



General Product Information:

Cellular Glass insulation is manufactured by melting glass powder, adding a foaming agent and creating a bun of insulation. This material can then be cut and shaped into various insulating products. It is comprised of 100% glass (no binders or filler) with individual sealed glass cells. This creates a product with excellent thermal and floatation properties. Since the material is closed cell insulation, it has zero moisture permeability. The glass composition also makes it resistant to cold and heat, providing a wide temperature service range. The product does not age and produces consistent insulation values. Because the material will not “wick” any fluid, it is preferable to use when flammable chemicals are present. High compressive strength, and dimensionally stable.

Description & Common Applications:

The insulation is commonly used within industrial facilities, offshore platforms and cold storage. Other applications include Chilled Water Pipes and Equipment, Stainless Steel Hot Water lines, Hot Oil Piping & Equipment, LNG Piping, Green Roof Insulation, Underground Steam, Cold process Pipe and Equipment, Tanks, Ethylene Piping and Equipment, Fireproof Building Panels.



Technical Data Sheet Cellular Glass Insulation

Compliance and Performance: ASTM C 552 Standard Specification for Cellular Glass Thermal Insulation

Average Density: 120kg/m³, 7.5lb/ft³, ASTM C303-2010

Compressive Strength: Average – 700 kpa, 101 psi, ASTM C165–2012

Flexural Strength: Average – 606 kpa, 88 psi, EN 12089

Service Temperature: -268°C / 480°C, -450°F / 896°F

Thermal Conductivity: Average .043 W/(m K), 0.32 BTU in / (hr ft² F), ASTM C177 – 2013 @10°C

Water Vapor Permeability: 0.00 perm – in. ASTM E96 - 2000

Moisture Resistance: Moisture Sorption - 0.5% (Water % by Volume) ASTM C240

Closed-Cell Content: 97% ASTM D2856-1994, ISO 4590

Corrosive Resistance: Corrosiveness to Steel – Pass, Chloride Content - <25ppm, EN 13468

Linear Expansion Coefficient: Product does not shrink or swell, (-196 °C - 25°C), ASTM E228-2011

Combustibility: Non-Combustible – Will not burn, Flame Spread 0 – Smoke Developed 0, ASTM E136-2004

Please note, all testing has been completed in accordance to the above international standards

All data pertaining to the performance of the material, has been provided by the Manufacturer Zhejiang Dehe Insulation Technology

Key Application Qualifiers:

- High Compressive Strength
- Non-combustible
- Closed Cell – 0 Perm
- Fire resistant
- Excellent thermal resistance
- Does not promote growth of fungi or mildew
- CFC and HCFC free product and process
- Made from natural and recycled materials



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