

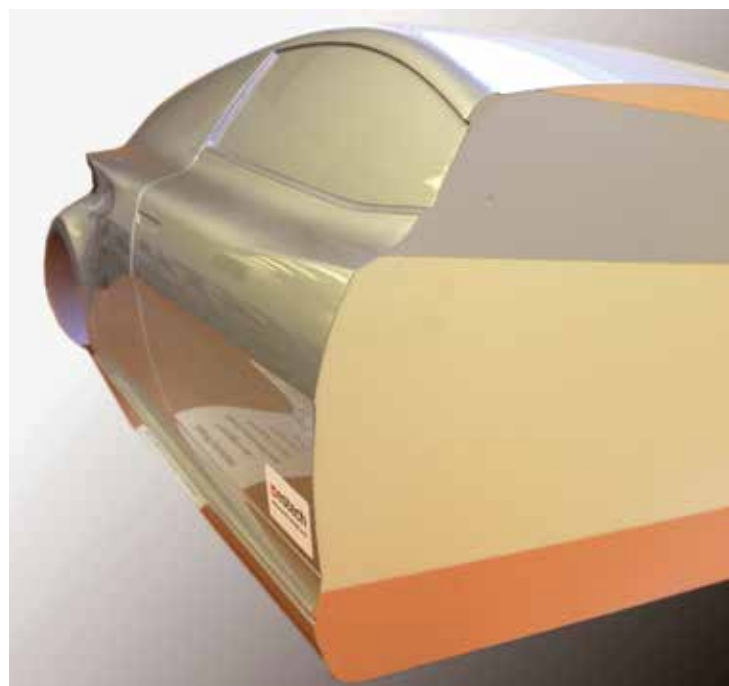
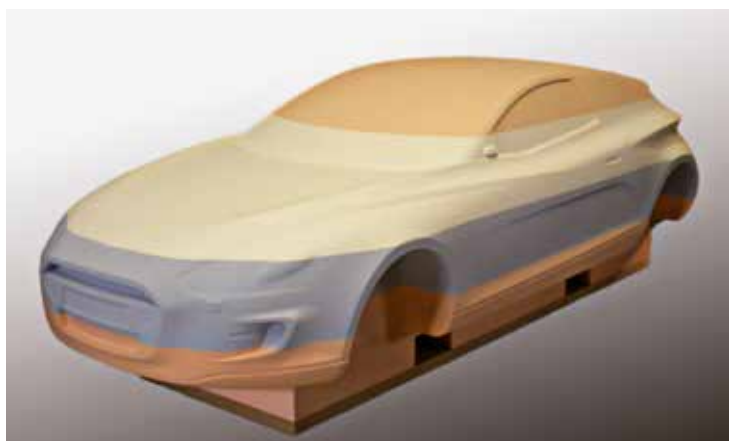
DESIGN AND STYLING BOARDS

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Light PUR foam boards are most favored materials that designers prefer to work with to create shaped forms or styling prototypes/models.

These specially formulated boards are offered from 0.08 to 0.35 g/cm³ density with optimum balanced mechanical and thermal properties.

All boards feature excellent machinability by hand or CNC milling, producing mainly shavings and minimal dust while delivering a fine and non-powdery surface.



Automotive design model made of Labelite range. The combination of superior surface quality and the use of dedicated adhesive Labelite Glue enables an easy painting with lowest appearance of glue lines.
Credit: Estech Design

DESIGN AND STYLING BOARDS

| | SikaBlock® M80 | Labelite 8 CY | SikaBlock® M150 | Labelite 15 IV | SikaBlock® M330 | Labelite 25YW | SikaBlock® M440 | Labelite 35 OE |
|---|---|-------------------------------------|---|---|---|---|--|--|
| Density [g/cm ³] | 0.08 | | 0.15 | | 0.24 | 0.25 | 0.35 | 0.35 |
| Colour | yellowish | grey | light green | ivory | siena | peach yellow | apricot | orange |
| Characteristics | fine and non-powdery surface; easily workable; low dust formation when milled | | | | excellent surface quality; very good milling behaviour; with low dust formation | | | |
| Physical data (approx. values) | | | | | | | | |
| Shore hardness | - | A 28 | - | A 65 | D 25 | D 25 | D 38 | D 35 |
| Flex. strength [MPa] | 1.1 | 1.0 | 2.2 | 2.2 | 5 | 5.4 | 9 | 9 |
| Compressive strength [MPa] | 0.8 | 0.7 | 1.6 | 1.6 | 4 | 3.8 | 8 | 7 |
| Thermal resistance [°C] | 130 | 115 | 80 | 80 | 60 | 75 | 60 | 70 |
| CTE, α_T [1/K] | 60 x 10 ⁻⁶ | 40 x 10 ⁻⁶ | 65 x 10 ⁻⁶ | 65 x 10 ⁻⁶ | 65 x 10 ⁻⁶ | 60 x 10 ⁻⁶ | 65 x 10 ⁻⁶ | 60 x 10 ⁻⁶ |
| Processing data (approx. values) | | | | | | | | |
| Dimensions [mm] | 2000 x 1000 x thickness: 100/200/300/400/450 | 2000 x 1000 x thickness: 100/200 | 2000 x 1000 x thickness: 100/150/200/250/300/350/400 | 2000 x 1000 x thickness: 100/150/200 | 2000 x 1000 x thickness: 50/100/150/200/250 | 1500 x 500 x thickness: 50/100/200 | 1500 x 500 x thickness: 50/75/100/150/200 | 1500 x 500 x thickness: 50/100/150/200 |
| other dimensions on request | 2400 x 1300 x thickness: 100/200/400 | | | | 1500 x 500 x thickness: 50/100/200 | 2000 x 1000 x thickness: 100/150/200 | | 2000 x 1000 x thickness: 50/100/150/200 |
| Adhesive | Biresin® Foam Adhesive / Labelite Glue | | | | Biresin® Foam Adhesive / Labelite Glue / Biresin® Kleber Orange | | | |
| Filler | Spachtel orange | | | | | | | |

