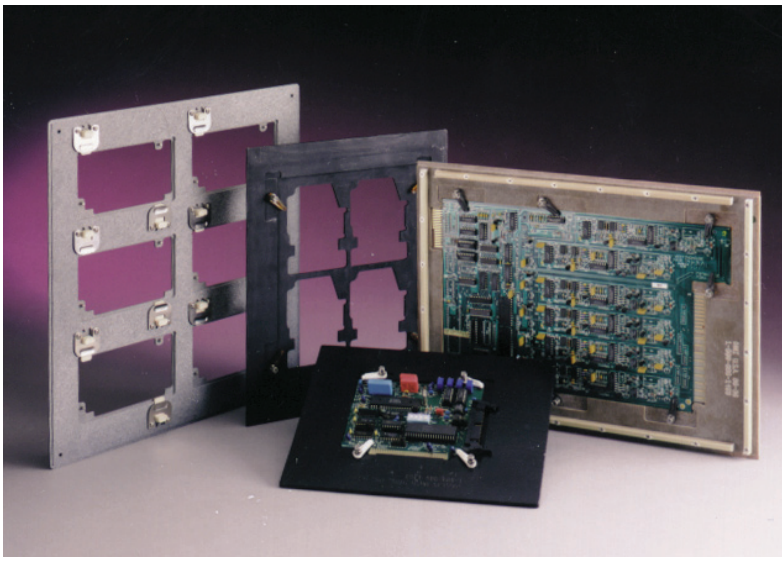
RÖCHLING
Glastic Composites

Solder Pallet Materials



- Made in USA
- Precision Thickness
- Dimensionally Stable
- Low Moisture Absorption
- Chemical Resistant
- Excellent Mechancial & Thermal Properties

Made in the USA, these premium circuit board carrier materials are available in three popular versions to meet your assembly needs.

The top-of-the-line grades are available in both non-conductive (CBC) and electrical static safe semi-conductive (CBC-C) versions. When an optically sense-able solder pallet is needed, without compromising electric static discharge safety, Glastic NBC grade is a perfect choice.

All three types are made with high-strength advanced composite materials.

Glastic solder pallet materials are lightweight, which gives them an advantage over aluminum, titanium and other composite materials.

Dimensional stability, flatness, thermal shock resistance and chemical resistance make them ideal products for the very hostile, lead-free environments presented in wave solder applications.

Each sheet is closely checked for warp, twist, surface resistivity and other key properties prior to being micro-sanded to the tightest tolerance control available (+/- 0.002").

Whether you require dedicated pallets for individual boards or adjustable pallets that can accommodate various sizes, you can rely on Glastic composites to provide a solution. Glastic's pallet carrier material is available in a variety of popular thicknesses to meet your needs. Standard sheet size is 1m x 2m.

Additional information and samples can be obtained through Glastic Customer Service or your local Glastic-authorized distributor.

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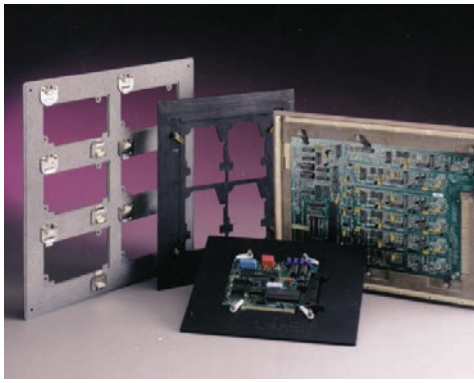
	Procedure	CBC-C	CBC-NBC	CBC
General Information				
Standard Color	–	Black	Light Gray	Deep Blue
ESD Safe	–	Yes	Yes	No
Chemical Resistance	–	Very Good	Very Good	Very Good
Mechanical Properties				
Flexural Strength at 77°F (25°C) in Psi (Mpa)	ASTM D 790	*55,000 (379)	*55,000 (379)	*55,000 (379)
IZOD Impact Strength in Ft.Lb./In (J/cm)	ASTM D 256	*15 (8.1)	*15 (8.1)	*15 (8.1)
Barcol Hardness	ASTM D 2583	90	77	90
Water Absorption in % by weight	ASTM D 570	< 0.2%	< 0.2%	< 0.2%
Specific Gravity	ASTM D 792	1.84	1.84	1.84
Tensile Strength at 77°F (25°C) in Psi (Mpa)	ASTM D 638	Engineering data available on request		
Tensile Strength at 266°F (130°C) in Psi (Mpa)	ASTM D 638			
Tensile Strength at 302°F (150°C) in Psi (Mpa)	ASTM D 638			
Tensile Modulus at 77°F (25°C) in Psi 1 x 10^6 (Mpa)	ASTM D 638			
Flexural Strength at 266°F (130°C) in Psi (Mpa)	ASTM D 790			
Flexural Strength at 302°F (150°C) in Psi (Mpa)	ASTM D 790			
Flexural Modulus at 77°F (25°C) in Psi 1 x 10^6 (Mpa)	ASTM D 790			
Comp. Strength, Vert. at 77°F (25°C) in Psi (Mpa)	ASTM D 695			
Comp. Strength, Horz. at 77°F (25°C) in Psi (Mpa)	ASTM D 695			
Electrical Properties				
Surface Resistivity (ohms/square)	ASTM D 4496	10^5–10^9	10^5–10^9	10^{14}
Volume Resistivity (ohms/square)	ASTM D 4496	10^5–10^9	10^5–10^9	10^{14}
Flame Resistance Properties				
UL Subject 94	UL 94	HB	HB	HB
Thermal Properties				
Coefficient of Thermal Expansion (para.) K^{-1}	ASTM D 696	7.1 x 10^{-6}	7.1 x 10^{-6}	7.1 x 10^{-6}
Coefficient of Thermal Expansion (perp.) K^{-1}	ASTM D 696	20.5 x 10^{-6}	20.5 x 10^{-6}	20.5 x 10^{-6}
Thermal Conductivity in BTU*In/Hr*Ft*°F (W/m*K)	ASTM C 177	2.0 (.31)	2.0 (.31)	2.0 (.32)
Glass Transition Temperature T_G, in °F (°C), DCMA test	ASTM E 1356	345°F (174°C)	345°F (174°C)	345°F (174°C)
Thermal Decomposition Temperature in °F (C°) @1% loss @5% loss @10% loss	ASTM E 1641	 440°F (227°C) 550°F (288°C) 622°F (328°C)	 440°F (227°C) 550°F (288°C) 622°F (328°C)	 440°F (227°C) 550°F (288°C) 622°F (328°C)
Maximum Surface Operating Temp. in °F (C°)	–	527°F (300°C)	527°F (300°C)	527°F (300°C)
Solder Heat Resistance 10 min at 500°F (260°C)	Internal	†Pass	†Pass	†Pass

* - Values are an average of typical L.W. and C.W. values.
† - Any test results that require subjective visual evaluation, results were agreed upon by a cross-functional team.
All - Typical values, after post-baking
-The above values are measured averages and not guaranteed.
-Performance of Glastic Corporation's Solder Pallet will vary depending on the process parameters being used.
-Glastic recommends that the pallets are periodically cleaned to achieve the best performance. Refer to technical bulletin #1.

Note: Additional Flexural testing, with the specimens conditioned at 302°F, was completed. The specimens were conditioned for one, three and give hours, with no notable reduction in strength.



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