



Paneltim® Construction Panels in PEHD

Material Properties				
	Value	Units	Test Method	Remarks
◆ General properties				
Type of material	PEHD			
Density	0.960	g/cm ³	ISO 1183	
Melt Flow Index	5 +/- 2	g/10min	ISO 1133	at 190°C/2,16 kg
Stress at Yield	>= 25	Mpa	ISO 527	
Strain at Yield	>= 10	%	ISO 527	
Flex E-Modulus	900 - 1000	Mpa	ISO 178	
Notched Izod	>= 8	kJ/m ²	ISO 180	at 23°C
	>= 5	kJ/m ²	ISO 180	at 0°C
	>= 4	kJ/m ²	ISO 180	at -20°C
Hardness	63 +/- 2	Shore D	ISO 868	
Cristaline Melt Point	133 +/- 3	°C	DSC	

Panel properties				
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◆ Standard dimensions				
(tolerance +/- 0,2%)	2600 x 1000 x 50	mm		Grid: 50/100
	1200 x 1000 x 50	mm		Grid: 50/50 and 50/100
◆ Standard colours				
Grid 50/50	Dark grey, black			
Grid 50/100	Black			
◆ Weight				
	12,35	kg/m ²		Grid 50/50
	10,25	kg/m ²		Grid 50/100
◆ Surface				
Even, plain surface	Standard frictino factor >= 0,20			
◆ Mechanical				
Effective Flex Modulus	650	Mpa		For 50/50 grid
	450	MPa		For 50/100 grid
	200	Mpa		For 100/50 grid
Impact resistance	>= 2	m		Dart drop test 2,7 kg impactradius 1,5"

	Value	Units	Test method	Remarks
◆ Thermal properties				
Thermal conductivity				
Grid 50/50	1,7	W/m ² °K		Siris certificates, depending on weather conditions
Grid 50/100	1,8	W/m ² °K		Siris certificates, depending on weather conditions
Linear thermal expansion	1,2 - 1,5 x 10 exp-4	1/°K		In a range from -20°C to + 80°C
Utilisation range				
Permanent	-40°C tot + 60°C	°C		Related to load and environment conditions
Shortly	till + 100°C	°C		for cleaning purposes etc .
Caloric value	+/- 45	Mjoule/kg		
Euro fire resistance	E			EN-ISO 11925-2
◆ Electrical properties				
Surface resistance	>= 10 exp14	Ohm	DIN VDE 0303	Conductive panels on request (<= 10 exp 5)
◆ Resistances				
UV- and weathering				
Standard panels	> = 3 jaar		Q-Sun	In mid european climate
UV resistant panels	>= 10 jaar		Q-Sun	In mid european climate
Water absorption				
	< 0,05	%		
Chemical resistance				
Most acids, alkali and salts	Excellent resistance			
Aliphatic hydrocarbons	Excellent resistance			
Oils and greases	Excellent resistance			
Cleaning and desinfectant products	Excellent resistance			
Others	List of chemical resistances on request, contact supplier			
Midrew, algae and bacteria	Uitstekend			
◆ Machining				
	Excellent sawing, milling, drilling by using suitable tool			
◆ Welding				
	Hot plate welding, extrusion welding and hot gas welding			
	DLG certificate			
◆ Food contact				
	According to :	EC1935/2004		
		EC90/128 and EC2002/72		
◆ ROHS				
	According to :	EC2002/95		
◆ Recycling				
	Completely recyclable			

