

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	0.30	0.35
Applications	<ul style="list-style-type: none"> > Design studies > CAM program proving models > Substructures for Close Contour pastes > Substructures for clay 	<ul style="list-style-type: none"> > Interior mockup > Design and styling models 	<ul style="list-style-type: none"> > Interior and exterior mockup > Molds for composite prototype parts > Wind tunnel models 	<ul style="list-style-type: none"> > Design and styling models > Laminating molds 	<ul style="list-style-type: none"> > Cutting jigs > Design and styling models
Key Properties	<ul style="list-style-type: none"> > Stable during milling > Temperature resistant up to 100°C > Solvent resistant > Homogeneous foam structure 	<ul style="list-style-type: none"> > Fine foam structure with low density > Temperature resistant up to 100°C > Large size boards > Stable during milling 	<ul style="list-style-type: none"> > Good chip formation during milling > Large and standard size boards > Very fine foam structure > Very stable during milling 	<ul style="list-style-type: none"> > Fine surface structure > Easy to machine, minimal dust 	<ul style="list-style-type: none"> > Hard surface with low density > High dimensional stability > Very stable during milling
Hardness (ISO 868) Shore D	–	–	–	–	–
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	–	–	60 – 70	65 – 70	60 – 70
Deflection temperature (ISO 75) °C	–	–	60 – 70	60 – 70	65 – 75
Compressive strength (ISO 604) MPa	0.5 – 1.0	1.5 – 2.0	2 – 4	5 – 8	7 – 10
Flexural strength (ISO 178) MPa	–	–	4 – 6	6 – 9	7 – 10
Dimensions mm (Length x Width x Height)	2500 x 1000 x 100 2500 x 1000 x 200 2500 x 1000 x 300 2500 x 1000 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 – 35	25 – 35	25 – 35	25 – 35
Minimum curing time (h)		16	16	16	16
Repair with RAKU[®] TOOL		> EP-2305 / EH-2936-2	> EP-2305 / EH-2936-2	> EP-2305 / EH-2936-2	> EP-2305 / EH-2936-2
Mix ratio (pbw)	–	100 : 50	100 : 50	100 : 50	100 : 50
Color		apricot	apricot	apricot	apricot
Pot life 100 ml (min)		15 – 20	15 – 20	15 – 20	15 – 20
Minimum curing time (min)		90 – 120	90 – 120	90 – 120	90 – 120

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
	Styling Boards	Modeling Boards		
Color	apricot	brown	brown	brown
Density (ISO 1183) g/cm³ ca.	0.47	0.60	0.67	0.72
Applications	<ul style="list-style-type: none"> > Architectural models > Interior and exterior mockup > Master models > Molds for composite prototype parts > Thermoforming tools > Water channel models > Wind tunnel models 	<ul style="list-style-type: none"> > General purpose master models > Models and molds > Trimming jigs 	<ul style="list-style-type: none"> > Master models > Master models for composite molds > Molds for composite prototype parts > Architectural models > Wind tunnel models > Water channel models > Thermoforming tools for prototypes 	<ul style="list-style-type: none"> > Data control models > Master models for tires > Thermoforming tools for prototypes > Molds for composite prototype parts > Architectural models > Assembly jigs for plastic parts > Checking fixtures for plastic parts
Key Properties	<ul style="list-style-type: none"> > Easy to seal and varnish > Finest foam structure > Good chip formation during milling > Very stable during milling 	<ul style="list-style-type: none"> > Fine surface structure > Easy to shape and machine > Easy to seal and varnish > Wide range of thicknesses 	<ul style="list-style-type: none"> > Fine surface structure > Excellent milling characteristics > Easy to seal and varnish > Good temperature resistance > Standard modeling board > Wide range of thicknesses 	<ul style="list-style-type: none"> > Very fine surface structure > Excellent milling characteristics > High edge strength > Wide range of thicknesses > Good dimensional stability > Good temperature resistance
Hardness (ISO 868) Shore D	–	50 – 55	60 – 65	60 – 65
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	70 – 75	50 – 55	50 – 55	50 – 55
Deflection temperature (ISO 75) °C	75 – 80	70 – 75	75 – 80	75 – 80
Compressive strength (ISO 604) MPa	10 – 15	15 – 20	15 – 20	20 – 25
Flexural strength (ISO 178) MPa	10 – 15	15 – 20	20 – 25	25 – 30
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
Bonding with RAKU® TOOL	> EP-2305 / 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
Color	apricot	brown	brown	brown
Pot life 500 ml (min)	25 – 35	30 – 40	30 – 40	30 – 40
Minimum curing time (h)	16	16	16	16
Repair with RAKU® TOOL	> EP-2305 / EH-2936-2	> EP-2306 / EH-2936-2	> EP-2306 / EH-2936-2	> EP-2306 / EH-2936-2
Mix ratio (pbw)	100 : 50	100 : 50	100 : 50	100 : 50
Color	apricot	brown	brown	brown
Pot life 100 ml (min)	15 – 20	15 – 20	15 – 20	15 – 20
Minimum curing time (min)	90 – 120	90 – 120	90 – 120	90 – 120

