ErgonArmor
TECHNICAL COATING SOLUTIONS™

PRODUCT INFORMATION

CE-207
10/18 Supersedes 12/13

HB™ MORTAR

DESCRIPTION

HB Mortar is a chemically hardening, halogen free, 100% potassium silicate, acid-resistant brick mortar. It is especially suited for the installation and maintenance of linings in acid towers, tanks, process equipment, pressure leaching autoclaves and other similar systems in the acid-resistant construction industry. HB Mortar requires no acid wash and employs a unique, inorganic, patented hardening system which makes it particularly resistant to sulfation-hydration, crystal growths, and, when cured, water wash out. It conforms to ASTM C-466. HB Mortar is not resistant to acid fluorides or hydrofluoric acid. **Consult Corrosion Engineering specification CES-358 for complete installation details.**

AREAS OF USE

HB Mortar is used in the installation of acid-resistant brickwork in sulfuric acid plant equipment, chimneys, vessels, towers, floors and other areas where exceptional chemical resistance and physical properties are required. HB Mortar's excellent chemical resistance to weakly alkaline salts alternating with exposures to acids allows it to withstand a pH range of 0 to 9.

OUTSTANDING FEATURES

- Excellent resistance to acid exposure in the vapor zone of lined pressure vessels.
- HB Mortar is free of silico-fluoride hardeners and will not corrode steel substrates as it hardens. Release of HF from the mortar either during curing or when equipment is put into service is eliminated.
- HB Mortar does not evolve fumes or odors when mixing or hardening.
- HB Mortar does not contain calcium, sodium or fluoride based components. Because HB Mortar is not formulated with sodium, calcium, fluoride-based products, the possibility of destruction from sulfation-hydration reactions or the release of fluorides (which can subsequently lead to the formation of HF (hydrofluoric acid) and resulting severe chemical corrosion) is eliminated.
- HB Mortar has excellent resistance to concentrated sulfuric, nitric, hydrochloric and other acids.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	**HB MORTAR**
Color	White
Density (ASTM C138)	115 lbs/cf (1843 kg/m^3)
Work life / Set time @ 70° F(ASTM C308)	30-60 min / 5-8 hours
Compressive strength (ASTM C579) 7 days / 28 days	>2,800 psi (19 MPa) / >5,400 psi (37 MPa)
Tensile strength (ASTM C307)	>385 psi (2.7 MPa)
Flexural strength (ASTM C580)	>1,500 psi (10.3 MPa)
Bond strength to brick (Pull Blocks)	>315 psi (2.2 MPa)
Maximum service temperature	1,650°F (900°C)

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	**CODE**	**PACKAGING**	**MIX RATIO***
HB Powder	19575	55 lb bag	2.5:1.0 (Powder: Solution) A unit (154 lb) consists of 2 x 55 lb bags powder, and 1 x 44 lb pail solution
HB Solution HB Solution	19573 19574	44 lb pail 600 lb drum	

*NOTE: Mix ratios vary due to ambient air temperatures and the handling preferences of individual bricklayers. The above information is provided as a general guide only. For usage rates for specific masonry units, consult Corrosion Engineering estimating guide CE-145.

SAFETY PRECAUTIONS / DISCLAIMER

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 material safety data sheets before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.