



HS 800 Cellular Glass Insulation

HS 800 Cellular Glass is specially designed for high load bearing applications. It is an inorganic material consists of millions of uniform and independent closed cells. This unique structure creates a low thermal conductivity, no water absorption or vapor permeability, it also provides outstanding compressive strength, which makes it an ideal insulation material for a wide range of high load bearing applications.

Physical Property		Unit	Index
Density		kg/m ³	120± 10%
Thermal Conductivity	Avg. Value	W/(m·K) (20°C)	≤0.042
	Highest Single value		≤0.043
Compressive Strength	Avg. Value	MPa	≥0.80
	Lowest Single value		≥0.55
Chemical composition		/	Pure glass totally inorganic
Water vapor permeability		ng/(pa.m.s)	≤0.007
Water Absorption		Vol%	≤0.2
Linear coefficient of thermal expansion		/K	≤9 X10 ⁻⁶
Flexural strength		Kpa	≥310
Modulus of Elasticity		Mpa	≥800
Surface burning characteristics		/	Non-combustible

Thermal Conductivity Values at Select Mean Temperatures (ASTM C518, C177)														
Temperature	°C	204	149	93	38	24	10	-18	-46	-73	-101	-129	-157	-165
HS 800	W/(m K)	0.080	0.067	0.056	0.046	0.045	0.042	0.035	0.034	0.030	0.027	0.025	0.022	0.022





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Dimension

- Thickness : 25 to 180 mm
Size : 450 x 600 mm
* Other specification available upon request

Applications

- Cold & cryogenic tank bases
- Hot oil or asphalt tank bases
- Cold pipe line insulation
- Hot pipe line insulation
- Underground/ground steam or chilled water piping system
- Offing oil platform
- Circulation and dual temperature system
- Heating piping and equipment
- Liquid heat exchanger system
- Insulation & energy-saving for building

Unique Advantages

- Applicable for both cryogenic and high temperature
- High compressive strength
- Low thermal conductivity
- No water absorption, no permeability, excellent airtight property
- Good dimensional stability
- Non-combustible
- Corrosion/chemical/vermin resistant
- Inorganic and long service life
- Nontoxic, harmless, and eco-friendly
- Easy to work with

Standards & Certifications

- ASTM C552 Standard Specification for Cellular Glass Thermal Insulation
- ASTM C240 Standard Test Methods for Testing Cellular Glass Insulation Block
- ASTM C177 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by means of the Guarded-Hot-Plate Apparatus
- ASTM C518 Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- ASTM C165 Test Method for Measuring Compressive Properties of Thermal Insulations
- ASTM E96/E96M Test Methods for Water Vapor Transmission of Materials
- ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials