



3M™ VHB™ High-Strength Bonding Tapes.

Product selection guide.

															
Product number	4905	4910	4915	5925	5952	5962	LSE-060WF	LSE-110WF	LSE-160WF	GPH-060GF	GPH-110GF	GPH-160GF	4912	4930	4950
Properties/suitable for	Transparent materials	Transparent materials	Transparent materials	Powder-coated paints	Powder-coated paints	Powder-coated paints	PP, TPO, TPE, composite materials	PP, TPO, TPE, composite materials	PP, TPO, TPE, composite materials	High temperature resistance	High temperature resistance	High temperature resistance	General purpose	General purpose	General purpose
Key features (info box)															

Physical and performance characteristics, key features

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Total thickness [mm]	0.5	1.0	1.5	0.6	1.1	1.6	0.6	1.1	1.6	0.6	1.1	1.6	2.0	0.6	1.1
Adhesive type	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Mod. Acrylic	Mod. Acrylic	Mod. Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic	Acrylic
Colour	Clear	Clear	Clear	Black	Black	Black	White	White	White	Grey	Grey	Grey	White	White	White
Foam density [kg/m ³]	960	960	960	590	590	590	715	715	715	710	710	710	730	800	800
Peel strength [Newton/cm] ASTM D-3330	21	26	26	30	39	39	30	44	54	25	37	34	35	35	44
Tensile strength (T-block) [kPa] ASTM D-897	690	690	690	620	620	620	566	479	450	636	681	729	655	1100	970
Dynamic overlap shear [kPa] ASTM D-1002	480	480	480	620	550	550	814	592	538	848	738	581		690	550
Temperature resistance (min, h)	90°C – 150°C	90°C – 150°C	90°C – 150°C	120°C – 150°C	120°C – 150°C	120°C – 150°C	100°C – 150°C	100°C – 150°C	100°C – 150°C	150°C / 230°C	150°C / 230°C	150°C / 230°C	150°C / 190°C	90°C / 150°C	90°C / 150°C
Surface energy															
High	++	++	++	++	++	++	+	+	+	++	++	++	++	++	++
Medium 	+	+	+	++	++	++	++	++	++	+	+	+	+	+	+
Low 	-	-	-	-	-	-	++	++	++	-	-	-	-	-	-
Material expansion/contraction (dilatation max.)	1.0 mm	2.0 mm	3.0 mm	1.8 mm	3.3 mm	4.8 mm	1.8 mm	3.3 mm	4.8 mm	1.8 mm	3.3 mm	4.8 mm	6.24 mm	1.9mm	3.3mm
Joint gap tolerances (max.)	0.125 mm	0.250 mm	0.375 mm	0.300 mm	0.550 mm	0.800 mm	0.300 mm	0.550 mm	0.800 mm	0.300 mm	0.550 mm	0.800 mm	0.690 mm	0.320 mm	0.550 mm
Indoor and outdoor use	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
UV-, solvent- and aging resistance	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

Suggested applications

Product number	4905	4910	4915	5925	5952	5962	LSE-060WF	LSE-110WF	LSE-160WF	GPH-060GF	GPH-110GF	GPH-160GF	4912	4930	4950
Bond panel to frame				•	•	•	•	•	•	•	•	•	•	•	•
Bond stiffener to panel				•	•	•	•	•	•	•	•	•	•	•	•
Bond of decorative material, trim, attachments	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bond of nameplates, logos and signs	•	•	•	•	•	•	•	•	•				•	•	•
Bond electronic displays				•	•	•	•	•	•				•	•	•
Bond lens window to housing	•	•	•	•	•	•	•	•	•				•	•	•
Joining transparent material	•	•	•												
Mount backlit translucent signs	•	•	•												
Assembly of components before heat curing paint processing like powder coating or liquid painting										•	•	•			

Product Use

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