

# JACKODUR® Technical data

Extruded polystyrene foam (XPS) according to EN 13164

Properties	Symbol	Declaration/ Unit	Standard	Thickness mm	NEW EVO 300 Standard		Plus 300 Standard		Plus 300 Gefiniert		KF 300 Standard		KF 300 Gefiniert		KF 500 Standard		KF 700 Standard			
					$\lambda_D$	$R_D$	$\lambda_D$	$R_D$	$\lambda_D$	$R_D$	$\lambda_D$	$R_D$	$\lambda_D$	$R_D$	$\lambda_D$	$R_D$	$\lambda_D$	$R_D$		
Density		kg/m <sup>3</sup>	EN 1602		> 30	> 33	> 33	> 33	> 30	> 30	> 35	> 38								
Thermal conductivity	$\lambda_D$	W/(m·K)	EN 13164	20	-	-	-	-	0,034	0,55	0,034	0,55	-	-	-	-	-	-		
				30	-	-	-	-	0,034	0,85	0,034	0,85	-	-	-	-	-	-	-	
				40	0,032	1,25	-	-	0,034	1,15	0,034	1,15	0,034	1,15	0,034	1,15	-	-	-	-
				50	0,032	1,55	0,027	1,85	0,034	1,45	0,034	1,45	0,034	1,45	0,034	1,45	0,034	1,45	0,034	1,45
				60	0,032	1,95	0,027	2,20	0,034	1,75	0,034	1,75	0,034	1,75	0,034	1,75	0,034	1,75	0,034	1,75
				80	0,032	2,50	0,027	2,95	0,035	2,25	0,035	2,25	0,035	2,25	0,035	2,25	0,035	2,25	0,035	2,25
				100	0,032	3,10	0,027	3,70	0,035	2,85	0,035	2,85	0,035	2,85	0,035	2,85	0,035	2,85	0,035	2,85
				120	0,032	3,75	0,027	4,40	0,035	3,40	0,035	3,40	0,035	3,40	0,035	3,40	0,035	3,40	0,035	3,40
				140	0,032	4,35	0,027	5,15	0,035	4,00	0,035	4,00	0,035	4,00	0,035	4,00	0,035	4,00	0,035	4,00
				160	0,032	5,00	0,027	5,90	0,035	4,55	0,035	4,55	0,035	4,55	0,035	4,55	0,035	4,55	0,035	4,55
				180	0,032	5,60	0,027	6,65	0,035	5,10	0,035	5,10	0,035	5,10	0,035	5,10	0,035	5,10	0,035	5,10
				200	0,032	6,25	0,027	7,40	0,036	5,55	0,036	5,55	0,036	5,55	0,035	5,70	0,035	5,70	0,035	5,70
				220	0,032	6,85	0,027	8,10	0,036	6,10	0,036	6,10	0,036	6,10	0,035	6,25	0,035	6,25	0,035	6,25
				240	0,032	7,50	0,027	8,85	0,036	6,65	0,036	6,65	0,036	6,65	0,035	6,85	0,035	6,85	0,035	6,85
				260	0,032	8,10	0,027	9,60	0,036	7,20	0,036	7,20	0,036	7,20	0,035	7,40	0,035	7,40	0,035	7,40
				280	0,032	8,75	0,027	10,35	0,036	7,75	0,036	7,75	0,036	7,75	0,035	8,00	0,035	8,00	0,035	8,00
				300	0,032	9,35	0,027	11,10	0,036	8,30	0,036	8,30	0,036	8,30	0,035	8,55	0,035	8,55	0,035	8,55
				320	0,032	10,00	0,027	11,85	0,036	8,85	0,036	8,85	0,036	8,85	0,035	9,10	0,035	9,10	0,035	9,10
				340	0,032	10,60	0,027	12,55	-	-	-	-	-	-	-	-	-	-	-	-
360	0,032	11,25	0,027	13,30	-	-	-	-	-	-	-	-	-	-	-	-	-			
380	0,032	11,85	0,027	14,05	-	-	-	-	-	-	-	-	-	-	-	-	-			
400	0,032	12,50	0,027	14,80	-	-	-	-	-	-	-	-	-	-	-	-	-			
Thickness tolerance	Ti	Class	EN 823		T1	T1	T1	T1	T1	T1	T1	T1	T1	T1	T1	T1	T1			
Dimensional stability at 70°C and 90% relative humidity	DS(70/90)	%	EN 1604		≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5			
Compressive stress at 10% deformation or compressive	CS(10\Y)i	Level i kPa <sup>3</sup>	EN 826		300	300	300	300 <sup>2</sup>	300 <sup>2</sup>	300 <sup>2</sup>	500	700								
