

INSBLOK-19

Mineral Wool, Block Insulation

INSBLOK-19 is a 1900°F maximum service temperature lightweight mineral wool block insulation. **INSBLOK-19** exhibits very low thermal conductivity, good moisture resistance, easy handling, and easy cutting. Its organic binder gives **INSBLOK-19** excellent cold strength but will dissipate above 475°F. **INSBLOK-19** meets the ASTM C612 Class 5 specification. Its principal application is as a backup lining to lower furnace shell temperatures.

CHEMICAL ANALYSIS - Calcined Basis

Silica - SiO ₂	49.1%
Alumina - Al ₂ O ₃	12.1%
Iron Oxide - Fe ₂ O ₃	1.1%
Lime - CaO.....	27.7%
Magnesia - MgO	6.3%
Titania - TiO ₂	0.5%
Alkalies - Na ₂ O + K ₂ O.....	2.4%

A. P. Green is a supplier of high duty and super duty brick, insulating firebrick, high alumina brick, basic brick, silica brick, mortars, plastics, castables, and precast shapes as well as mineral wool block insulation and a complete ceramic fiber line. Stocks of these products are maintained in more than 90 locations throughout North America. And, having been in the refractories business for more than 80 years, A. P. Green can also provide the expertise and thorough technical assistance that you might require.

INSBLOK-19

Technical Data

MAXIMUM RECOMMENDED TEMPERATURE

Used Behind Rigid Refractories	1900°F	1040°C
Used Behind Ceramic Fiber Linings.....	1500°F	815°C

	<u>lb/ft³</u>	<u>g/cm³</u>
BULK DENSITY - ASTM C303	19	0.30

LINEAR SHRINKAGE - ASTM C356

Heated at 1900°F (1040°C) and Then Cooled		1.0%	
	<u>lb/in²</u>		<u>MPa</u>
MODULUS OF RUPTURE C203	115		0.8

COMPRESSIVE STRENGTH - ASTM C165

10% Deformation.....	<u>lb/in²</u>		<u>MPa</u>
	38		0.3

CORROSION ON STEEL

None

SURFACING BURNING CHARACTERISTICS - ASTM E-84

Flame Spread	25
Smoked Developed	5

SPECIFICATION COMPLIANCE - ASTM C612

Meets	Class 5 - Rigid
-------------	-----------------

THERMAL CONDUCTIVITY - ASTM C177

At a Mean Temperature of	<u>Btu·in/hr·ft²·°F</u>	<u>W/m·°C</u>
400°F (205°C)	0.46	0.07
600°F (315°C)	0.55	0.08
800°F (430°C)	0.71	0.10
1000°F (540°C)	0.84	0.12
1200°F (650°C)	1.05	0.15

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. Accordingly, test data cannot be taken as establishing maximum or minimum specifications.