

## Corlok™ B Mortar

### **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 ErgonArmor with specific questions.

#### **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**

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 B 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.

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/ft³ (1,970 kg/m³)
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℉ (900℃)

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

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