



Aerogel Foam Concrete is a composite inorganic insulation material that brings together the advantages of foam concrete in terms of workability and sustainability (low embodied energy) with the thermal insulation capacity of the aerogels. The material is suitable for application in lightweight sandwich facade elements for new buildings and renovation and for indoor partition walls. The material is developed by **Aercrete Technology AB** in collaboration with **Svenska Aerogel AB**.

Name of product	Aerogel Foam Concrete		
Function of product	Insulation		
Form	Bulk material (fluid/solid)		
Raw Material	Aerogel, cement, water and surfactant		
Properties			
Property	Unit	Value	Test methods/standardisation
Chemical/physical properties			
Bulk density	kg/m ³	200	Wet density
Structures and construction			
Dimensions of product	m		Customised dimensions
Mechanical properties			
Compressive strength	N/mm ²	0.25	EN 12390-3
Stiffness	N/mm ²	5	
Thermal properties			
Thermal conductivity	mW/(m·K)	30-35	EN 12667
Hygrothermal properties			
Water vapour diffusion resistance factor			
Moisture buffer value	kg/(m ² ·%RH)		
Water vapour permeability	kg/(m·s·Pa)		
Acoustic properties			
Dynamic stiffness, s'	MN/m ³	500	ISO 9052-1
Fire Safety			
Reaction to fire		Incombustible	
Resistance to fire	Minutes		
Environmental properties			
Embodied energy (% renewable)	MJ/kg		
Embodied energy (% renewable)	MJ/FU*		*FU= 1m ² of insulation material for R=1 m ² K/W
GHG emissions	kg CO ₂ eq		
GHG emissions	kg CO ₂ eq/FU*		*FU= 1m ² of insulation material for R=1 m ² K/W
TVOC (SVOC)	µg/m ³		
Radon	Bq/m ³		
Photocatalytic capacity			