EPS - EXPANDED POLYSTYRENE

THERMAL INSULATION
EPS is a lightweight closed-cell material with excellent stable thermal properties based on entrapped air.
MOISTURE RESISTANCE
EPS is non-hygroscopic and is therefore moisture resistant whilst retaining it's thermal properties.
COMPATIBILITY
EPS is compatible with cement, concrete, brick; masonry, mortars, plaster and bitumen based damp-proof membranes. It must not be used in contact with membranes based on coal tar pitches or other building materials containing solvents
EASE OF INSTALLATION
EPS products are light in weight and easy to handle, store and install. No specialised equipment or specialist trades are required.
ENVIRONMENTAL SAFETY
EPS is not affected by bacteria, moulds or fungi, and will not provide nutrient value for insects or vermin. It is non-toxic, non-irritant and odourless. It does not contain CFC's or HCFC's. EPS has a Global Warming Potential (GWP) of zero and an Ozone Depletion Potential (ODP) of zero.
DURABILITY
EPS is rot proof and durable, and will remain effective as an insolent for the life of the construction (when installed as recommended).
PHYSICAL PROPERTIES
The physical properties of each grade of EPS are listed below in Table 1. Test methods are as required by EN 13163.
COMBUSTIBILITY
EPS is a combustible material when tested to BS476: Part 4. However, Type A (Flame Retardant Additive) is specially formulated to restrict the extent of burn when tested to BS4735: 1974. Type A (Flame Retardant Additive) is classified ' P ' : Not easily ignitable when tested to BS476: Part 5: 1979.

TABLE1 DECLARED VALUES

	EPS 70	EPS 100	EPS 150	EPS 200	PLUSTHERM
Length	L1	L1	L1	L1	L1
Width	W1	W1	W1	W1	W1
Thickness	T1	T1	T1	T1	T1
Square ness	S1	S1	S1	S1	S1
Flatness	P2	P2	P2	P2	P2
Compressive strength @ 10% Def (k/pa)	70	100	150	200	70
Compressive strength @ 1% Def (k/pa)	21	45	70	90	21
Bending Strength (k/pa)	115	150	200	250	115
Thermal Conductivity (w/mk)	0.038	.036	.034	.031	.030
Dimensional Stability @ 23°C/50% RH	DS (N) 2	DS (N) 2	DS (N) 2	DS (N) 2	DS (N) 2
Dimensional Stability @ 23°C/90% RH	DS (23,90) 1	DS (23,90) 1	DS (23,90) 1	DS (23,90) 1	DS (23,90) 1
Water absorption by immersion - total % -partial (kg/m2)	WL(T) 3 0.05	WL(T) 3 0.1	WL(T) 5 0.09	WL(T) 5 N/A	WL(T) 3 0.05
Water absorption by diffusion	WD(V)10	WD(V)10	WD(V)10	N/A	N/A
Typical Density	13-14kg/m3	18kg/m3	22kg/m3		18kg/m3