



Product/System range for assessment

XPANDA – an open cell polyurethane foam impregnated with flame retardant resin

Product range:

Gap to be filled (mm)	Tape width into joint depth (mm)	XPANDA grade
1-3	15	XPANDA 1-3
2-4	15	XPANDA 2-4
3-7	15	XPANDA 3-7
5-10	20	XPANDA 5-10
7-12	20	XPANDA 7-12
8-15	25	XPANDA 8-15
10-18	30	XPANDA 10-18
13-24	30	XPANDA 13-24
24-40	35	XPANDA 24-40

Performance claims

Technical data and requirements	Classification and categories	Norm
Impregnation	72% (Flame-retardant synthetic resin)	
Building materials class	BG1	DIN 18542
Fire resistance	B1 (non-flammable)	DIN 4102
Resistance to driving rain	> 600 Pa	DIN 18542
Air permeability	$a < 0.1 \text{ m}^3/[\text{h.m.}(\text{daPa})^7]$	DIN 18542
Water vapour diffusion resistance index	$\mu < 10$	EN ISO 12572
Sound Reduction Index	$R_{s,W} = 44\text{dB}$	EN ISO 717-1
Heat conductivity	0.046 W/m.K	ISO 8302
Temperature cycle resistance	-20°C to 80°C	DIN 18542
Resistance to light and moisture	Weathering resistance satisfied	DIN 18542
Compatibility with neighbouring building materials	Requirements satisfied	DIN 18542
Storage time and temperature	24 month, 1°C to 25°C	Information from manufacturer

Other components

Incoming product	Property measured	Method of test	Frequency of testing	Acceptance limits
Foam	Gross density	NF EN ISO 845	Once per block	28 ± 5%
	Compressive strength	NF EN ISO 3386-1		3.5 ± 15% to 40%
	Tensile strength and elongation at break	NF EN ISO 1798		>120 % >110 kPa
	Permanent deformation	NF EN ISO 1856		<5%
Acrylic impregnating	Colour, physical condition (dispersion)	Visual	Once per lot	Grey
	pH-value	Supplier method		5.5 to 7.5
	Solids content	Supplier method		53.5% to 56.5%
	Viscosity	Supplier method		300 to 500 mPa.s
Adhesive			Once per lot (number fabrication)	Certificate of conformity

Health and Safety Data Sheets

The product doesn't present any risk concerning health and safety considerations.

Test Results – Nov 2023

Req. Nr	Characteristics	Classification Standard	Test or Calculation Standard	Value	Classification
4.2	Resistance to Wind Load	EN 12210 : 2016	EN 12211 : 2016	n/a	n/a
4.5	Water Tightness (Test Method A)	EN 12208 : 2000	EN 1027 : 2016	600Pa	600Pa
4.14	Air Permeability	EN 12207 : 2000	EN 1026 : 2016	600Pa	Class 4

Note : Water did not come from the foam at all, water tightness achieved Class 11A

*Full certificate available on request

Xpanda 600 is made of compressed foam, within the range of use, Xpanda will compress and decompress while keeping its weathertight specification.

e.g. Xpanda 7 (5-14) will fill a gap from 5mm to 14 mm and will be able to absorb the movement from 5 to 14 mm. Please see chart for additional sizes