

Tarecpir™ HD Rigid Polyisocyanurate Insulation 120-320 kg/m³ / 7.5-20.0 lb/ft³

General Physical Properties (Metric)

Property	Test Method	Unit	Typical Value			
Nominal Density	(EN ISO 845) / (ASTM D 1622)	kg/m ³	120	160	224	320
Thermal Conductivity at +10°C	(EN 12667) / (ASTM C 518)	W/m·K	0.033	0.036	0.038	0.048
Colour			Green	Green	Green	Green
Closed Cell Content	(EN ISO 4590) Method 1 / (ASTM D 2856) Method B	%	≥ 95	≥ 95	≥ 95	≥ 95
Operating Temperature Limits	Upper Limit	°C	+120	+120	+120	+120
	Lower Limit	°C	-200	-200	-200	-200
Minimum Compressive Strength	(EN 826) / (ASTM D 1621)					
	Parallel at +23°C	kPa	1200	1900	2950	5750
	Parallel at -165°C	kPa	—	4600	9250	18750
	Perpendicular at +23°C	kPa	1000	1650	2750	5000
Minimum Tensile Strength	(ASTM D 1623)					
	Parallel at +23°C	kPa	1400	1750	3000	4900
	Parallel at -165°C	kPa	—	1950	3400	5400
	Perpendicular at +23°C	kPa	1300	1550	2800	4700
Linear Dimensional Stability	(EN 1604) / (ASTM D 2126)					
	+93°C for 24 hours	%	≤ 1	≤ 1	≤ 1	≤ 1
	-30°C for 24 hours	%	≤ 1	≤ 1	≤ 1	≤ 1
	+70°C for 48 hours and 95% RH	%	≤ 3	≤ 3	≤ 3	≤ 3
Friability for 10 mins	(ASTM C 421)	%	< 10	< 10	< 5	< 5
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
Water Absorption	(ISO 2896)	Vol %	≤ 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

General Physical Properties (Imperial)

Property	Test Method	Unit	Typical Value			
Nominal Density	(EN ISO 845) / (ASTM D 1622)	lb/ft ³	7.5	10.0	14.0	20.0
Thermal Conductivity at +50°F	(EN 12667) / (ASTM C 518)	Btu·in/hr·ft ² ·°F	0.23	0.25	0.26	0.33
Colour			Green	Green	Green	Green
Closed Cell Content	(EN ISO 4590) Method 1 / (ASTM D 2856) Method B	%	≥ 95	≥ 95	≥ 95	≥ 95
Operating Temperature Limits	Upper Limit	°F	+248	+248	+248	+248
	Lower Limit	°F	-328	-328	-328	-328
Minimum Compressive Strength	(EN 826) / (ASTM D 1621)					
	Parallel at +73°F	psi	174	276	428	834
	Parallel at -265°F	psi	—	667	1342	2720
	Perpendicular at +73°F	psi	145	240	399	725
Minimum Tensile Strength	(ASTM D 1623)					
	Parallel at +73°F	psi	203	254	435	711
	Parallel at -265°F	psi	—	283	493	783
	Perpendicular at +73°F	psi	189	225	406	682
Linear Dimensional Stability	(EN 1604) / (ASTM D 2126)					
	+199.4°F for 24 hours	%	≤ 1	≤ 1	≤ 1	≤ 1
	-22°F for 24 hours	%	≤ 1	≤ 1	≤ 1	≤ 1
	+158°F for 48 hours and 95% RH	%	≤ 3	≤ 3	≤ 3	≤ 3
Friability for 10 mins	(ASTM C 421)	%	< 10	< 10	< 5	< 5
Linear Expansion Coefficient	(ASTM D 696)	ft/ft·K	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
Water Vapour Permeability	(ASTM E 96)	Perm inch	≤ 3.8	≤ 3.8	≤ 3.8	≤ 3.8

Fire Test Classifications

Fire Test	Test Method	Typical Result			
Horizontal Burning	EN ISO 3582: 2000	≤ 20 mm / 0.8 in	≤ 20 mm / 0.8 in	≤ 20 mm / 0.8 in	≤ 20 mm / 0.8 in
Temperature Index	EN ISO 4589-3: 1996	> 390°C / 734°F	> 390°C / 734°F	> 390°C / 734°F	> 390°C / 734°F
Epiradiateur	NF P 92-501	M4	M4	M4	M4

Fire Test Specifications

Fire Test	Test Method	Specification			
Vertical Burning	DIN 4102-1: 1998	B2	B2	B2	B2