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RAKU® TOOL Boards

	RAKU® TOOL WB-0801 	RAKU® TOOL WB-0691	RAKU® TOOL WB-0700	RAKU® TOOL WB-0890	RAKU® TOOL WB-1000	
Working Boards						
Color	gray	blue	light green	dark blue	beige, also available in gray (WB-1001)	
Density (ISO 1183) g/cm³ ca.	0.80	0.69	0.70	0.89	1.00	
Applications	<ul style="list-style-type: none"> > Foundry models for prototypes > Jigs and fixtures for plastic parts > Thermoforming tools 	<ul style="list-style-type: none"> > Lay-up tools for low temperature preprints > Thermoforming tools 	<ul style="list-style-type: none"> > Lay-up tools for preprints > Thermoforming tools 	<ul style="list-style-type: none"> > Lay-up tools for low temperature preprints > Thermoforming tools 	<ul style="list-style-type: none"> > Architectural models > Checking fixtures > Foundry models > Thermoforming tools 	
Key Properties	<ul style="list-style-type: none"> > Good solvent resistance > High heat deflection temperature with low density > High mechanical strength with low density > Low linear coefficient of thermal expansion 	<ul style="list-style-type: none"> > Temperature resistant up to 110°C > Low linear coefficient of thermal expansion > Low odor during milling > Stable during milling > Fine surface structure 	<ul style="list-style-type: none"> > Temperature resistant up to 130°C > Dimensionally stable after post-cure > Low linear coefficient of thermal expansion > Excellent milling characteristics > Very fine surface 	<ul style="list-style-type: none"> > Very fine surface structure > Good dimensional stability > Temperature resistant up to 110°C > Excellent milling characteristics 	<ul style="list-style-type: none"> > Easy to mill > Low linear coefficient of thermal expansion > Very fine surface structure 	
Hardness (ISO 868) Shore D	65 – 70	70 – 75	70 – 75	75 – 80	75 – 80	
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	45 – 50	35 – 45	35 – 45	35 – 45	50 – 60	
Deflection temperature (ISO 75) °C	85 – 90	100 – 110	130 – 140	100 – 110	70 – 80	
Compressive strength (ISO 604) MPa	40 – 45	50 – 60	60 – 70	60 – 70	45 – 50	
Flexural strength (ISO 178) MPa	35 – 40	25 – 35	40 – 50	40 – 50	45 – 50	
Dimensions mm (Length x Width x Height)	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100	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 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100	
Bonding with RAKU® TOOL	> EP-2306 / EH-2904-1	> EP-2303 / EH-2934-1	> EP-2304 / EH-2934-1	> EP-2303 / EH-2934-1	> PP-3310 / PH-3905	> EL-2210 / EH-2910-1*
Mix ratio (pbw)	100 : 30	100 : 20	100 : 20	100 : 20	100 : 50	100 : 60
Color	brown	blue	light green	blue	beige	clear
Pot life 500 ml (min)	30 – 40	50 – 60	50 – 60	50 – 60	5 – 8	50 – 60
Minimum curing time (h)	16	16	16	16	4	16
Repair with RAKU® TOOL	> EP-2306 / EH-2936-2	> EP-2303 / EH-2936-2	> EP-2304 / EH-2936-2	> EP-2303 / EH-2936-2	Repair with adhesive bonded inserts	
Mix ratio (pbw)	100 : 50	100 : 50	100 : 50	100 : 50		
Color	brown	blue	light green	blue		
Pot life 100 ml (min)	15 – 20	15 – 20	15 – 20	15 – 20		
Minimum curing time (min)	90 – 120	90 – 120	90 – 120	90 – 120		