MODEL AND TOOLING BOARDS

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Medium density brown boards are the ideal material for making master models or moulds for short series of parts. From 0.45 to 0.70 g/cm³ we offer a complete range to satisfy every preference of model makers in mechanical strength, thermal resistance and of course surface aspect. Prolab boards display the smoothest surface aspect in such category in the market place while SikaBlocks® are thermally the most resistant and stable.



Full scale car model made of SikaBlock® M330 boards bonded with Biresin® Kleber Orange



High quality master models made of SikaBlock® M680/ M700 provides highest dimensional accuracy

Models milled out of Prolab 65/70 fulfil highest demands of surface quality

MODEL AND TOOLING BOARDS

| | SikaBlock® M450 | Labelite 45 PK | SikaBlock® M600 | Prolab 65 (XL) | Prolab 70 | SikaBlock® M680 | SikaBlock® M700 |
|---|---|---|---|--|-----------------------------------|--|--|
| Density [g/cm ³] | 0.45 | | 0.60 | 0.65 (0.73) | 0.70 | 0.68 | 0.70 |
| Colour | orange | pink | light brown | brown | light brown | light brown | light brown |
| Characteristics | good economical grade | superior surface quality; good edge stability | easily workable; fine, dense surface; good compressive strength and edge stability; good heat distortion temperature; | | | | |
| Physical data (approx. values) | | | | | | | |
| Shore hardness | D 45 | | D 58 | D 63 (D 70) | D 58 | D 63 | D 66 |
| Flex. strength [MPa] | 12 | | 19 | 34 | 17 | 23 | 26 |
| Compressive strength [MPa] | 10 | | 17 | 28 | 17 | 21 | 25 |
| Thermal resistance [°C] | 78 | 65 | 80 | 85 | 58 | 80 | 90 |
| CTE, α _T [1/K] | 55 x 10 ⁻⁶ | | 55 x 10 ⁻⁶ | 75 x 10 ⁻⁶ | 70 x 10 ⁻⁶ | 55 x 10 ⁻⁶ | 55 x 10 ⁻⁶ |
| Processing data (approx. values) | | | | | | | |
| Dimensions [mm] | 1500 x 500 x thickness: 50/75/100/150/200 | 1500 x 500 x thickness: 50/75/100/150 | 1500 x 500 x thickness: 30/50/75/100/150/200 | 1500 x 500 x thickness: 30/50/75/100 (XL):150/ 200 | 1500 x 500 x thickness: 50/75/100 | 1500 x 500 x thickness: 30/50/75/100/150/200 | 1500 x 500 x thickness: 30/50/75/100/150 |
| Adhesive | Biresin® Kleber orange | Labelite Glue / Biresin® Kleber orange | Biresin® Kleber braun / Prolab Glue | | | | |
| Filler | Spachtel orange | | | Spachtel braun Neu | | | |

TOOLING BOARDS

TOOLING BOARDS

For composites tooling we offer epoxy boards with very compact surface aspect, high dimensional stability under heat and pressure to produce prepreg moulds or parts in autoclave and up to 130°C.

We offer medium to high density PUR tooling boards from 0.78 to 1.7g/m³ with high mechanical strength and sufficient heat resistance up to 100°C combined with high dimensional stability.

Their performance package makes them suitable for applications such as checking fixtures, gauges, vacuum forming tools, low pressure RIM-moulds as well as metal sheet stamping tools.



