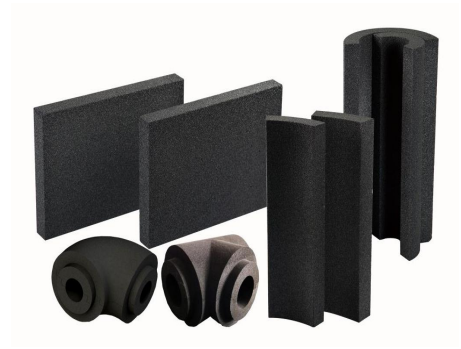


## Cellular Glass (National Standard)

### 1. Product Introduction

Cellular Glass is a rigid inorganic thermal insulating product, composed of uniform closed cells. It is made from pure glass and foaming agents, through high temperature foaming and annealing. It reserves the chemical stability of glass, and characterized by low density, low thermal conductivity, impermeability, no water absorption, incombustibility anti-mildew/rat, high mechanical strength but easy to cut. It can bear all kinds of chemical erosion except the hydrofluoric acid.



### 2. Properties (Comply with JC/T 647)

Physical Property		Unit	ZES 140	ZES 160	Testing Method
Density		kg/m <sup>3</sup>	140±10%	160±10%	GB/T5486
Thermal Conductivity	Avg. Value	W/(m · K) (10°C)	0.050	0.056	GB/T 10294/ GB/T 10295
	Highest Single Value		0.053	0.059	
Compressive Strength	Avg. Value	MPa	1.0	0.7	JC/T 647 Appendix A
	Lowest Single Value		0.7	0.50	
Flexural Strength		Mpa	≥ 0.4	≥ 0.5	JC/T 647 Appendix B
Water Vapor Permeability		ng/(pa.m.s)	≤ 0.007	≤ 0.05	GB/T 17146-1997 Dry Method
Water Absorption by Vol		Vol%	≤ 0.5		JC/T 647 Appendix C
Service Temp		°C	-268~+480		
Linear Thermal Expansion Coefficient		1/°C	9×10 <sup>-6</sup>		GB/T 7320
Dimension		mm	L: 610mm(max)		

### 3. Product Application

It is mainly applied to the insulation for low temperature/cryogenic pipes, vessels, tanks and equipment. It can also be used in dual temperature system.

#### **4. Packing and Storage**

- (1) Carton packing, special packing is available on request.
- (2) During shipment, keep cartons tightly closed, keep stacks upright to protect from collision.  
If necessary, reinforcement can be applied.
- (3) Store in weatherproofing, dry and ventilated environment, no more than 6 layers stack is preferred.

#### **5. Application and Cautions**

- (1) Cellular Glass is fragile, shall be handled gently, avoid rolling or collision.
- (2) Fix cellular glass segments by stainless steel band when applied in pipe/equipment insulation.
- (3) Cut it with saw during application.