

TECHNICAL BULLETIN – B 125 A

DURO™ Type II-P Acid Resistant Fireclay Brick

Product Description

DURO™ Type II-P Brick are a high-quality fireclay acid brick compliant with the ASTM-279 Type II designation for chemical resistant masonry DURO™ Type II-P Brick is a pressed brick with a formulation that provides close tolerance desirable for process vessel lining systems. This closer tolerance allows for a better and easier installation.

Maximum service life and reliability are achieved when installed as part of an engineered lining system. The DURO™ Type II-P Brick formulation provides a high degree of chemical resistance along with other advantageous mechanical properties offered by Knight fireclay acid brick.

DURO™ Type II-P Bricks are available in a wide variety of sizes and shapes making these bricks ideal for acid resistant masonry construction in various size vessels and dished heads.

Typical Physical Data

Water Absorption	4 %	4 %
Density	141.0 lb/ft ³	2,258 kg/m ³
Acid Solubility	7 %	7 %
Compressive Strength	14,000 psi	97 MPa
Coefficient of Thermal Expansion	3.0*10 ⁻⁶ in/in/°F	5.4*10 ⁻⁶ mm/mm/°C
Modulus of Rupture	2,900 psi	20 MPa
Thermal Conductivity	8.0 BTU/in/hr-ft ² -°F	1.2 W/M-K
Tensile Strength	700 psi	5 MPa
Poisson's Ratio	0.21	0.21
Young's Modulus	6.7*10 ⁶ psi	4.7*10 ⁴ MPa

The above physical data was derived by using ASTM Test Specifications C-20, C-67 and C-279

Typical Chemical Data

Alumina	Al ₂ O ₃	28.8 %
Silica	SiO ₂	63.2 %
Titania	TiO ₂	1.3 %
Iron Oxide	Fe ₂ O ₃	2.4 %
Other	-	4.3 %

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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