



3M™ VHB™ High-Strength Bonding Tapes



Product number	4905	4910	4915	5925	5952	5962	LSE-060WF	LSE-110WF	LSE-160WF	GPH-060GF	GPH-110GF	GPH-160GF	4936	4941	4991
Properties/suitable for	Trans-parent materials	Trans-parent materials	Trans-parent 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	Plasticizer resistance	Plasticizer resistance	Plasticizer resistance
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	0.6	1.1	2.3
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	Grey	Grey	Grey
Foam density [kg/m³]	960	960	960	590	590	590	715	715	715	710	710	710	720	720	720
Peel strength [Newton/cm] ASTM D-3330	21	26	26	30	39	39	30	44	54	25	37	34	30	35	35
Tensile strength (T-block) [kPa] ASTM D-897	690	690	690	620	620	620	566	479	450	636	681	729	620	590	410
Dynamic overlap shear [kPa] ASTM D-1002	480	480	480	620	550	550	814	592	538	848	738	581	550	480	450
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	90°C – 150°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	1.8 mm	3.3 mm	6.9 mm
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	0.300 mm	0.550 mm	1.150 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	4936	4941	4991
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										●	●	●			
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Product Use

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