



OTB Materials - SulfCrete™

Sulfur concrete to replace portland cement

Technical Data Sheet

DESCRIPTION

BASIC USES: SulfCrete™ is used in concrete, precast, and masonry products for a multitude of construction projects including:

- Precast concrete/tilt wall
- Ornamental precast stone
- Roadway and pavements
- Residential foundations and driveways
- Water collection and treatment facilities
- Marine applications (seawalls, docks and wave abatement)
- Encapsulation of hazardous wastes
- High sulfate and acidic environments

SulfCrete™ is best suited for applications at or below grade, or in structures not requiring a high temperature tolerance (above 225°F). SulfCrete™ is not susceptible to scaling from freeze/thaw as it is an impermeable material incapable of entraining liquids or gases. SulfCrete™ cement can be used in concrete exposed to highly aggressive sulfate and acidic environments. SulfCrete™ develops higher strength at early ages when compared with a portland cement. It is effectively used in precast or prestressed concrete, where early strength gain and quick form turnaround are desired.

SulfCrete™ facilities produce Sulfur cements that meet or exceed the optional physical requirements of ASTM C150 and AASHTO M85. Due to the physical characteristics of SulfCrete™, air entrainment is not necessary to prevent deterioration caused by freeze/thaw cycles. SulfCrete™ comes as a thermoplastic pellet containing microaggregates. The product is melted and blended with conventional aggregates at 350°F to form sulfur concrete products.

Applicable Standards: The following standards apply to the use of SulfCrete™ sulfur cement: Performance-based specifications ASTM C39, C78, C496, C882, C666A, C672, C469, C157 AASHTO T336. SulfCrete can be designed to meet the physical performance requirements of portland cement concrete, but may not precisely address current OPC specifications.

Availability: SulfCrete™ cement is available in full tanker transports or bulk Super Sacks. SulfCrete can be ordered by contacting SulfCrete Sales at sales@OTBMaterials.com.

Sustainability: The manufacture of SulfCrete™ produces up to 95% less CO₂ than the manufacture of portland cement. Additionally, SulfCrete has a 100% reduction in water usage during production versus portland cement.

SulfCrete™ Features and Benefits:

- Rapid Setting
- Accelerates Mold Cycle Time
- Achieves Full Strength in 24 Hours
- Salt Water Resistant
- Water & Vapor Impermeable
- High Resistance to Acid
- Up to 95% Reduction in CO₂ Emissions
- 100% Reduction in Water Usage

Measure	SulfCrete	Portland
Time to 2000 PSI	2 Hour	4-8 Hours
Max Compressive Strength	8000	Upto 25,000
Time to Full Strength	24 Hrs	28 days
High Resistance to Acids	Yes	No
Low Permeability	Yes	No
CO ₂ Created per Ton	.05 of a Ton	1.0 Ton

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