



## SULFUR BASE MORTARS BASOLIT NO. 600 CARBON BASOLIT NO. 610

Sauereisen Nos. 600 and 610 Sulfur Based Mortars are used in the construction of floors, trenches, sumps and tanks in steel mills, mines, metal finishing and chemical processing plants. They are also used as a capping compound for concrete test cylinders.

### Outstanding characteristics

No. 600 and No. 610 mortars are manufactured in flake form. Unlike other sulfur mortars supplied in ingot, briquette, or block form, the No. 600/610 mortars melt rapidly and set quickly - within minutes.

No. 600 is silica-filled, while No. 610 is carbon-filled for those applications where hydrofluoric acid exposure is encountered. Refer to Sauereisen Chemical Resistance Chart for suitability in specific chemical service.

No. 600/610 mortars can be used in accordance with ANSI/ASTM C-386, "Standard Practice for Use of Chemical-Resistant Sulfur Mortar."

No. 600/610 comply with the requirements of ANSI/ASTM C-617, "Standard Method of Capping Cylindrical Concrete Specimens."

### AREA PREPARATION

#### Temperature of Working Area

Maintain a temperature of 50° on air, brick, substrate, during mixing, application, and cure.

#### Surface Preparation

All surfaces in contact with No. 600/610 should be clean, dry, and free of dust, dirt, grease, oil, and other contaminants that may inhibit bond of No. 600. Surface prep should be in accordance with membrane requirements.

PHYSICAL PROPERTIES	No. 600	No. 610
Bond strength (ASTM C-321)	150 psi (10.5 kg/cm <sup>2</sup> )	45 psi (3.2 kg/cm <sup>2</sup> )
Compressive strength (ASTM C-579)	9,000 psi (632.7 kg/cm <sup>2</sup> )	8,500 psi (597.6 kg/cm <sup>2</sup> )
(ASTM C-617)	8,000 psi (562.4 kg/cm <sup>2</sup> )	8,083 psi (568.2 kg/cm <sup>2</sup> )
Density (modified ASTM D-71)	136.5 pcf (2.19 gm/cm <sup>3</sup> )	123.7 pcf (1.98 gm/cm <sup>3</sup> )
Dielectric constant 60 HZ @ 84°F (29°C) maximum	2.92 average	--
Power factor 60 HZ @ 84°F (29°C) maximum	0.004 average	--
Tensile strength (ASTM C-307)	605 psi (42.6 kg/cm <sup>2</sup> )	675 psi (47.5 kg/cm <sup>2</sup> )

Physical properties were determined on specimens prepared under laboratory conditions using applicable ASTM procedures. Actual field conditions may vary and yield different results; therefore, data are subject to reasonable deviation.

### APPLICATION

#### Melting

No. 600/610 must be melted to a free flowing state for use. Place a quantity of No. 600/610 into a suitable clean, dry, steel, temperature-controlled kettle and melt to a smooth, free flowing liquid at 265°F to 290°F. Stir occasionally while melting or when adding more material.

If heated above 300°F, the material thickens. To reduce viscosity and lower the temperature to optimum range, remove the heating element and/or add additional No. 600/610 material. Overheated material is still usable after temperature has decreased to 260°F - 290°F, provided temperature has not exceeded 320°F.

#### Installation

**Floors** - Using a suitable pouring container, apply a thin layer of No. 600/610 over membrane to prevent damage prior to brick installation. Set the masonry units on No. 620 wood spacers and align brickwork, maintaining 1/4 inch wide vertical joints. Pour molten No. 600/610 into vertical joints until completely filled.

**Walls** - Set the masonry units on No. 620 wood spacers and form 1/4 inch wide horizontal and vertical joints. Install a single layer at a time and fill joints before proceeding with successive layers. When the exposed joints are to be No. 600/610, they must be taped with muslin strips saturated in Sauereisen No. 14 to retain the molten mortar until it congeals. Muslin may be stripped, resaturated and reused as soon as No. 600/610 Mortar congeals. The pour should stop when the joint is approximately 1/2 inch below the top surface of the masonry unit to provide a key for subsequent courses.

### CAPPING COMPOUND APPLICATION

**Temperature of Capping Plate** Maintain an optimum temperature of 85°F to 90°F on the capping plate to prevent thermal shock and potential cracking when molten material is poured into the capping plate.

