



BNZ Materials, Inc.

Insulating and Finishing Cements

Refractory Products



BNZ Materials' Marinite Insulating and Finishing Cements are air-setting materials, mixed with water and applied in plastic form. They are designed for application to irregular surfaces where it is impractical to cut and apply pipe, block or other insulating products.

In addition to providing a pleasing, smooth surface appearance, BNZ cements fill voids and seal against heat losses. These strongly adhering insulations offer a hard surface which can be painted or weather-proofed if service temperatures are appropriate.

These cements are not normally recommended for exposure to combustion conditions, such as the hot face of furnace linings. In all applications, provisions should be made for the escape of water during drying and initial heat-up.

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Typical Applications

Selected types of BNZ Insulating and Finishing Cements can be utilized for:

Insulating and Sealing. For kiln and furnace refractory crowns and domes, and flat suspended arches. Insulation of small steel pipe fittings.

Leveling. For warped steel furnace shells prior to installing refractories. Finish coat over block insulation.

Repairs. For damaged block and pipe insulation.

Irregular Fill. For areas in refractory backup insulation where other types of insulation would be difficult to apply.

Advantages

Easy to Use. Mix with water and apply with trowel or shovel.

Reduce Inventory. Ideal for plant maintenance inventory to reduce number of items used for small jobs.

Reduce Construction Costs. Eliminate field cutting of block insulations for insulating irregular areas.

Available Types

508 Insulating Cement. An 1800°F service product, utilized in the refractory applications requiring a combination of insulating value and high temperature performance.

460 Insulating Cement. A 1600°F product, provided in higher density than 508 Insulating Cement. 460 Cement can be applied in heavy layers. It is frequently used as the principal covering on pipe sizes smaller than 4", then covered with a finish of 375 Finishing Cement.

375 Finishing Cement. A one coat finish which hardens to a smooth, crack-free surface in a few hours. This surface may then be painted with a water-base paint. Recommended for insulating small steel pipe fittings and as a finish over non-absorptive insulating surfaces or under very slow-drying conditions. Service temperature limit is 1400°F.

375-L Insulating Cement. Used specifically in the aluminum industry as a filler material and trough liner, 375-L Insulating Cement is a 1500°F product.

The physical and chemical properties of BNZ's Insulating and Finishing Cements represent typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice.

Typical Data

Physical Properties

	Type Cement			
	508	460	375	375-L
Temperature Limit, °F	1800	1600	1400	1500
Coverage per 100 lbs, applied & dried, bd ft	55	43	30	29
Mixing Water Required, approx., U.S. qt/100 lbs dry material	100	100	56	48
Color	Grey/Tan	Grey	White	White

Specifications

BNZ Insulating and Finishing Cements can meet the requirements of the following specifications when specified on the order. Certificates of compliance can be provided if requested on the order also.

Type Cement	Specifications
508	Federal SS-C-160A, Type IV, ASTM C 196
460	Federal SS-C-160A, Type III, Grade U ASTM C 195, Type III, Grade U, U.S.C.G. 164.009/167/0
375	Federal SS-C-160A, Type III, Grade F ASTM C 449, Type III, Grade F, U.S.C.G. 164.009/166/0

Standard Size Bags: 50 lbs

Warranty

BNZ Materials warrants that its products are manufactured in accordance with its applicable material specifications and are free from defects in workmanship and materials using BNZ's specifications as a standard. Every claim under this warranty shall be deemed waived unless in writing and received by BNZ within thirty (30) days of the date the defect was discovered and within one (1) year of the date of the shipment of the product.

BNZ MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, IN FACT OR IN LAW, INCLUDING WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY OR THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OTHER THAN THE LIMITED WARRANTY SET FORTH ABOVE.

Limitation of Liability

It is expressly understood and agreed that the limit of BNZ's liability shall be the resupply of a like quantity of non-defective product and that BNZ shall have no such liability except where the damage or claim results solely from breach of BNZ's warranty.

IT IS ALSO AGREED THAT BNZ SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES FOR ANY ALLEGED NEGLIGENCE, BREACH OF WARRANTY, STRICT LIABILITY, OR ANY OTHER THEORY, OTHER THAN THE LIMITED LIABILITY SET FORTH ABOVE.



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Insulating and Finishing Cements Plant Location

Zelienople

191 Front Street

Zelienople, PA 16063

Phone: (412) 452-8650
(800) 955-8650

FAX: (412) 452-1346

CS85,™ Marinite® & Transite® Plant Location

Billerica

400 Iron Horse Park

North Billerica, MA 01862

Phone: (978) 663-3401
(800) 888-0061

FAX: (978) 663-2735

BNZ Materials manufactures, and is a worldwide supplier of a range of specialty industrial insulations. BNZ Insulating Fire Brick has been manufactured continuously at Zelienople, Pennsylvania for over 50 years. Prior product identification was under the Johns-Manville JM trademark.

In addition to the Insulating Fire Brick product line, BNZ also manufactures many grades of Structural Insulations under the tradenames Marinite, Transite and CS85. These products are designed for use from ambient temperatures to 1800°F, in densities from 36 to 100 pcf, and will meet the demanding requirements of a variety of industries and their specific needs.

Contact BNZ for more information on these products and their applications.

