



Penntrowel™ Epoxy Brick Mortar

SELECTION & SPECIFICATION DATA

Type	Bisphenol epoxy brick mortar
Description	Penntrowel Epoxy Brick Mortar is an economical 3-component mortar used to bond and bed acid brick or abrasion resistant ceramic linings.
Uses	<p>Bond and bed chemical resistant brick, granite, or abrasion resistant ceramics, including high alumina brick and dense tiles, used in:</p> <ul style="list-style-type: none">• High impact, abrasion or vibration service• Process vessels• Flooring• Chutes• Trenches• Sumps• Secondary containment
Features	<ul style="list-style-type: none">• Good abrasion, wear and impact resistance• Excellent adhesion to brick and tile surfaces• Broad resistance to acids, alkalis and solvents• Creamy, non-slumping consistency• Nonporous, hard• Low shrinkage
Limitations	Not for use beyond its chemical resistance or thermal capabilities. Consult Armor with specific questions.

INSTALLATION GUIDANCE

Reference Specifications	CES-358	Armor Specification for Brick Mortar Mixing
Installation Conditions	Penntrowel Epoxy Brick Mortar is formulated for ideal handling at 70°F (21°C).	
Ratio	1 part resin: 0.14 parts hardener: 3.0 parts filler by weight. Filler loading may be adjusted slightly to suit individual bricklayer handling preferences.	
Mixing	Pour resin into clean, dry mixing vessel. Slowly add hardener to resin at specified ratio and mix until thoroughly blended. Slowly add filler at suggested ratio and mix until fully wetted.	
Work Life	<p>70 - 90 minutes at 50°F (10°C) 35 - 45 minutes at 70°F (21°C) 10 - 20 minutes at 90°F (32°C)</p> <p>Work life is shorter at higher temperatures. A larger volume of mixed material will have a shorter work life than a smaller volume.</p>	
Cleanup	MEK	

CURE TIME

Temperature	Initial Set	Full Cure
70°F (21°C)	1.5 - 2.5 hours	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.



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PACKAGING, ESTIMATING & HANDLING

Product	Code	Packaging
Penntrowel Epoxy Resin	19680	4 x 9.2 lb (1.0 gallon) can case
Epoxy Cold Room Hardener	29447	20 lb (2.3 gallon) can
Penntrowel L/F Filler - Silica	19642	55 lb (25 kg) bag

A 1.33 cubic foot (153 lb or 69.4 kg) unit consists of 1 x 36.8 lb (16.7 kg) case of resin, 5.9 lb (2.68 kg) or 88 fluid ounces of hardener and 2 x 55 lb (25 kg) bags of filler.

Theoretical Coverage

Consumption will vary based on tile size and joint width. Consult estimating guide CES-145.

Storage & Shelf Life

Maintain products in original packaging and sealed until ready for use. Estimated resin and hardener shelf life is 12 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	Gray
Density, ASTM C138	115 lb/ft ³ (1,842 kg/m ³)
Compressive strength, ASTM C579, 7-day	>11,000 psi (76 MPa)
Tensile strength, ASTM C307, 7-day	>2,000 psi (13.8 MPa)
Absorption, ASTM C413	0.1%
Bond strength to brick, pull blocks	Exceeds strength of brick
Maximum service temperature	190°F (88°C)

Rev 11/2025

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