

EXPANDED POLYSTYRENE INSULATION BOARDS FOR ROOFING

WHAT ARE SPRA COMPONENT QUALITY STANDARDS?

SPRA Component Quality Standards set a benchmark of performance for products used in single ply membrane systems. They are a vital aid to specification and define the minimum technical standard for membership of the Association. All SPRA CQS are available by download from www.spra.co.uk

PRODUCT DESCRIPTION

Expanded polystyrene is manufactured by fusing together expanded beads of polystyrene in a high pressure steam.

TYPICAL APPLICATIONS

Warm roof constructions in plain or tapered form. Overlays to existing steel panel roofs (special products).

HARMONISED EUROPEAN PRODUCT SPECIFICATION

EN 13163 Thermal insulation products for buildings – Factory made products of expanded polystyrene (EPS) – Specification.

REQUIREMENTS				
Product characteristic	Symbol	Characteristic value/class	Tolerances	Test Method
DIMENSIONAL				
Thickness	d		$\pm 2\text{mm}$	BS EN 823
Width	b	W1	$\pm 0.6\%$ or $\pm 3\text{mm}$	BS EN 822
Length	l	L1	$\pm 0.6\%$ or $\pm 3\text{mm}$	BS EN 822
Deviation from Squareness (on length & width)	S_b	S1	$\pm 5\text{mm} / 1000\text{mm}$	BS EN 824
Flatness	S_{max}	P1	$\pm 30\text{mm}$	BS EN 825
Dimensional stability under laboratory conditions	—	0.5% / DS(N)5		BS EN 1603
THERMAL				
Conductivity at 10°C	λ_D	0.035W/mK	—	BS EN 12667
EPS150	λ_D	0.034W/mK	—	or
EPS200				BS EN 12939
REACTION TO FIRE				
Euroclass	—	E, Flame retardant modified boards	—	
MECHANICAL				
Density	—			
Compressive strength at 10% deformation		150kPa / CS(10)150 200kPa / CS(10)200		BS EN 826 BS EN 826
Design load at 1% deformation		70kPa 90kPa		
Bending strength	σ_{mt}	200kPa / BS 200 250kPa / BS 250		
MOISTURE				
Water Vapour Transmission	μ	1		BS EN 12086

SPRA ASSOCIATE MEMBERS

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