air curing paint. It is easily applied by brush; roller or spray and it meet the requirements of IS 9862 specification.

**USES :**

- Primer is used as primer over concrete surface for the application of mastic as membrane for the chemical resistant acid proof Tile / Brick Lining work on treatment with Primer, a good bond is developed between the concrete surface and the mastic.
- It is also used as anti-corrosive paint on steel structures for rust prevention. It is used for coating and protecting any surface, whether wood, metal or concrete in such constructions as bridges, tanks, girders, pipes, railways, docks, ship's interiors and exteriors such as holds, bunders, peaks, decks, funnels, top sides, iron gearing and fittings etc. Further uses are for painting gas works, power stations and smoke stacks.
- Primer form an elastic film which expands / contracts with the metal to which it adheres and is therefore not subjected to "Flaking" making in an ideal coating for exposed conditions.