

## **Thermal** Foam Glass/Cellular Glass

Properties		Physical Index	
Item	Unit	ThermalCold	ThermalCold-C552-91
Density	kg/m <sup>3</sup>	Min 110	Min 107
Maximum use temperature	°C	Max 145	Max 147
		-270~+550	-268~+427
Thermal conductivity W/m K at °C	204	0.088	0.094
	149		
	93		
	38		
	24		
	10		
	-18		
	-46		
	-73		
	-101		
Flexural strength	kpa	0.032	0.037
		0.027	0.035
Compressive strength	kpa	≥550	≥448
Linear expansion coefficient:	Wm/m °C	≥430	≥414
Moisture absorption rate	%	<8.1X10-6	<9X10-6
Water absorption rate per Volume	%	<0.2	

### Standard size and packaging and Dimension tolerance

Class	Items	Sizes	Tolerances
Pipe section or slab	Length (mm)	1000, 610, 500,457,400,300	+3, -2
	Inside diameter (mm)	16---3560	+3, -2
	Thickness (mm)	25---180	+3, -2
Standard packaging	Polythene bags inside and Cardboard cartons outside		

Foam glass (Cellular glass): Cellular glass is made using glass dust as the basic material. The texture is achieved by adding foaming agent and gets roasted when passed through tunnel kiln. It is the best low-temperature heat insulation material at present in the world market. It is noted for its low unit weight, minor thermal conductivity, anti-moisture absorption, anti-combustion, anti-mouldable, high mechanical strength, easy processing, resisting all chemical contacts except by drogen fluoride, poisonless, stable chemical function, ability to be used in a wide scope from extremely low to high temperature. Its excellent heat-insulation property can last for many years without any degeneration. Another advantage is that cellular glass itself is fireproof and shockproof. When it is exposed to bad conditions as extreme cold, under-ground, open exposure to air, direct firing, wetness and with chemical corrodents. It is not only safe but durable. It is called "permanent heat-insulation material that need not be replaced" So it is widely used in oil industry, cold storehouse, under-earth projects, ship-building, national defence and military projects etc.