

EVA Laminate

Technical Information

EVA Laminate Process - General

- Custom-made laminate glass
- Bonding two or more **Cut to Size** glass panes together
- Using an EVASAFE interlayer to bond them together – Ethylene Vinyl Acetate (A thermoplastic copolymer resin)
- Heat and Pressure used to facilitate the bond through a vacuum process
- Various inserts – printed interlayer, fabric, wood veneer, wallpaper, stainless steel mesh, etc...

EVA Specifications

Interlayer Specification Requirements

Glass Type	Clear Glass	Obscure & Coated Glass	Images & Patterns
Annealed (up to 12mm combined glass thickness)	0.4	1.2	0.8
Annealed (13mm-24mm combined glass thickness)	0.8	1.2	1.6
Toughened (up to 12mm combined glass thickness)	1.2	1.2	1.6
Toughened (over 13mm combined glass thickness)	1.2	1.6	2.4
Multi Laminates (3 ply glass)	1.6	2.4	2.4

Glass Specification Requirements

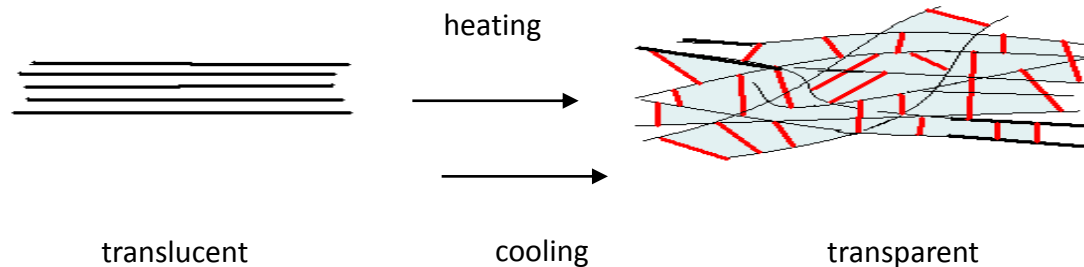
Glass Type	Max. Glass Size	Min. EVA Interlayer thickness	Min. EVA Interlayer Structural glass*
Annealed			
4mm / 4mm	2440mm x 1220mm	0.4	
5mm / 5mm	3000mm x 2000mm	0.4	
6mm / 6mm	4200mm x 2190mm	0.8	
Toughened			
4mm / 4mm	2000mm x 1200mm	0.4	0.4
5mm / 5mm	2700mm x 1220mm	0.8	0.8
6mm / 6mm	3000mm x 1500mm	0.8	1.2

EVASAFE™ Interlayer

- ***EVASAFE™*** is the ‘premium’ interlayer product developed, patented and trade mark registered by Bridgestone
 - Unique manufacturing process and properties
 - Excellent durability and stable optical performance
 - Proven for long term inside and outside usage
 - High moisture resistance
 - No plasticizers
 - Excellent compatibility with various insert media

EVASAFE™ 3D Superior Network-Building

- **High density of Network-Building** between polymer chains compared to other generic EVA based films
- The chains react chemically between 110°C and 140°C
- 3D network of polymer chains is built
- Result is a solid and stable structure
- No melting anymore



EVA Specifications cont.

Glass types

- Coated glass surface to outside – unless testing of embedded coatings performed
- Seek technical advice when Low E tints or heavy tinted float glass is specified (ie supergreen). Irregular laminating results may occur.

Interlayers

- Multiple interlayers required for toughened glass for adequate adhesion
- 1.2mm interlayer recommended for large panel frameless assemblies / balustrades where toughened laminate required.
- Semi Opaque interlayer available - Milky White - .4mm or .8mm thickness
- To reduce exposure to UV fading of PET film on exterior use we recommend two EVASAFE interlayers (0.8) to the exterior face and one EVASAFE interlayer (0.4) to the interior face (98.6% UV reduction).