Reaction to fire	-	Class	EN 13501-1		Euroclass E															
Deformation under 40 kPa load and 70°C	DLT(2)5	%	EN 1605		≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5			
Tensile strength	TRi	Level i kPa <sup>3</sup>	EN 1607		-	-	200	-	200	-	-	-	-	-	-	-	-			
Compressive creep (50 years, deformation < 2%)	CC(2/1,5/50) $\sigma_c$	$\sigma_c$ kPa <sup>3</sup>	EN 1606		-	-	-	130	-	180	250									
Long term water absorption by total immersion	WL(T)i	Level i %	EN 12087		0,7	0,7	-	0,7	-	0,7	0,7									
Long term water absorption by diffusion <sup>1</sup>	WD(V)i	Class	EN 12088		WD(V) 3	WD(V)1-3	-	WD(V)1-3	-	WD(V)1-3	WD(V)1-3	WD(V)1-3	WD(V)1-3	WD(V)1-3	WD(V)1-3	WD(V)1-3	WD(V)1-3			
Freeze-thaw resistance	FTCDi	Class	EN 12091		FTCD1	FTCD1	-	FTCD1	-	FTCD1	FTCD1	FTCD1	FTCD1	FTCD1	FTCD1	FTCD1	FTCD1			
Water vapour diffusion resistance factor <sup>1</sup>	$\mu$	-	EN 12086		250-80	250-80	250-80	250-80	250-80	250-80	250-80	250-80	250-80	250-80	250-80	250-80	250-80			
Coefficient of linear thermal expansion	-	mm/(m·K)	-		0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07	0,07			
Maximum working temperature	-	°C	-		+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C	+75 °C			
Surface	-	-	-		skin	skin	structured	skin	structured	skin	structured	skin	structured	skin	structured	skin	structured			
Possible edge profiles	-	-	-		shiplap	shiplap	butt edge	butt edge, shiplap, tongue and groove	butt edge	shiplap	shiplap	shiplap	shiplap	shiplap	shiplap	shiplap	shiplap			

<sup>1</sup> depending on thickness

<sup>2</sup> at thickness 20 mm: 200 kPa

<sup>3</sup> 100 kPa = 100 kN/m<sup>2</sup> = 0.10 N/mm<sup>2</sup>



#### JACKODUR® thermal insulation:

- Free of HBCD flame retardants, chlorofluorocarbons (CFCs) and propellants containing HCFCs.

#### Important notes:

JACKODUR® products are suitable for continuous use at maximum temperatures of up to +75°C. On days with exposure to intense sunlight, care must be taken to ensure that the JACKODUR® products are not covered with dark layers (e.g. waterproofing elements, non-woven materials, mats). Any heat build-up can lead to deformation of the thermal insulation boards and therefore must be avoided.

JACKODUR® products cannot withstand continuous exposure to sunlight (UV radiation) and their surface must be protected from weathering.

Contact with volatile substances (e.g. Solvents) and solvent-containing adhesives must be avoided.

Because JACKODUR® products offer a wide range of application options, suppliers cannot always monitor them for proper compliance with processing instructions, handling and installation. As a result, JACKON Insulation GmbH is liable only for the data named here in accordance with licensing regulations.