

Technical Data

Rigid Polyurethane Insulation 35-60 kg/m³

General Physical Properties (Metric)

Property	Test Method	Unit	Typical Value					
Nominal Density	(EN ISO 845) / (ASTM D 1622)	kg/m ³	35	37	40	42	0	60
Thermal Conductivity at +10°C	(EN 12667) / (ASTM C 518)	W/m K	0.024	0.024	0.024	0.024	0.024	0.024
Colour			Cream	Cream	Cream	Cream	Cream	Cream
Closed Cell Content	(EN ISO 4590) Method 1 (ASTM D 2856) Method B	%	95	95	95	95	95	95
Operating Temperature Limits	Upper Limit	°C	+100	+100	+100	+100	+100	+100
	Lower Limit	°C	-180	-180	-180	-180	-180	-180
Minimum Compressive Strength at +23°C	Parallel	kPa	190	210	250	270	370	500
	Perpendicular	kPa	120	130	160	190	250	340
Minimum Tensile Strength at +23°C	Parallel	kPa	430	450	470	490	600	700
	Perpendicular	kPa	300	320	340	350	450	530
Linear Dimensional Stability	(EN 1604) / (ASTM D 2126)							
	+93°C for 24 hours	%	0.5	0.5	0.5	0.5	0.5	0.5
	-30°C for 24 hours	%	1	1	1	1	1	1
	+70°C for 48 hours and 95% RH	%	3	3	3	3	3	3
Friability for 10 mins	(ASTM C 421)	%	< 15	< 15	< 15	< 15	< 15	< 15
Linear Expansion Coefficient	(ASTM D 696)	m/m K	40-70 x 10 ⁻⁶	40-70 x 10 ⁻⁶	40-70 x 10 ⁻⁶	40-70 x 10 ⁻⁶	40-70 x 10 ⁻⁶	40-70 x 10 ⁻⁶
Water Absorption	(ISO 2896)	Vol %	5.0	5.0	5.0	5.0	5.0	5.0
Water Vapour Permeability	(ASTM E 96)	ng/Pa.s.m	5.5	5.5	5.5	5.5	5.5	5.5



Calculation Sheet

Norm: VDI-2055
Date: 27/08/2014 - PWI

Calculation results are valid for the given conditions only

CONDITIONS

Ambient Parameters: Ambient Temperature = 20 °C
Material: Insulation = Tarepur 35
Thickness = According to table

CALCULATION

Product: Tarepur 35
Method: Thermal resistance values (R) and thermal transmittance values (U) per thickness. Calculations for foam core only.

Boards	Thermal resistance	Thermal transmittance
Thickness [mm]	R-value [W/m ² .K]	U-value [mm]
10	0,40	2,50
20	0,80	1,25
30	1,20	0,83
40	1,60	0,63
50	2,00	0,50
60	2,40	0,42
70	2,80	0,36
80	3,20	0,31
90	3,60	0,28
100	4,00	0,25
110	4,40	0,23
120	4,80	0,21
130	5,20	0,19
140	5,60	0,18
150	6,00	0,17
160	6,40	0,16
170	6,80	0,15
180	7,20	0,14
190	7,60	0,13
200	8,00	0,13
210	8,40	0,12
220	8,80	0,11
230	9,20	0,11
240	9,60	0,10
250	10,00	0,10

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