



PROPERTIES OF C.B.P. CAST BASALT

Specific Gravity	2.9 - 3.0 g/cu ³ (181-187 lbs./ft. ³)
Compressive Strength	78,000 lb/in ²
Tensile Strength	5,100 lb/in ²
Bending Strength	6,000 lb/in ²
Hardness	8.5 Mohs scale
Dielectric Strength	100 Kv/in
Thermal Expansion	75-80 x 10 ⁻⁷ inch per °C per foot
Specific Heat	.2 Btu /lb. / °C
Vickers	726
Rockwell	60
BHN	613
Hazen Williams Friction Factor	105 New Basalt – 140 Worn Basalt

CHEMICAL COMPOSITION OF CAST BASALT

Chemical	Percentage
SiO ₂	43.5 - 47.0
Al ₂ O ₃	11.0 - 13.0
CaO	10.0 - 12.0
MgO	8.0 - 11.0
FeO	5.0 - 8.0
Fe ₂ O ₃	4.0 - 7.0
Na ₂ O	2.0 - 3.5
TiO ₂	2.0 - 3.5
K ₂ O	1.0 - 2.0
P ₂ O ₅	.5 - 1.0