



SELECTION & SPECIFICATION DATA

Type

Potassium silicate brick mortar

Description

Corlok B Mortar is a 2-component, halogen-free potassium silicate brick mortar used to bond and bed acid brick in chemical environments.

Uses

- Butter industrial ceramics such as acid brick
- Brick linings in contact plant sulfuric acid manufacturing process vessels
- Brick linings in industrial and thermal power plant chimneys

Features

- Extensive 45+ year history of performance
- Creamy, buttery consistency
- High temperature resistance
- Resists strong oxidizing acids including nitric, chromic and sulfuric
- Low shrinkage
- High bond strength
- No acid washing required
- Fluoride-, sodium- and calcium-free, eliminates potential sulfation-hydration reactions

Limitations

 Not for use beyond its chemical resistance or thermal capabilities. Do not use in hydrofluoric acid service or caustic environments. Consult Armor with specific questions.

INSTALLATION GUIDANCE

Reference Specifications CES-358 Armor 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

Temperature Initial Set Full Cure 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 19553	44 lb (20 kg) pail 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.

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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 Armor.

TYPICAL PHYSICAL PROPERTIES

Property	Typical Value	
Color	White	
Density, ASTM C138	123 lb/ft ³ (1,970 kg/m ³)	
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 Armor		

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Rev 11/2025

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