



for Better Quality & Durability

MICRO-SILICA

DESCRIPTION

CETEX MICRO-SILICA is a super pozzolan - a finely powdered material which can be added to cementitious matter to increase durability and to provide a positive set. It complies with **ASTM C1240**.

ADVANTAGES

- ✓ Higher compressive strength by 10-20 %
- ✓ Lower permeability – resistance to penetration of water, chloride & other chemicals
- ✓ Lower free lime formation - delays ettringite and thaumasite formation
- ✓ Controls bleeding in fresh concrete
- ✓ Lower Heat of Hydration, which prevents formation of cracks.

PROPERTIES

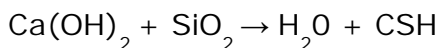
Appearance	Very fine powder
Colour	Grey
Odour	Odourless
Mean particle size	25 microns
SiO ₂ – Silica	85 % minimum
Humidity	2 % maximum
Loss on ignition at 800°C	4 % maximum

HOW IT WORKS

1. **Pozzolonic effect** : When water is added to cement, hydration occurs as shown below:



The free lime does not contribute to strength. When combined with carbon dioxide, it forms a soluble salt, which leaches through the concrete causing efflorescence, a familiar architectural problem. Concrete is also more vulnerable to chemical attack and deterioration. When it is added, the following reaction takes place:



The reaction reduces the amount of calcium hydroxide in the concrete.

2. **Micro filler effect** : It is an extremely fine material, with an average diameter much finer than cement. It gets well distributed in the paste, thus blocking the bleed-water channels.

PACKING

Available in 25 kg Plastic bag or Jumbo Bag.