OTB Materials – Formula 16™

Sulfur concrete to replace portland cement

Technical Data Sheet

DESCRIPTION

BASIC USES: Formula16™ 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

Formula 16™ is best suited for applications at or below grade, or in structures not requiring a high temperature tolerance (above 225°F). Formula 16™ is not susceptible to scaling from freeze/thaw as it is an impermeable material incapable of entraining liquids or gases. Formula 16™ cement can be used in concrete exposed to highly aggressive sulfate and acidic environments. Formula 16™ 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.

Formula 16™ facilities produce Sulfur cements that meet or exceed the optional physical requirements of ASTM C150 and AASHTO M85. Due to the physical characteristics of Formula 16™, air entrainment is not necessary to prevent deterioration caused by freeze/thaw cycles. Formula 16™ 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 Formula 16™ sulfur cement: Performance-based specifications ASTM C39, C78, C496, C882, C666A, C672, C469, C157 AASHTO T336. Formula 16™ can be designed to meet the physical performance requirements of portland cement concrete, but may not precisely address current OPC specifications.

Availability: Formula 16™ cement is available in full tanker transports or bulk Super Sacks. Formula 16™ can be ordered by contacting Formula 16™ Sales at info@OTBMaterials.com.

Sustainability: The manufacture of Formula 16™ produces up to 95% less CO_2 than the manufacture of portland cement. Additionally, Formula 16™ has a 100% reduction in water usage during production versus portland cement.

Formula 16™ 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 CO_2 Emissions
- 100% Reduction in Water Usage

Measure	Formula 16™	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 Permeablitiy	Yes	No
CO_2 Created per Ton	.05 of a Ton	1.0 Ton

info@OTBMaterials.com
3239 S. Dixie Highway, Dalton, Georgia, USA 30720
www.OTBMaterials.com