Foam concrete is a pumpable and self-levelling cementitious material with a typical air content between 40-80% and void sizes between 0.1-1.5 mm. It is developed by **Aercrete Technology AB** through patented technology, using synthetic foam (Aercell-A7®). Due to the low density and highly porous structure, it has good functional properties such as fire resistance, thermal conductivity and acoustic performance. It is mainly used as filling material, soil stabilisation, road sub-bases, insulation of foundations, runway arresting systems and sandwich fill for precast units and concrete blocks.

Name of product	Foam concrete
Function of product	Insulation
Form	Bulk material (fluid/solid)
Raw Material	Cement, water and surfactant

Properties			
Property	**Unit**	**Value**	**Test methods/standardisation**
Chemical/physical properties			
Bulk density	kg/m^3	400-1600	Wet density
Structures and construction			
Dimensions of product	m		Customised dimensions
Mechanical properties			
Compressive strength	N/mm^2	1-10	EN 12390-3
Flexural strength	N/mm^2	0.2-1	EN 12390-5
Modulus of elasticity	kN/mm^2	1-10	EN 12390-13
Stiffness	N/mm^2	20	(@ 400 kg/m^3)
Shrinkage	mm/m	4.5-0.5	
Thermal properties			
Thermal conductivity	W/(m·K)	0.10-0.65	EN 12667
Specific heat capacity	J/(kg·K)	1050	
Hygrothermal properties			
Water vapour diffusion resistance factor			
Moisture buffer value	$kg/(m^2 \cdot \%RH)$		
Water vapour permeability	kg/(m·s·Pa)		
Acoustic properties			
Dynamic stiffness, s'	MN/m^3	1500	ISO 9052-1 (@ 800 kg/m^3)
Sound reduction index, $R_W(C;C_{tr})$	dB	40(0;-3)	ISO 10140-2 (@ 800 kg/m^3)
Fire Safety			
Reaction to fire		Incombustible	
Resistance to fire	Minutes		
Environmental properties			
Embodied energy (% renewable)	MJ/kg	6.58 (3.7%)	(@ 400 kg/m^3)
Embodied energy (% renewable)	MJ/FU*		*FU= 1m² of insulation material for R=1 m²K/W
GHG emissions	kg CO_2 eq	0.58	per kg (@ 400 kg/m^3)
GHG emissions	kg CO_2 eq/FU*		*FU= 1m² of insulation material for R=1 m²K/W
TVOC (SVOC)	$\mu g/m^3$		
Radon	Bq/m^3		
Photocatalytic capacity			