KNIGHT
MATERIAL TECHNOLOGIES

TECHNICAL BULLETIN

B 125 A

DURO™ Type II-P Acid Resistant Brick

ACID RESISTANT FIRECLAY BRICK

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 derive by using ASTM Test Specifications C-20, C-67 and C-279

TYPICAL CHEMICAL DATA		**WEIGHT %**
Alumina	Al_2O_3	28.8 %
Silica	SiO_2	63.2 %
Titania	TiO_2	1.3 %
Iron Oxide	Fe_2O_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 warranty or guarantee of performance. Data are subject to reasonable variations and should not be used for specification purposes.

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