



# TECHNICAL DATA

## Building Solutions

### XENERGY™ LB



Extruded polystyrene foam XPS (EN13164) - HFC free - gray color				
EN designation code	XPS-EN13164-T3-CS(10\Y)300-DS(TH)-TR400			
Property	Standard	Value	Unit	EN code
<b>Thermal conductivity</b>				
Declared value <sup>1)</sup>				
- Thickness 30 - 50 mm	EN 13164	0.030	W/mK	$\lambda_D$
- Thickness > 50 - 80 mm	EN 13164	0.031	W/mK	$\lambda_D$
- Thickness > 80 - 120 mm	EN 13164	0.032	W/mK	$\lambda_D$
<b>Mechanical properties</b>				
- Compressive strength $\sigma_m$ or compressive stress at 10% deformation $\sigma_{10}$ ( $\perp$ to the faces)	EN 826	0.3 300	N/mm <sup>2</sup> kPa	<b>CS(10\Y)300</b>
- Compression modulus of elasticity ( $\perp$ to the faces)	EN 826	12	MPa	-
- Tensile Strength $\sigma_{mt}$ ( $\perp$ to the faces)	EN 1607	500	kPa	<b>TR400</b>
- Tensile modulus of elasticity ( $\perp$ to the faces)	EN 1607	12	MPa	-
- Shear Strength	EN 12090	250	kPa	-
- Shear modulus of elasticity	EN 12090	8	MPa	-
<b>Hygrometric properties</b>				
- Long term water absorption by immersion (28 days)	EN 12087	$\leq 1.5$	vol %	-
- Water vapour diffusion resistance factor ( $\mu$ ), typical	EN 12086	100	-	-
<b>Dimensional stability:</b>				
- Under specified temperature and humidity conditions: 48h at 23°C / 90%RH	EN 1604	$\leq 2$	%	<b>DS(TH)</b>
<b>Dimensions and tolerances<sup>2)</sup></b>				
- Thickness range	EN 823	30 - 120	mm	-
- Thickness tolerance	EN 823	-/+ 0.5	mm	<b>T3</b>
- Width	EN 822	600	mm	-
- Width tolerance	EN 822	- 0/+3	mm	-
- Length tolerance	EN 822	- 0/+10	mm	-
<b>Other properties</b>				
- Reaction to fire	EN 13501-1	E	-	<b>Euroclass</b>
- Linear thermal expansion coefficient	-	0,07	mm/m.K	
- Maximum service temperature	-	+75	°C	
- Capillarity	-	0	-	
- Density, typical	EN 1602	33	kg/m <sup>3</sup>	
- Surface:	-	-	-	<b>Planed</b>
- Edge profile:	-	BE	-	<b>Butt Edge</b>

1) Declared thermal conductivity  $\lambda_D$  according to EN 13164 (§ 4.2.1; Annex A; Annex C.2 and C.4.1)

2) Products with special dimensions or closer tolerances may be available upon request

#### Thermal resistance $R_D$ according to EN 13164 (§ 4.2.1):

Thickness [mm]	30	40	50	60	70	80	90	100	120
$R_D$ [m <sup>2</sup> .K/W]	1.00	1.35	1.65	1.95	2.25	2.60	2.80	3.15	3.75

#### Note:

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