

TECHNICAL BULLETIN – B 104 E

DURO™ TYPE II-E

Acid Resistant Brick

Product Description

DURO™ Type II-E Acid Proof Brick meet ASTM Specification C 279 Type II for acid-proof masonry. DURO Brick are available in many more sizes and shapes than red shale brick, making them more adaptable to acid resistant masonry construction of various size vessels and dished heads.

All DURO Brick are true refractory, and therefore, are preferred for corrosion resistant work at high temperatures, in contrast to red shale products.

Typical Physical Data

Water Absorption	3%	3%
Bulk Density	132.0 lb/ft ³	2,115 kg/m ³
Acid Solubility	7%	7%
Compressive Strength	21,600 psi	150 MPa
Modulus of Rupture	2,890 psi	20 MPa
Tensile Strength	1,200 psi	8.3 MPa
Young's Modulus	9.2*10 ⁶ psi	6.3*10 ⁴ MPa
Coefficient Thermal Expansion	2.6*10 ⁻⁶ in/in/°F	4.7*10 ⁻⁶ mm/mm/°C
Thermal Conductivity	8 BTU/in/hr-ft ² -°F	1.2 W/M-K
Poisson's Ratio	0.27	0.27

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

Typical Chemical Data

Alumina	Al ₂ O ₃	28.7%
Silica	SiO ₂	63.8%
Titania	TiO ₂	1.4%
Iron Oxide	Fe ₂ O ₃	2.6%
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 any warranty or guarantee of performance. Data are subject to reasonable variations and should not be used for specification purposes.

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