

## TECHNICAL BULLETIN – M 537 B

### ACIDSIL™ HT Acid Resistant Mortar

#### Product Description

ACIDSIL™ HT Acid Resistant Mortar is a high-density silicate type mortar made with size-graded alumina fillers, which are extremely hard and abrasive resistant.

The liquid binder is a special potassium silicate designed for high solids loading plus good workability.

ACIDSIL HT is suitable for applications in service temperature up to 1800°F (982°C).

#### Application

Four (4) parts by weight of ACIDSIL™ HT Filler is added to 1 part of ACIDSIL™ HT Solution and mixed thoroughly. The working life is approximately 20-30 minutes depending on the temperature. Mortar that has begun to set should not be tempered by adding more solution. Mix small batches to match bricklayer's pace. Mortar joints should be 1/8" (3 mm) thick or smaller. Set time depends on the temperature; but will usually be 1-2 days. Additional heat will ensure the most complete set.

#### Safety

The ACIDSIL HT Filler should be carefully mixed to avoid excessive dust. OSHA approved dust respirators are to be worn during the mixing operation. As the solution is caustic, gloves, eye goggles and long sleeve shirts should be worn to protect the skin. Material Safety Data Sheets should be read before use.

#### Typical Physical Data

Bulk Density	147 lb/ft <sup>3</sup>	2,355 kg/m <sup>3</sup>
Compressive Strength	3,000 psi	21 MPa
Coefficient Thermal Expansion	3.4*10 <sup>-6</sup> in/in/°F	6.11*10 <sup>-6</sup> mm/mm/°C
Modulus of Rupture	1,000 psi	7 MPa
Tensile Strength	600 psi	4 MPa
Water Absorption	12 %	12 %
Apparent Porosity	13 %	13 %
Bond Strength	200 psi	1.4 MPa
Shrinkage	≤ 1.5 %	≤ 1.5 %
Color	White	White

The above physical data was derived by using ASTM Test Specifications C-905, C-579, C-580, C-307, C-143

#### Note

The information contained in this bulletin is believed to be accurate and reliable but is not to be construed as implying any warranty or guarantee of performance. Data are subject to reasonable variations and should not be used for specification purposes.

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