RenShape®
polyurethane board materials

standard types and dimensions

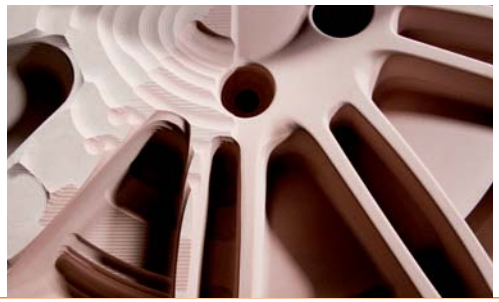
technical data
Measured average values, given for information purposes only.

Type	**BM 5108-1**	**BM 5025-1**	**BM 5185**	**BM 6300**
Colour	yellowish	yellowish	apricot	mocca
Applications	• design models • data controlling • supporting structures for modelling paste and clay/plasticine • negative moulds for net size casting	• styling • epoxy laminating moulds • supporting structures for modelling pastes and clay/plasticine • negative moulds for net size casting	• styling models • master models	• master models • cubing models • working models
Properties	• resistant to organic solvents • good heat resistance > 80 °C • very light weight and smooth • easily shapeable (low dust/particles)	• very good surface structure • good heat resistance > 80 °C • good machinability • resistant to organic solvents	• low coefficient of thermal expansion • very good surface structure • good machinability	• good surface structure • low coefficiency of thermal expansion • good dimensional stability
Density approx. **g/cm³**	80	200	420 – 520	550 – 650
Compressive strength (DIN EN ISO 604) approx. **MPa**	**Please ask for technical data for this product separately!**	2,6	10 – 15	15 – 20
Compressive modulus (ISO 604) approx. **MPa**		145	500 – 600	———
Bending strength (DIN EN ISO 178) approx. **MPa**		3,3	10 – 15	20 – 25
Linear thermal expansion coefficient temperature from approx. 25 up to 70 °C (according to DIN 53752) **$10^{-6} \cdot K^{-1}$**		———	50 – 55	50 – 55
Shore-D (DIN 53505) **Shore-D**		———	40 – 50	45 – 55
Deflection temperature **°C**	120	150	80 – 85	75 – 80
Standard dimensions **mm**	2000 x 1000 x 200 2000 x 1000 x 420 Possible on special request: 2000 x 1000 x 100 2000 x 1000 x 150 2000 x 1000 x 300	2000 x 1000 x 200 2000 x 1000 x 420 Possible on special request: 2000 x 1000 x 100 2000 x 1000 x 150 2000 x 1000 x 300	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 Further dimensions on request.	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 Further dimensions on request.

RenShape® board materials, bonding adhesives and repair systems

Standard bonding	RenPaste® SV 36/ Ren® HY 5162	RenPaste® SV 427-2/ Ren® HY 5162	RenPaste® SV 427-2/ Ren® HY 5162	RenPaste® SV 427-2/ Ren® HY 5162
Mix ratio	100 : 35	100 : 35	100 : 35	100 : 35
Fast bonding	RenCast® FC 52	RenCast® FC 52	RenCast® FC 52	RenCast® FC 52
Mix ratio	100 : 100	100 : 100	100 : 100	100 : 100
Repair system	XW 5184 / XW 5130	XW 5184 / XW 5130	XW 5184 / XW 5130	XW 5184 / XW 5130

Storage: The block material can be stored flat in original card board boxes or on a pallet at 20 °C to 40 °C in dry condition. Temperature variations should be avoided during transport and storage. The technical data relating to the material and its processing has been compiled carefully and is correct to the best of our knowledge.The information cannot, however, be taken to be legally binding nor as any commitment that the material has certain properties or is suited for any particular purpose.



RenShape®
Epoxy

BM 5460 brown	BM 5066 beige	BM 5173 dark blue	BM 5112-2 grey	BM 5166 ivory	BM 5050 blue	BM 5055 light green
• master models • cubing models • working models	• master models • foundry models • master template	• pattern plates • core boxes • tooling jigs	• hammer form tools • flanging tool • pattern plates • core boxes • jigs	• pressing tools • jigs	• prepregs • data control models • cubing • vacuum forming moulds	• prepregs • data control models • cubing • vacuum forming moulds
• very good and fine surface structure • good bending and compressive strength • low coefficient of thermal expansion • good dimensional stability	• easily machinable (no abrasive filler) • dust free milling • very good edge strength • very good dimensional stability	• excellent machinability • high abrasion resistance • excellent edge stability • high impact resistance • good heat resistance	• good abrasion resistance • high impact resistance • dimensionally stable	• good abrasion resistant • very good compressive strength • very compact surface • good heat resistance • good machinability	• very fine surface structure • easily machinable • very good dimensional stability • high deflection temperature up to 110 °C	• very fine surface structure • easily machinable • very good dimensional stability • high deflection temperature up to 140 °C
670 – 770	900 – 1000	1150 – 1250	1500 – 1600	1650 – 1750	700 – 750	720 – 750
25 – 30	50 – 55	85 – 90	95 – 100	90 – 100	60 – 65	50 – 55
1250 – 1350	———	2900 – 3000	4800 – 5000	7000 – 7500	———	2300 – 2400
25 – 30	55 – 60	90 – 95	100 – 110	55 – 65	35 – 40	30 – 40
45 – 50	55 – 60	75 – 80	60 – 65	45 – 50	35 – 40	35 – 45
70 – 75	70 – 75	80 – 85	80 – 85	85 – 90	72 – 78	67 – 75
75 – 80	85 – 90	80 – 85	85 – 90	75 – 80	105 – 110	135 – 140
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 1500 x 500 x 200 Further dimensions on request.	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 Further dimensions on request.	1000 x 500 x 50 1500 x 500 x 50 1000 x 500 x 75 1500 x 500 x 75 1000 x 500 x 100 1500 x 500 x 100 Further dimensions on request	750 x 500 x 50 1500 x 500 x 50 750 x 500 x 75 1500 x 500 x 75 750 x 500 x 100 Further dimensions on request.	750 x 500 x 50 750 x 500 x 75 750 x 500 x 100 Further dimensions on request.	1524 x 610 x 50 1524 x 610 x 75 1524 x 610 x 100 Further dimensions on request.	1524 x 610 x 50 1524 x 610 x 75 1524 x 610 x 100 Further dimensions on request.
RenPaste® SV 427-2/ Ren® HY 5162					RenGel® SW 18/ Ren® HY 5159	RenGel® SW 18/ Ren® HY 5159
100 : 35					100 : 16	100 : 16
RenCast® FC 52						
100 : 100						
XW 5184 / XW 5130					Repair with original bonding material RenGel® SW 18/ Ren® HY 5159	Repair with original bonding material RenGel® SW 18/ Ren® HY 5159

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