



Bushfire  
Protection

PyroGuard 40™



## Bushfire resistant glass

Changes incorporated in to 'AS3959; Construction of Building in Bushfire-Prone Areas' has provided a pathway for a deemed to satisfy and alternative solution to glazing based on a BushFire Attack Level (BAL) rating. The deemed to satisfy approach prescribes glazing and bushfire resistant shutters and/or specific metal screens to the glazing area as the BAL moves through BAL 12.5 through to BAL 40 (refer to AS3959 for specific details). For consumers the presence of either or both of these elements may provide an unsightly and undesirable additional feature to the buildings external appearance.

AS3959 also provides an alternative solution using specifically tested and certified window systems in lieu of the deemed to satisfy provision. By successfully completing the test procedures in AS1530.8.1 alternative window systems can be installed without the need for bushfire resistant shutters and/or specific metal screens to the glazing area up to and including BAL 40.

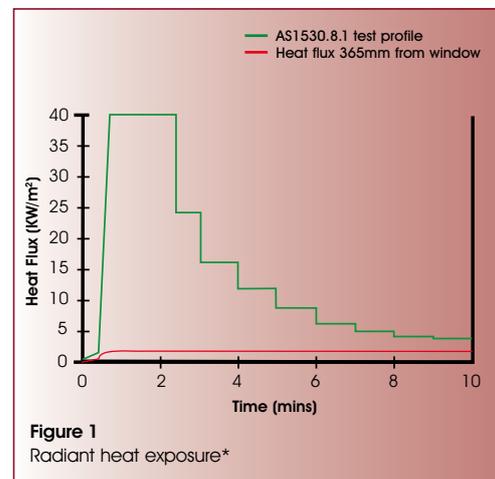
When a Viridian **PyroGuard 40™** bushfire resistant insulated glass unit is glazed as a part of a successfully tested window system to the

requirements of AS1530.8.1 it is suitable to be used for Bushfire Attack Levels (BAL) up to and including BAL 40. Viridian PyroGuard 40 is not designed to be used in BAL Fire Zone (BAL FZ).

Specific advice on the application should be sought from the relevant authorities and the window system manufacturer on suitability.

### Viridian PyroGuard 40™

Viridian PyroGuard 40 bushfire resistant glass is a specially processed insulated glass unit. It includes an ultra-thin coated glass that reduces the transfer of radiant heat from the bushfire front through the glass unit to the inside of a building. When subjected to radiation levels of up to 40kW/m<sup>2</sup> less than 4% of the radiant heat is transferred through a window glazed with Viridian PyroGuard 40. Figure 1 shows a typical test for Viridian PyroGuard 40 to resist radiant heat exposure of under 40kW/m<sup>2</sup>. This assists in providing protection to combustible materials such as curtains and furnishings within the building. Viridian PyroGuard 40 is a proprietary bushfire resistant glazing system available only through authorised Viridian processing facilities.





## Bushfire Protection

# Bushfire resistant glass

### Energy management

Viridian PyroGuard 40™ provides significantly better insulation performance than standard single paned glass, to improve the thermal comfort for occupants in the normal seasonal operation of the building. Viridian PyroGuard 40 is an insulated glass unit which features two pieces of glass separated by a hermetically sealed argon gas filled gap. This forms a transparent insulating barrier between the interior of the building and the outdoors, significantly reducing the rate of transfer of heat. Viridian PyroGuard 40™ is a safety glass which is manufactured to comply with AS2208 – Safety Glass in Buildings.

Bushfires are highly unpredictable in their intensity, duration and progress. The ability of a building to survive a passing bushfire is not solely dependent on the ability of glass used in windows and doors to withstand radiant heat.

A number of other factors are critical, including wall cladding, roofing material and absence of combustible material near the house.

AS3959, Construction of buildings in bushfire-prone areas, states that it is designed to improve the performance of the buildings when subjected

to bushfire attack in designated bushfire-prone areas, but does not guarantee that a building will survive a bushfire event on every occasion.

Refer to AS3959 for specific details. It is imperative that home owners contact fire authorities to obtain all relevant information on how to best manage bushfire risks. Viridian PyroGuard 40 bushfire resistant glass in a successfully tested and certified window system is only one part of a combination of strategies needed to reduce the risk of ignition from a bushfire while the fire front passes.

### Identifying Viridian PyroGuard 40™

Your Genuine Viridian PyroGuard 40™ is identified by a stamp in the bottom right hand corner of each of the two glass panes of the insulated glass unit as shown below:

# Viridian



## PyroGuard 40™



### Maximum size

- ◆ Refer to window manufacturer's test certificate for maximum window size

### Minimum size

- ◆ 350 x 250mm

