

## SELECTION & SPECIFICATION DATA

<b>Type</b>	Potassium silicate brick mortar
<b>Description</b>	Corlok B Mortar is a 2-component, halogen-free potassium silicate brick mortar used to bond and bed acid brick in chemical environments.
<b>Uses</b>	<ul style="list-style-type: none"> <li>• Butter industrial ceramics such as acid brick</li> <li>• Brick linings in contact plant sulfuric acid manufacturing process vessels</li> <li>• Brick linings in industrial and thermal power plant chimneys</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>• Extensive 45+ year history of performance</li> <li>• Creamy, buttery consistency</li> <li>• High temperature resistance</li> <li>• Resists strong oxidizing acids including nitric, chromic and sulfuric</li> <li>• Low shrinkage</li> <li>• High bond strength</li> <li>• No acid washing required</li> <li>• Fluoride-, sodium- and calcium-free, eliminates potential sulfation-hydration reactions</li> </ul>
<b>Limitations</b>	<ul style="list-style-type: none"> <li>• Not for use beyond its chemical resistance or thermal capabilities. Do not use in hydrofluoric acid service or caustic environments. Consult ErgonArmor with specific questions.</li> </ul>

## INSTALLATION GUIDANCE

**Reference Specifications** CES-358 ErgonArmor Specification for Brick Mortar Mixing

**Installation Conditions** Corlok B Mortar is formulated for ideal handling at 70°F (21°C). Do not use if temperature of mortar or components are below 50°F (10°C). If temperatures are below 50°F (10°C), condition components and substrate before application.

**Ratio** 1.0 part solution: 2.5 parts powder by weight.

Powder loading may be adjusted slightly to suit individual bricklayer handling preferences.

**Mixing** Pour measured quantity of solution into clean, dry mixing vessel. Slowly add measured quantity of powder to solution and mix thoroughly until fully blended.

**Work Life** 2-3 hours at 50°F (10°C)  
60-80 minutes at 70°F (21°C)  
30-40 minutes at 90°F (32°C)

**Cleanup** Water

## CURE TIME

<b>Temperature</b>	<b>Initial Set</b>	<b>Full Cure</b>
70°F (21°C)	5-6 hours	72-96 hours

## SAFETY

**Safety** 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 safety data sheets before using.

**Ventilation** Provide thorough air circulation during and after application until the material has cured when used in enclosed areas.

### PACKAGING, ESTIMATING & HANDLING

Product	Code	Packaging
Corlok Solution	19554	44 lb (20 kg) pail
	19553	600 lb (272 kg) drum
Corlok B Powder	19539	55 lb (25 kg) bag

A 1.25 cubic foot (154 lb or 70 kg) unit consists of 1 x 44 lb (20 kg) pail of solution and 2 x 55 lb (25 kg) bags of powder.

**Theoretical Coverage** Consumption will vary based on brick size and joint width. Consult estimating guide CES-145.

**Storage & Shelf Life** Maintain products in original packaging and sealed until ready for use. Protect Corlok Solution from freezing. Estimated shelf life for Corlok B Powder and Solution is 18-24 months when stored in a dry area at 70°F (21°C). Actual shelf life may vary with storage conditions.

If there is any question with respect to the quality of the components, check reactivity prior to use. For assistance consult with ErgonArmor.

### TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
Color	White
Density, ASTM C138	123 lb/ft <sup>3</sup> (1,970 kg/m <sup>3</sup> )
Compressive strength, 28-day, ASTM C579	>5,400 psi (37 MPa)
Tensile strength, 7-day, ASTM C307	>350 psi (2.4 MPa)
Flexural strength, ASTM C453	>1,300 psi (9 MPa)
Bond strength to brick (pull blocks)	>180 psi (1.2 MPa)
Maximum service temperature	1,650°F (900°C)

Temperature limitations will vary with chemical exposure. Consult ErgonArmor Technical Service for guidance.

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