



Structural Voidformer



Voidformer is used to replace construction materials such as concrete within civil engineering and construction applications. This may allow for a reduction in loading as the self weight of the concrete is reduced without an impact on required load capacity performance.

Voidformer is supplied as a block, cut sheet or bespoke shaped pieces to suit the application or project. Standard block sizes are 2400mm x 1200mm x 600mm.

VOIDFORMER (VFS)	20	45	70	90	100	120	140	160	190
Nominal Density (kg/m ³)	15	20	25	30	35	38	43	48	55
Design Load Long Term Creep (kPa) EN1606	21	30	45	60	75	90	105	120	150
Maximum Cyclic Load kPa EN 826	20	28	42	56	70	84	98	112	140
10% Compressive Strength (kPa) EN 826	70	100	150	200	250	300	350	400	500
Shear Strength (kN/m ²) EN 12090	55	75	100	125	170	225	260	300	375
Bending Strength (kN/m ²) EN 12089	115	150	200	250	350	450	525	600	750

Designing for Long Term Compressive Creep

Where the application requires Structural Voidformer to accommodate permanent long term imposed loads the designer should take into account long term compressive creep.

Performance of Jablite Structural Voidformer is tested in accordance with BS EN 1606. This standard allows an extrapolation for compressive creep for 10, 20 and 50 years.

Jablite Structural Voidformer will have a deformation less than 2% after 50 years when loaded to 30% of the 10% compression value.

Compressive Strength Under Cyclic Load

On the basis of extensive studies it has been concluded that a material factor of 1.25 should be applied to the safe design value which is taken as 35% of the 10% compressive strength.

Under moderate loads (less than 1% deformation) the material remains elastic under cyclic loading. This maintains a deformation under cyclic loading of less than 0.4%, therefore there will be no permanent deformation in the geofoam.