Core Products

VLam™

The starting point for safety, security, noise and structural integrity

How to specify

- **Select glass name**
  Viridian VLam
- **Select thickness – process**
  6.38mm to 39.52mm – Laminated
  7.52mm to 39.52mm – Toughened Laminate
- **Select colour**
  Refer to range chart on page 15

VLam, if broken the glass is bonded to an interlayer.

Product description

Viridian **VLam**™ consists of two or more sheets of glass bonded together by heat and pressure with an interlayer of either PVB, EVA or a specialist high strength ionoplast interlayer.

Resin Pour or Cast In Place (CIP) is another form of lamination. Edge tape is applied to the edge of the glasses before a liquid resin is poured between the two sheets. The resin is cured under UV lights. Only available in New Zealand.

The result is a durable, adaptable high performance glazing material that can provide solutions to many architectural applications. Within the Viridian™ range there is a wide variety of laminated glass options.

Features and benefits

- **Safety** – in vertical or sloped overhead applications, laminated glass can resist penetration from accidental impact. If the glass is broken, fragments adhere to the interlayer and are retained in place. VLam provides safety from contact with broken or falling glass, or bodily injury by falling through the glass. In certain applications, toughened laminated glass must be used, such as sloped overhead glass.
- **Security** – standard laminated glass provides resistance to penetration from physical attack. By increasing the thickness of the interlayer and its strength, as well as using multiple glass interlayer constructions, products are offered for specialist security applications including bullet and bomb resistance (refer to page 110 and 113).
- **Noise control** – VLam provides good noise dampening over the same thickness of float glass. By incorporating VLam into a Viridian **ThermoTech**™ insulating glass unit, excellent noise attenuation can be achieved. Viridian **VLam Hush**™ uses a specially developed interlayer for enhanced noise reduction (refer to page 55).
- **UV protection** – the PVB interlayer used in VLam eliminates 99% of ultraviolet radiation. When incorporated with solar control glass, fading can be reduced up to 8.5 times over normal glass.
- **Solar control** – VLam can be manufactured with toned solar control glass and interlayers providing glare and solar heat gain reductions. Further to this, VLam can be customised with virtually any Viridian solar control glass for the ideal balance between daylight solar control and thermal insulation.

VLam™

- **Colour and decoration** – translucent and translucent grey interlayers, along with the Viridian **ScalaTexture™** glass options are available for privacy and light diffusion. The Viridian **ScalaSeraphic™** range can also be laminated providing options for screen printed colours and designs.

Custom laminating

The laminating process provides almost limitless options in glass configurations. Combinations of solar control glass, special interlayers, Low E and coated glass, as well as decorative glass provide tailored solutions. Toughened laminated glass is also available for large overhead spans and additional safety in balustrades and Viridian **Structural Glazing Systems.™** Glass options for floors and very thick glass for aquariums are also available.

Interlayer thicknesses

The standard PVB interlayer is 0.38mm thick. Also available are 0.76mm and 1.52mm for increased resistance to penetration and security applications.

Resin Pour or Cast in Place (CIP) is another type of lamination. This is available in New Zealand for customised solutions.

Considerations

- Glass selection, glazing and manufacturing must be in accordance with Australian and New Zealand Standards – refer to standards on page 122 for an explanation on each standard.
- Interlayer colours are based on but are not identical to 6mm Viridian **VFloat™** glass colours.
- The glazing system must allow for water drainage or be completely watertight.
- Certain sealants may cause edge de-lamination such as linseed oil putty – neutral cure silicone sealants are recommended.
- Laminated glass edges left exposed are not recommended.
- Warranty, refer to page 122.

VLam range

	Thickness (mm)					Max size (mm)†
Product	6.38	6.76	8.38	10.38	12.38	
Clear	◆	◆	◆	◆	◆	5100 x 3210
Bronze	◆		◆	◆	◆	3660 x 2440
Green	◆		◆	◆	◆	4600 x 2760
Grey	◆		◆	◆	◆	5100 x 3210
SuperClear				◆	◆	3660 x 2440
SuperGreen	◆			◆	◆	5100 x 3210
Translucent	◆		◆	◆	◆	5100 x 3210
Translucent Grey		◆				3660 x 2440
Cool Blue	◆		◆	◆	◆	3660 x 2440

† Max size not available in all thicknesses.

Applications

- Overhead glazing
- Residential and commercial buildings where safety glass is required

Safety

- A range of laminated and toughened laminated glass for safety applications

Noise

- VLam Hush
- ComfortHush

Decorative

- SpectraPrism
- LuminaMist, LuminaMist Grey

Solar Control

- VLam Grey, Bronze, Green, SuperGreen, SuperBlue
- ComfortPlus
- EnviroShield Performance

Security

- Observa
- IntruderGuard
- AssaultGuard
- AssaultGuard Ultra
- JailGuard

Special Applications

- StormGuard
- BulletGuard
- Bomb and BlastGuard
- MineGuard