



TECHNICAL DATA XPS FOAM

Property	Unit ¹⁾	Code according to DIN EN 13164	CS 1150	CS 1250	CS 2160	CS 2260	Standard
Edge profile							
Surface			Skin	Skin	Skin	Skin	
Length x Width	mm		1000 x 500	2000 x 500	1000 x 600	2000 x 600	
Density	kg / m ³		36	36	36	36	DIN EN 1602
Thermal conductivity	λ_b [W/(m K)]		λ_b	λ_b	λ_b	λ_b	DIN EN
Thermal resistance	R_b [m ² ·K/W]		R_b	R_b	R_b	R_b	13164
	30 mm	-	0.032 0.95	0.032 0.95	0.032 0.95	0.032 0.95	
	40 mm	-	0.034 1.25	0.034 1.25	0.034 1.25	0.034 1.25	
	50 mm	-	0.034 1.50	0.034 1.50	0.034 1.50	0.034 1.50	
Thickness	60 mm	-	0.034 1.80	0.034 1.80	0.034 1.80	0.034 1.80	
	80 mm	-	-	0.036 2.30	0.036 2.30	0.036 2.30	
	100 mm	-	-	0.038 2.80	0.038 2.80	0.038 2.80	
	120 mm	-	-	0.038 3.20	0.038 3.20	0.038 3.20	
	140 mm	-	-	-	0.038 3.65	-	
Compressive stress or compressive strength at 10% deformation	kPa	CS(10\V)	150 - 200 ²⁾	200 - 300 ³⁾	300	500	DIN EN 826
Compressive creep over 50 years at < 2% deformation	kPa	CC(2/1.5/50)	60 - 80 ²⁾	200 - 300 ³⁾	130	180	DIN EN 1606
Certificated compressive stress under load bearing floor slabs	kPa	-	-	-	130	180	DIBT Z - 23, 34 - 1325
Adhesive strength concrete	kPa	TR 200	-	> 200	-	-	DIN EN 1607
Shear strength	kPa	SS	> 300	> 300	> 300	> 300	DIN EN 12090
Compressive modulus of elasticity	kPa	CM	10,000	15,000	20,000	30,000	DIN EN 826
Dimensional stability 70° C; 90% r.h.	%	DS(TH)	≤ 5%	≤ 5%	≤ 5%	≤ 5%	DIN EN 1604
Deformation behavior load 20 kPa; 80° C	%	DLT(1)5	≤ 5%	≤ 5%	≤ 5%	≤ 5%	DIN EN 1605
Deformation behavior load 40 kPa; 70° C	%	DLT(2)5	≤ 5%	≤ 5%	≤ 5%	≤ 5%	DIN EN 1605
Linear coefficient of thermal expansion	mm/(m·K)						DIN
Longitudinal		-	0.08	0.08	0.08	0.08	53752
Transverse		-	0.06	0.06	0.06	0.06	
Reaction of fire	Class	-	E	E	E	E	DIN EN 13501-1
Long term water absorption by immersion	% v/v	WL(T)0.7	0.2	0.3	0.2	0.2	DIN EN 12087
Long term water absorption by diffusion ²⁾	% v/v	WD(V)3	< 3	-	< 3	< 3	DIN EN 12088
Water vapour transmission ²⁾		MU	150 - 50	200 - 80	150 - 50	150 - 80	DIN EN 12086
Freeze - thaw - resistance	% v/v	FT2	≤ 1	≤ 1	≤ 1	≤ 1	DIN EN 12091
Maximum service temperature	°C	-	-	75	75	75	-

¹⁾ N/mm² = 1 Mpa = 1,000 kPa

²⁾ Depends on thickness

³⁾ Thickness ≥ 30 mm

⁴⁾ Thickness 30 and 40 mm; 2,510 x 610 mm



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Density	kg / m ³		36	36	36	36	DIN EN 1602
Thermal conductivity	λ_D [W/(m K)]		λ_D	λ_D	λ_D	λ_D	DIN EN
Thermal resistance	R_D [m ² -K/W]		R_D	R_D	R_D	R_D	13164
	30 mm	-	0.032 0.95	0.032 0.95	0.032 0.95	0.032 0.95	
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Long term water absorption by immersion	% v/v	WL(T)0.7	0.2	0.3	0.2	0.2	DIN EN 12087
Long term water absorption by diffusion ²⁾	% v/v	WD(V)3	< 3	-	< 3	< 3	DIN EN 12088
Water vapour transmission ²⁾		MU	150 - 50	200 - 80	150 - 50	150 - 80	DIN EN 12086
Freeze - thaw - resistance	% v/v	FT2	≤ 1	≤ 1	≤ 1	≤ 1	DIN EN 12091
Maximum service temperature	°C	-	-	75	75	75	-

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