

RAKU® TOOL Boards

	RAKU® TOOL SB-0080	RAKU® TOOL SB-0140	RAKU® TOOL SB-0240	RAKU® TOOL SB-0301	RAKU® TOOL SB-0351
	Styling Boards				
Color	off-white	light green	apricot	apricot	apricot
Density (ISO 1183) g/cm³ ca.	0.08	0.14	0.24	0.35	0.35
Applications	<ul style="list-style-type: none"> > Design study > Program proving > Supporting structures for Close Contour Pastes > Negative molds for casting 	<ul style="list-style-type: none"> > Design study > Program proving > Supporting structures for Close Contour Pastes > Negative molds for casting 	<ul style="list-style-type: none"> > Styling models > Epoxy laminating molds > Supporting structures for Close Contour Pastes > Negative molds for casting 	<ul style="list-style-type: none"> > Styling & Design models > Molds for laminating parts 	<ul style="list-style-type: none"> > Styling & design models > Supporting structures for Close Contour Pastes > Molds for laminating parts
Key Properties	<ul style="list-style-type: none"> > Very light weight and smooth surface > Easily shaped and good chip formation > Good heat resistance > Resistant to organic solvents 	<ul style="list-style-type: none"> > Light weight and smooth surface > Easily shaped, low dust > Resistant to organic solvents 	<ul style="list-style-type: none"> > Good surface structure > Easily shaped and machined > Resistant to organic solvents 	<ul style="list-style-type: none"> > Fine surface structure > Easily shaped and machined, low dust 	<ul style="list-style-type: none"> > Fine surface structure > Easily shaped and machined, low dust
Hardness (ISO 868) Shore D	–	–	–	–	–
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	–	–	60 – 70	65 – 70	45 – 50
Deflection temperature (ISO 75) °C	–	–	55 – 65	55 – 65	60 – 70
Compressive strength (ISO 604) MPa	0.7	1.8 – 2	2 – 4	6 – 8	8 – 12
Flexural strength (ISO 178) MPa	–	–	5 – 6	7 – 9	8 – 12
Dimensions mm (Length x Width x Height)	2500 x 1200 x 100 2500 x 1200 x 200 2500 x 1200 x 300 2500 x 1200 x 400	2000 x 1000 x 100 2000 x 1000 x 200 2000 x 1000 x 300 2000 x 1000 x 400	1500 x 500 x 50 1500 x 500 x 100 1500 x 500 x 200 2000 x 1000 x 50 2000 x 1000 x 100 2000 x 1000 x 200	2000 x 1000 x 100 2000 x 1000 x 200	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200
Bonding with RAKU® TOOL		> EP-2305/EH-2904-1	> EP-2305/EH-2904-1	> EP-2305/EH-2904-1	> EP-2305/EH-2904-1
Mix ratio (pbw)	–	100 : 30	100 : 30	100 : 30	100 : 30
Color		apricot	apricot	apricot	apricot
Pot life 500 ml (min)		25	25	25	25
Minimum curing time (h)		16	16	16	16
Repair with RAKU® TOOL	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts

SB = Styling Board | MB = Modeling Board | WB = Working Board. Special sizes available on request.

	RAKU® TOOL SB-0470	RAKU® TOOL MB-0600	RAKU® TOOL MB-0670	RAKU® TOOL MB-0720	RAKU® TOOL WB-0801
	Styling Boards	Modeling Boards			Working Boards
Color	apricot	brown	brown	brown	gray
Density (ISO 1183) g/cm³ ca.	0.47	0.60	0.67	0.72	0.80
Applications	> Styling models > Master models and data control models	> Master models, Cubing models, Patterns	> Master models, Cubing models, Patterns	> Master models, Cubing models, Patterns	> Master models > Cubing models > Tooling Jigs and Fixtures > Vacuum forming tools
Key Properties	> Very good surface structure > Easily machined	> Fine surface structure > Easily shaped and machined > Low coefficient of thermal expansion > Good dimensional stability	> Fine surface structure > Easily shaped and machined > Low coefficient of thermal expansion > Good dimensional stability	> Excellent surface structure > Low coefficient of thermal expansion > Good dimensional stability > Good compressive and flexural strength	> Fine surface structure > High HDT and very low CTE > Good dimensional stability > Good compressive and flexural strength
Hardness (ISO 868) Shore D	–	50 – 55	60 – 65	60 – 65	65 – 70
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	60 – 65	50 – 55	50 – 55	50 – 55	45 – 50
Deflection temperature (ISO 75) °C	60 – 70	70 – 75	75 – 80	75 – 80	85 – 90
Compressive strength (ISO 604) MPa	10 – 15	15 – 20	15 – 20	20 – 25	40 – 45
Flexural strength (ISO 178) MPa	10 – 15	15 – 20	20 – 25	25 – 30	35 – 40
Dimensions mm (Length x Width x Height)	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150
Bonding with RAKU® TOOL	> EP-2305/EH-2904-1	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1	> EP-2306/EH-2904-1
Mix ratio (pbw)	100 : 30	100 : 30	100 : 30	100 : 30	100 : 30
Color	apricot	brown	brown	brown	brown
Pot life 500 ml (min)	25	35	35	35	35
Minimum curing time (h)	16	16	16	16	16
Repair with RAKU® TOOL	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts

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RAKU® TOOL Boards

	RAKU® TOOL WB-0691	RAKU® TOOL WB-0700	RAKU® TOOL WB-1000		RAKU® TOOL WB-1222		RAKU® TOOL WB-1250	
Working Boards								
Color	light blue	light green	beige, also available in gray (WB-1001)		green		light green	
Density (ISO 1183) g/cm³ ca.	0.69	0.70	1.00		1.22		1.25	
Applications	> Lay-up tools for low temperature tooling prepregs > Vacuum forming molds > Medium temperature applications	> Lay-up tools for prepreg > High temperature applications > Vacuum forming molds	> Tooling jigs > Fixtures		> Foundry pattern plates > Hammer tools > Checking fixtures for metal parts		> Foundry models > Foundry pattern plates > Foundry core boxes	
Key Properties	> Very fine surface structure > Excellent machinability > Good dimensional stability > Heat resistant up to 110°C	> Very fine surface structure > Very easily machined > Temperature resistance up to 135°C > Good dimensional stability	> Very easily machined > Low coefficient of thermal expansion > Good edge strength and abrasion resistance		> Low wear of milling tools > Resistant to amine > Most proven working board on the foundry market > Resistant to dry ice cleaning > Good abrasion resistance		> Easy to mill > Low wear of milling tools > Very good amine resistance > Very good abrasion resistance > Resistant to dry ice cleaning	
Hardness (ISO 868) Shore D	70 – 75	65 – 70	75 – 80		75 – 85		77 – 83	
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	35 – 45	35 – 45	50 – 60		80 – 85		70 – 75	
Deflection temperature (ISO 75) °C	100 – 110	130 – 140	70 – 80		80 – 90		80 – 85	
Compressive strength (ISO 604) MPa	50 – 60	50 – 55	45 – 50		60 – 70		70 – 80	
Flexural strength (ISO 178) MPa	25 – 35	30 – 40	45 – 50		70 – 80		90 – 100	
Dimensions mm (Length x Width x Height)	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100		1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100		1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	
Bonding with RAKU® TOOL	> EP-2303/EH-2934-1	> EP-2304/EH-2934-1	> PP-3310/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3311/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3350/ PH-3905	> EL-2210/ EH-2910-1*
Mix ratio (pbw)	100 : 20	100 : 20	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60
Color	light blue	light green	beige	clear	green	clear	light green	clear
Pot life 500 ml (min)	80 – 90	90	5 – 8	60	5 – 8	60	5 – 8	60
Minimum curing time (h)	16	16	4	16	4	16	4	16
Repair with RAKU® TOOL	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts	

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	RAKU® TOOL WB-1258	RAKU® TOOL WB-1404	RAKU® TOOL WB-1460	RAKU® TOOL WB-1600	RAKU® TOOL WB-1700				
Working Boards									
Color	orange	olive	light green	ivory	dark gray				
Density (ISO 1183) g/cm³ ca.	1.20	1.40	1.46	1.60	1.70				
Applications	> Pattern plates > Core boxes	> Checking fixtures for metal parts > Models and molds for polyester and composites applications > Hammer tools > Vacuum forming tools > Foundry: models, pattern plates and core boxes > Molds for low pressure RIM	> Foundry models > Foundry pattern plates	> Metal forming tools > Jigs > Fixtures	> Metal forming tools > Vacuum forming molds, jigs > Foam molds > Rapid prototyping molds				
Key Properties	> Very high abrasion resistance whilst good dimensional stability and accuracy > Homogeneous surface > High impact strength, good edge strength > Very easily machined > Excellent resistance to chemicals, no swelling	> Good styrene resistance > High compressive modulus > Good amine resistance > Good abrasion resistance > Resistant to dry ice cleaning > Can be polished > Low coefficient of thermal expansion	> Made out of recycle polyol > Resistant to amine > Resistant to dry ice cleaning > Good abrasion resistance	> Dense surface > Easily machined > Low coefficient of thermal expansion > Very good compressive strength	> Very dense surface structure, can be polished > Easily machined > Good temperature resistance > Excellent compressive strength > High abrasion resistance				
Hardness (ISO 868) Shore D	80 – 85	85 – 90	80 – 85	85 – 90	85 – 90				
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	70 – 75	50 – 55	65 – 75	45 – 50	45 – 50				
Deflection temperature (ISO 75) °C	70 – 75 (Tg)	75 – 80	75 – 80	75 – 80	120 – 125				
Compressive strength (ISO 604) MPa	90 – 100	85 – 95	70 – 80	90 – 100	125 – 130				
Flexural strength (ISO 178) MPa	100 – 110	80 – 90	70 – 80	55 – 65	80 – 85				
Dimensions mm (Length x Width x Height)	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	750 x 500 x 50 750 x 500 x 75 750 x 500 x 100	750 x 500 x 50 750 x 500 x 75 750 x 500 x 100				
Bonding with RAKU® TOOL	> PP-3358/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3314/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3311/ PH-3905	> EL-2210/ EH-2910-1*	> PP-3310/ PH-3905	> EL-2210/ EH-2910-1*	> EL-2210/EH-2910-1*
Mix ratio (pbw)	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 60
Color	orange	clear	olive	clear	green	clear	beige	clear	clear
Pot life 500 ml (min)	5 – 8	60	5 – 8	60	5 – 8	60	5 – 8	60	60
Minimum curing time (h)	4	16	4	16	4	16	4	16	16
Repair with RAKU® TOOL	Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts

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