

Glass Bonding Adhesives

Permabond adhesives for glass form very high strength bonds in load bearing joints. Glass furniture and display cabinets benefit from formulations that offer flexibility and stress absorption when bonding dissimilar substrates.

Application: TV Cabinets



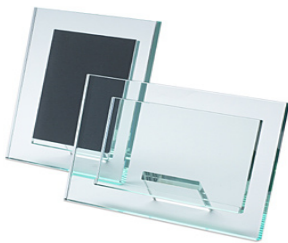
Sleek, contemporary glass furniture is all the rage nowadays. Visible fixtures and fittings are not desirable so adhesives are the ideal alternative method of fixing components whilst still keeping smooth lines and an aesthetically pleasing finish.

Beneath the outward appearance of furniture items are the more crucial factors of joint strength, durability and of course, safety. Therefore adhesives used must not only look good, but meet tough performance requirements.

- Non-flammable
- 100% solids
- Clear & non-yellowing
- Flexible to cope with differential thermal expansion and contraction between glass and metal surfaces
- Excellent impact, vibration and thermal shock resistance
- No weighing or mixing required - single part
- Adhesive strength exceeds substrate strength. i.e., the bond was stronger than the glass.

Adhesive used: *Permabond UV610*

Application: Photo Frames



- Optically clear adhesive for bonding novelty photo frames
- Non-yellowing
- Rapid cure for high-speed production line
- Strong bonds - even on shelf style butt-joint configurations
- Excellent long-term durability on glass

Adhesive used: *Permabond UV620*



Application: Bonding Glass Display Cabinets

- Excellent strength even without traditional metal fixtures.
- Allows for modern, minimalistic designs.
- No drip gel for easy application

Adhesive used: *Permabond UV625*

Application: Lens Bonding

- Invisible bond does not affect lens performance
- Non-yellowing
- Low viscosity to reduce air entrapment



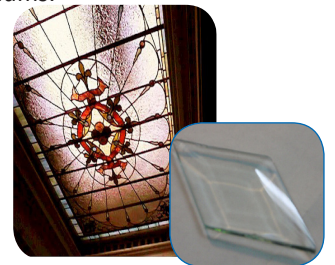
Adhesive used:
Permabond UV610

Application: Bevel bonding for decorative glass windows

Permabond has developed a special "Bevel Bonder" suitable for bonding decorative glass bevels for windows, skylights and atriums.

- Excellent resistance to UV-yellowing
- Low viscosity for minimal air entrapment
- Slow cure to allow easy clean up of excess adhesive around the bevel
- Excellent optical clarity

Adhesive used: *Permabond UV612*



Application: UV Bonding with Shadowed Areas

Permabond also offers dual cure UV adhesives for curing in shadow areas e.g. in aluminium extrusions and for mirror fixings.



Adhesive used:
Permabond UV7141

Application: Bonding Liquid Crystal Displays

- Invisible bond - seamless modern appearance
- Non-yellowing
- Easy to apply
- Rapid cure for high-speed production line



Adhesive used: *Permabond UV620*

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Engineering Adhesives

Product selector

Features	Typical Applications	Cure Method	Cure speed (with low powered 4mW/cm ² lamp)	Viscosity (mPa.s) cP	Refractive Index	Shore D Hardness	Maximum Shear Strength Glass to Metal (MPa) psi	Temperature range (°C) °F
Permabond UV610 Low viscosity UV adhesive to minimise air bubble entrapment.	Lens bonding, furniture bonding	UV-lamp	11 seconds	800 - 1000	1.47	90	(16) 2300	(-55 to +120) -65 to +250
Permabond UV612 Bevel bonding adhesive offering easy clean up	Decorative glass bevel bonding	UV-lamp	15 seconds	400 - 500	1.475		(5) 700	(-55 to +120) -65 to +250
Permabond UV620 High strength, high performance UV adhesive. Ideal for bonding glass to metal. Optically clear and non-yellowing.	Glass furniture bonding	UV-lamp	5 seconds	2000 - 3000	1.49	62	(10) 1500	(-55 to +120) -65 to +250
Permabond UV625 Non-drip UV gel. Ideal for vertical applications or where larger gap fill is required.	Glass display cases	UV-lamp	5 seconds	Gel	1.47	65	(11) 1600	(-55 to +120) -65 to +250
Permabond UV7141 Dual cure UV-anaerobic adhesive will cure in shadow areas. Ideal for glass to metal bonding applications. Excellent environmental resistance.	Bonding metal hinges to glass shower doors, mirrored bathroom cabinets and for glass into aluminium extrusion edging.	UV-lamp and anaerobic cure	5 - 20 seconds (UV cure) 30 - 60 mins (anaerobic cure)	1000 - 2000	1.49	35	(17) 2500	(-55 to +150) -65 to +300
Permabond TA4246 Structural acrylic adhesive with brush on initiator and separate resin.	Architectural projects involving high strength glass to metal bonding	Resin & Brush-on initiator	2 - 4 minutes	28,000 - 32,000	-	-	(16) Substrate failure 2300	(-55 to +120) -65 to +250

If you can't see the exact product you are looking for, or need more in depth technical information, Permabond's technical team would be more than happy to help.

Contact Permabond

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Permabond Worldwide

Wherever your manufacturing or R&D site may be located, Permabond representatives can be called upon to assist you. We have an extensive network of trained distributors worldwide.



Permabond's sales engineers are available to assess your production line and find the best possible turnkey adhesive solution that will result in production efficiencies.

The experienced team of Permabond chemists is on hand to help you with custom formulations and fulfilling your technical data requests.



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