Gauge with high dimensional accuracy milled out of Prolab 75

BOARDS FOR HIGHEST DIMENSIONAL STABILITY

| | LAB 975 NEW | LAB 973 | Prolab 75 | SikaBlock® M1000 | LAB 1000 |
|---|---|---|--|-----------------------------------|---------------------------------------|
| Density [g/cm ³] | 0.70 | 0.75 | 0.78 | 1.0 | 1.67 |
| Colour | light green | blue | light grey | white | grey |
| Characteristics | new low density epoxy board with high dimensional stability under pressure and heat up to 130C; excellent performance/price ratio | low density epoxy board with high dimensional stability under pressure and heat up to 125C; superior machinability and surface aspect | medium density, good compressive strength and edge stability; low thermal expansion and high dimensional stability | | heavy-duty high density tooling board |
| Physical data (approx. values) | | | | | |
| Shore hardness | D 75 (D 68 @ 130°C) | D 73 (D 63 @ 130°C) | D 73 | D 75 | D 89 |
| Flex. strength [MPa] | 30 | 30 | 43 | 48 | 100 |
| Compressive strength [MPa] | 50 | 50 | 54 | 47 | 110 |
| Thermal resistance [°C] | 130 | 125 | 85 | 85 | 100 |
| CTE, α_r [1/K] | 35-40 x 10 ⁻⁶ | 35-45 x 10 ⁻⁶ | 50 x 10 ⁻⁶ | 55 x 10 ⁻⁶ | 45 x 10 ⁻⁶ |
| Processing data (approx. values) | | | | | |
| Dimensions [mm] other dimensions on request | 1500 x 500 x thickness: 50/75/100/150/200 | 1500 x 500 x thickness: 50/75/100/150/200 | 1500 x 500 x thickness: 50/75/100 | 1500 x 500 x thickness: 50/75/100 | 830 x 500 x thickness: 50/75/100 |
| Adhesive | H 8973 / GC 15 | | Prolab Glue / Biresin® Kleber Braun | | H9930 / Biresin® Power Adhesive Thix |



High durability with SikaBlock® M980 for foundry core boxes even in complicated shapes

FOUNDRY TOOLING BOARDS

SikaAxson offers a wide range of tooling boards specially dedicated to make foundry patterns and cold core boxes. Model-makers can select the most suitable board for their requirement in durability: abrasion resistance level from low to higher series of sand mouldings to be made as well as strength and dimensional stability. These boards are cost effective alternative solutions to metallic patterns and cold core boxes for most foundry processes up to medium size series.



SikaBlock® M945 provides excellent milling behaviour with low dust formation

BOARDS FOR TOOLS AND FOUNDRY

| | SikaBlock® M930 | SikaBlock® M945 | SikaBlock® M960 | LAB 920 | LAB 850 | SikaBlock® M970 | SikaBlock® M980 |
|---|---|---|--|--------------------------------------|--|--------------------------------------|--|
| Density [g/cm ³] | 1.0 | 1.3 | 1.2 | 1.30 | 1.18 | 1.2 | 1.35 |
| Colour | mint green | green | blue | green | dark blue | turquoise | blue |
| Characteristics | high dimensional stability, very easy to mill and smooth surface aspect | good abrasion resistance, easy to mill, high strength | good abrasion resistance, easy to mill, good impact resistance | | high abrasion resistance, excellent milling behavior, very high strength | | excellent combination between good abrasion resistance and dimensional stability; very high strength |
| Physical data (approx. values) | | | | | | | |
| Shore hardness | D 78 | D 83 | D 78 | D 85 | D 80 | D 84 | D 86 |
| Flex. strength [MPa] | 52 | 100 | 80 | 75 | 57 | 110 | 145 |
| Compressive strength [MPa] | 50 | 95 | 70 | 68 | 41 | 105 | 120 |
| Impact resistance | 12 | 25 | 30 | 30 | 72 | 25 | 35 |
| Thermal resistance [°C] | 90 | 80 | 80 | 90 | 80 | 78 | 85 |
| CTE, α_T [1/K] | 55 x 10 ⁻⁶ | 65 x 10 ⁻⁶ | 85 x 10 ⁻⁶ | 85 x 10 ⁻⁶ | 95 x 10 ⁻⁶ | 68 x 10 ⁻⁶ | 60 x 10 ⁻⁶ |
| Abrasion resistance | + | ++ | ++ | ++ | +++ | +++ | ++ |
| Processing data (approx. values) | | | | | | | |
| Dimensions [mm] other dimensions on request | 1500 x 500 x thickness: 50/75/100 | 1000 x 500 x thickness: 30/50/75/100 | 1000 x 500 x thickness: 30/50/75/100 | 1000 x 500 x thickness: 27/50/75/100 | 1000 x 500 x thickness: 50/75/100 | 1000 x 500 x thickness: 30/50/75/100 | 1000 x 495 x thickness: 30/50/75/100 |
| Adhesive | Biresin® Kleber grün / Biresin® Power Adhesive Thix | | Biresin® Kleber blau / Biresin® Power Adhesive Thix | | HH9930 / Biresin® Power Adhesive Thix | | Biresin® Kleber blau / Biresin® Power Adhesive Thix |