

**CE-136**  
**03/15 Supersedes 12/13**

### ***SULFUR CEMENTS***

#### **DESCRIPTION**

Sulfur Cements are economical, plasticized sulfur-based cements with excellent resistance to high concentrations of non-oxidizing acids such as sulfuric, hydrochloric and phosphoric acids. Corrosion Engineering Sulfur Cements are also resistant to moderate concentrations of oxidizing acids such as nitric acid. They are available in two different formulations: Sulfur Regular Cement (silica-filled), and Sulfur Carbon Cement (carbon filled). Each grade of cement is supplied in flake form for faster, more uniform melting. **Consult Corrosion Engineering specification [CES-313](#) for complete installation details.**

#### **AREAS OF USE**

Sulfur Regular and Sulfur Carbon Cements are used to bond acid brick to protect floors, trenches, pickling tanks, process vessels, towers, manholes, and sewage systems. Sulfur Carbon Cement is used specifically in areas involving hydrofluoric acid and fluoride salts where Sulfur Regular Cement would not be suitable.

#### **OUTSTANDING FEATURES**

- Resistant to a wide range of acids
- Easily installed-hardens quickly
- Good adhesion to rough surfaces
- Fast cure minimizes delays in getting equipment into service
- Flake form results in faster and more uniform melting

**TYPICAL PHYSICAL PROPERTIES**

PROPERTY	Sulfur Regular	Sulfur Carbon
Mortar density - ASTM D792	137 lbs./cu. ft.	127 lbs./cu. ft.
Compressive strength - ASTM C287	>6,750 psi	>6,900 psi
Tensile strength - ASTM C287	>540 psi	>575 psi
Modulus of rupture - ASTM C287	>1,175 psi	>1,075 psi
Melting range	285-300°F	285-300°F
Adhesion to wire cut brick - ASTM C321	>110 psi	>55 psi
Coefficient of thermal expansion	$1.9 \times 10^{-5} / ^\circ\text{F}$	$1.8 \times 10^{-5} / ^\circ\text{F}$
Color	Black	Black
Water absorption - ASTM C413	0.3%	0.3%
Solidification shrinkage	4%	4%
Maximum continuous service temperature	190°F	190°F

**ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE**

PRODUCT	CODE	PACKAGE SIZE	COVERAGE
Sulfur Regular Mortar	19596	50 LB Carton	Coverage for Sulfur Cements is calculated on the basis of the required volume. The volume is a function of the size of mortar joint spacing, and the number of sides of the masonry piece to be covered.  Consult Corrosion Engineering for specific estimating information if unsure of the quantity required.
Sulfur Carbon Mortar	19590	50 LB Carton	
Spacer Chips	29606	500 pcs/lb	

**SAFETY PRECAUTIONS / DISCLAIMER**

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and [material safety data sheets](#) before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.



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