

## Technical Data

## STYROFOAM™ HD 300F-X

Extruded Polystyrene Foam XPS (EN13164) – free from HCFC – blue color

Properties <sup>1)</sup>	CE-Code	Standard	Unit	Value
Density		DIN EN 1602	kg/m <sup>3</sup>	45
Thermal conductivity @ 10°C		DIN EN 12667/ DIN EN 12939	W/m·K	0,025 <sup>6)</sup>
Thermal conductivity $\lambda_D$		DIN EN 13164	W/m·K	0,029
$\lambda$ design value according to Z-23.15-1476		DIN 4108-4 DIN 4108-4	W/m·K W/m·K	0,029 (40 – 70 mm) 0,030 (> 70 mm)
Compressive stress or compressive strength				
@ 10% deformation <sup>2)</sup>	CS(10\Y) $\sigma_m$	DIN EN 826	N/mm <sup>2</sup> <sup>3)</sup>	0,7
Compressive modulus <sup>2)</sup>	–	DIN EN 826	N/mm <sup>2</sup>	25
Compressive creep				
(50 years) $\leq$ 2% deformation <sup>2)</sup>	CC(2/1,5/50) $\sigma_c$	DIN EN 1606	N/mm <sup>2</sup>	0,21
Tensile strength <sup>2)</sup>	TR900	DIN EN 1607	N/mm <sup>2</sup>	1
Tensile modulus <sup>2)</sup>	–	DIN EN 1607	N/mm <sup>2</sup>	25
Shear strength	–	DIN EN 12090	N/mm <sup>2</sup>	0,5
Shear modulus	–	DIN EN 12090	N/mm <sup>2</sup>	14
Water vapour diffusion resistance factor ( $\mu$ )	–	DIN EN 12086	–	150
Long term water absorption by total immersion	WL(T)0,7	DIN EN 12087	Vol.-%	$\leq$ 0,7
Dimensional stability under specified temperature and humidity	DS(TH)	DIN EN 1604	%	$\leq$ 2
Deformation under specified compressive load and temperature	DLT(2)5	DIN EN 1605	%	$\leq$ 5
Reaction to fire	–	DIN 4102	–	B1
Reaction to fire Euroclasse	–	EN 13501-1	–	E
Coefficient of linear thermal expansion	–	–	mm/m·K	0,07
Temperature limits	–	–	°C	-50/+75
Capillarity	–	–	–	0
Edge profile	–	–	–	butt
Surface finish	–	–	–	planed/grooved
Dimensions <sup>4)</sup>				
Thickness	–	DIN EN 823	mm	40 – 100
Width	–	DIN EN 822	mm	600
Length	–	DIN EN 822	mm	2500
Tolerances <sup>4)</sup>				
Thickness	T3	DIN EN 823	mm	-0,5/+0,5
Width < 700 mm	–	DIN EN 822	mm	-0/+3
Length	–	DIN EN 822	mm	-0/+10
Applications <sup>5)</sup>		DIN 4108, T10		DAD, WAB

1) The properties refer to thickness ranges mentioned in the table.

2) Measured in thickness direction

3) 1 N/mm<sup>2</sup> = 10<sup>3</sup> kPa; 1 kPa = 10<sup>-3</sup> MPa

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

5) Only valid for the use of products in building applications. Details are given for potential applications, which however for the final building product need to be defined by its fabricator.

6) Measured after 60 days



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**CE Kennzeichnung:**  
XPS-EN13164-T3-CS(10\Y)700-CC(2/1,5/50)  
210-WL(T)0,7-DS(TH)-TR900