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	RAKU® TOOL WB-1222	RAKU® TOOL WB-1250	RAKU® TOOL WB-1258	RAKU® TOOL WB-1404	RAKU® TOOL WB-1460					
Working Boards										
Color	green	light green	orange	olive	light green					
Density (ISO 1183) g/cm³ ca.	1.22	1.25	1.20	1.40	1.46					
Applications	> Checking fixtures for metal parts > Foundry pattern plates > Hammer tools	> Foundry core boxes > Foundry models > Foundry pattern plates	> Pattern plates > Core boxes	> Checking fixtures for metal parts > Foundry models > Foundry pattern plates and core boxes > Hammer tools > Models and molds for composite applications > Models and molds for polyester applications > Molds for low pressure RIM > Thermoforming tools	> Foundry models > Foundry pattern plates					
Key Properties	> Good abrasion resistance > Low wear of milling tools > Most proven working board on the market > Resistant to amine > Resistant to dry ice cleaning	> Easy to mill > Low wear of milling tools > Resistant to dry ice cleaning > Excellent abrasion resistance > Excellent amine resistance	> Excellent abrasion resistance > High impact resistance > High edge strength > Excellent milling characteristics > Excellent resistance to chemicals	> Polishable > Good abrasion resistance > Good amine resistance > Good styrene resistance > Low coefficient of thermal expansion > Resistant to dry ice cleaning	> Good abrasion resistance > Made with recycled polyol > Resistant to amine > Resistant to dry ice cleaning					
Hardness (ISO 868) Shore D	75 – 85	77 – 83	80 – 85	85 – 90	80 – 85					
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	80 – 85	70 – 75	70 – 75	50 – 55	65 – 75					
Deflection temperature (ISO 75) °C	80 – 90	80 – 85	70 – 75 (Tg)	75 – 80	75 – 80					
Compressive strength (ISO 604) MPa	60 – 70	70 – 80	90 – 100	85 – 95	70 – 80					
Flexural strength (ISO 178) MPa	70 – 80	90 – 100	100 – 110	80 – 90	70 – 80					
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	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	> PP-3311 / PH-3905	> EL-2210 / EH-2910-1*	> PP-3350 / PH-3905	> EL-2210 / EH-2910-1*	> 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*
Mix ratio (pbw)	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60
Color	green	clear	light green	clear	orange	clear	olive	clear	green	clear
Pot life 500 ml (min)	5 – 8	50 – 60	5 – 8	50 – 60	5 – 8	50 – 60	5 – 8	50 – 60	5 – 8	50 – 60
Minimum curing time (h)	4	16	4	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	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	
Mix ratio (pbw)										
Color										
Pot life 100 ml (min)										
Minimum curing time (min)										

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	RAKU® TOOL WB-1600	RAKU® TOOL WB-1700
	Working Boards	
Color	ivory	dark gray
Density (ISO 1183) g/cm³ ca.	1.60	1.70
Applications	<ul style="list-style-type: none"> > Jigs and checking fixtures for metal parts > Metal sheet forming tools > Thermoforming tools 	<ul style="list-style-type: none"> > Jigs and checking fixtures for metal parts > Metal sheet forming tools > Preform tools for RTM > Prototyping RTM tools > Thermoforming tools
Key Properties	<ul style="list-style-type: none"> > Good mechanical properties > Low linear coefficient of thermal expansion 	<ul style="list-style-type: none"> > Polishable > Temperature resistant up to 120°C > Low friction resistance > Excellent mechanical properties > Very low linear coefficient of thermal expansion
Hardness (ISO 868) Shore D	85 – 90	85 – 90
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	45 – 50	45 – 50
Deflection temperature (ISO 75) °C	75 – 80	120 – 125
Compressive strength (ISO 604) MPa	90 – 100	125 – 130
Flexural strength (ISO 178) MPa	55 – 65	80 – 85
Dimensions mm (Length x Width x Height)	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	<ul style="list-style-type: none"> > PP-3310 / PH-3905 	<ul style="list-style-type: none"> > EL-2210 / EH-2910-1*
Mix ratio (pbw)	100 : 50	100 : 60
Color	beige	clear
Pot life 500 ml (min)	5 – 8	50 – 60
Minimum curing time (h)	4	16
Repair with RAKU® TOOL	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts
Mix ratio (pbw)		
Color		
Pot life 100 ml (min)		
Minimum curing time (min)		

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