

DURO™ TYPE III-E Acid Resistant Brick**ACID RESISTANT FIRECLAY BRICK**

DURO™ Type III-E Acid Proof Brick meets ASTM Specification C-279 Type III for acid proof masonry. Type III Bricks have water absorption and acid solubility values lower than standard fireclay acid bricks. DURO Bricks are available in many sizes and shapes making them adaptable to acid resistant masonry construction of various size vessels and dished heads.

TYPICAL PHYSICAL DATA

Water Absorption	0.5 %	0.5 %
Bulk Density	141.0 lb/ft ³	2,258 kg/m ³
Acid Solubility	6.0 %	6.0 %
Compressive Strength	20,000 psi	138 MPa
Coefficient of Thermal Expansion	2.8*10 ⁻⁶ in/in/°F	5.0*10 ⁻⁶ mm/mm/°C
Modulus of Rupture	4,000 psi	28 MPa
Thermal Conductivity	9.0 BTU/in/hr-ft ² -°F	1.3 W/M-K
Tensile Strength	1,200 psi	8.3 MPa
Poisson's Ratio	0.33	0.33
Young's Modulus	8.6*10 ⁶ psi	5.9*10 ⁴ MPa

The above physical data was derive by using ASTM Test Specifications C-20, C-133, C-279 and C-885

TYPICAL CHEMICAL DATA**WEIGHT %**

Alumina	Al ₂ O ₃	31.5 %
Silica	SiO ₂	62.0 %
Titania	TiO ₂	1.3 %
Iron Oxide	Fe ₂ O ₃	1.7 %
Other		3.5 %

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

REV. 05/17 DSP

Trademarks

Registered trademarks contained in this document are owned by Knight Material Technologies in the United States and may be registered in other jurisdiction, unless otherwise stated. Refer to our website for trademark details: www.knightmaterials.com.

©2021 Knight Material Technologies - All Rights Reserved

5385 Orchard View Drive S.E. · P.O. Box 30070
East Canton, Ohio USA 44730
Phone: +1 (330) 488-1651
Email: sales@knightmaterials.com
www.knightmaterials.com