

# BLOCKOUT BUSHFIRES



## FIRE RESISTANCE CHARACTERISTICS OF A BLOCKOUT SHUTTER



Doors, windows and glass areas in buildings and houses are highly vulnerable to the effects of bushfires. Radiant heat can shatter glass areas, allowing flames to enter a building quickly and spread to internal fittings such as curtains and blinds. Other effects created by bushfires such as wind and turbulence carry debris that can shatter windows before a fire arrives.

In addition, hours after a bushfire has swept through an area, ignition can still occur through deposits of hot ash around window crevices that smoulder until they finally ignite the surrounding material.

Government agencies such as the Australian Standards (AS 3959-1999), The Rural Fire Services, Councils and Local Fire Authorities now advise installing products such as Blockout Roller Shutters on all doors and windows on properties in bushfire zoned areas for extra protection. Blockout's aluminium roller shutters, along with its exclusive rigid interlocking system, will reduce the effects of bushfires such as:

- Stopping scorching heat and flames from entering buildings.
- Preventing window or door glass areas from shattering.
- Stopping internal fittings such as curtains and other soft furnishings from igniting.
- Reducing the risk of ash build up on window frames.
- Sealing the property from penetrating fumes.
- Restraining the spread of the fire by preventing the escape of oxygen.

In addition, Blockout's standard roller shutters use roll

formed aluminium profiles filled with a very dense, non-flammable polyurethane insulating foam core. This provides an extra level of fire insulation and unlike PVC profiles, they do not give off a poisonous gas when burning or melting.

The Rural Fire Services and Australian Standards currently have three building levels that require shutters. For level 1 (16kW) and Level 2 (21kW) constructions, we recommend using our Original Blockout Roller Shutter or our Roll Formed Maxiblock® Roller Shutters. For Level 3 (31kW) constructions, a higher temperature demand is required so we recommend using either our Maxiview® or Extruded Maxiblock® Roller Shutters due to the heavier gauge material used.

### Case Study

In 1993, Blockout Roller Shutters were involved with the CSIRO in testing a double wall extruded aluminium shutter for bushfires. The shutter was tested to 35kW with no product failure, easily exceeding the requirement of 31kW for Level 3 construction.

Our heavy-duty shutter profiles are manufactured from extruded aluminium that does not require a foam core and is even stronger than the model tested. Blockout aluminium profiles also offer the great advantage of minimal distortion under the influence of high temperatures, unlike profiles of PVC or steel.

As part of our ongoing research and development programme, the CSIRO conducted additional appraisals on our shutters in 2004.

