FREQUENTLY ASKED QUESTIONS
Bushfire Preparedness for Residential Aged Care Facilities and Country Hospitals

Q. Our facility had a Bushfire Site Risk Assessment undertaken as part of the RAC & CH project earlier this year. We have acted on the recommendations and we would like to request a re-assessment to see what our rating is now and if we can shelter in place during a bushfire?

There are no resources allocated in this project for re-assessment and CFS is unable to resource this activity. The project group is currently seeking funding for further project work. This may include follow up assessments for facilities that were assessed as having a high to extreme site bushfire risk rating and facilities will be contacted if this is going ahead.

However, it is recommended that a building surveyor experienced in the application AS 3959 Construction of buildings in bushfire prone areas assess your facilities for compliance with the relevant Bushfire Attack Level at an FDI (Fire Danger Index) of 100\(^2\). This will provide a more detailed and accurate assessment of your facility’s passive protection levels.

All Bushfire Site Risk Assessment reports state that if facilities implement and maintain the recommendations as listed, passive shelter in place may be a viable option up to a Fire Danger Index of 100 [Fire Danger Rating (FDR) of Catastrophic].

Q. Our facility wasn’t part of this project, how do we get a Bushfire Site Risk Assessment done?

The assessment process has been completed for this project and CFS is unable to resource any other assessments. The project group is currently seeking funding for another round of assessments and there may be an opportunity to be included if you are in a high bushfire risk location.

You could also engage a building surveyor experienced in the application AS 3959 Construction of buildings in bushfire prone areas to assess your facilities for compliance with the relevant Bushfire Attack Level at an FDI (Fire Danger Index) of 100 to determine how you could improve your passive bushfire protection measures.

Q. What if the Fire Danger Index is above 100 (Catastrophic Fire Danger Rating)?

The Bushfire Attack Level (BAL) assessment in the Bushfire Site Risk Assessment reports has been based on a Fire Danger Index (FDI) of 100. The BAL assessment is not valid where conditions exceed this FDI level.

A Fire Danger Index in excess of 100 (a FDR rating of Catastrophic) means that fire will burn so fast and so hot that it is virtually impossible to control. Building construction standards as defined in Australian Standard AS3959 do not go beyond a Fire Danger Index of 100.

\(^{1}\) Residential Aged Care and Country Hospital Risk Assessment Review and Planning Activities National Disaster Resilience Grant project 2011.

\(^{2}\) In SA the FDI used for private dwellings is 80 but for an added level of safety CFS recommends the use of FDI 100 for Special Protection Assets.
Even well prepared, constructed and actively defended buildings may not be safe during a fire burning under Extreme or Catastrophic conditions.

The best place to be in these conditions is away from a bushfire prone area. However, if this is not possible you need to improve your chances of survival by seeking refuge in a very well prepared Refuge building and implementing active bushfire protection measures.

Q. What if we can’t implement all the recommendations?

Your Bushfire Site Risk Assessment details the process of how your assessment was carried out. If you have implemented the vegetation recommendations but not the others, you can step through the process with the revised vegetation rating (i.e. BAL low) and determine how this has reduced your Bushfire Site Risk Rating.

If you are unable to reduce your Bushfire Site Risk Rating below Medium you need to improve your chances of survival through your emergency planning and by taking action during dangerous fire weather and during bushfire incidents. Options include seeking refuge in a very well prepared Refuge building and implementing active bushfire protection measures.

You must also identify the triggers that will prompt you to relocate the occupants of your facility.

Q. What is the difference between passive and active bushfire protection?

Passive protection measures are those that are put in place before the fire season and do not require ongoing input. These measures will mean that there is an inbuilt level of fire protection even if no one is present during a bushfire. Passive protection measures include:

- landscaping
- spark and ember proofing
- fire breaks
- safe vehicle access
- storage of flammables

Active protection measures are those that need our input and are only of benefit to building survival if someone is present and able to use them. However, they can be an essential part of a building’s protection package to ensure a higher level of protection for people using the building as a refuge, or when adequate passive measures cannot be put in place. Active protection measures include:

- pumps, hoses and sprinkler systems
- water supplies
- window shutters

Q. What is a Refuge building and how does this differ from a bushfire shelter?

A Refuge building is a designated place that people can relocate to and remain in, which provides relative safety during the passage of a bushfire. It should be built and maintained in accordance with CFS recommendations (see below).

A Refuge does not guarantee the survival of those who assemble there, however an adequately-prepared building is more likely to be defendable, and more likely to survive a bushfire if undefended. Most importantly, if there is insufficient time to leave safely, an adequately-prepared Refuge can provide shelter from radiant heat and, provided it is actively defended, can be protected in most circumstances.

A Refuge must not be considered as a stand-alone solution to potential risks to life safety in a bushfire event; however it should be part of a broad package of measures that, in combination, form a robust ‘Bushfire Risk Management Strategy’.
A bushfire shelter is a purpose built facility which is an above ground or in-ground shelter separated from an associated dwelling. It is designed to provide a tenable environment for occupants during the passage of untenable conditions arising from a bushfire event\(^3\). There are performance standards for private (i.e. domestic) shelters, but no building code standards for a private bushfire shelter. There are no performance standards or building code standards developed for larger bushfire shelters.

Q. **We have been informed that there are no standards for a “Refuge Building” What do we do?**

There is currently no definition of a “Refuge building” and no set building standards or set back distances for a refuge in the Australian building code and standards. As a result, building surveyors are unable to provide an assessment against a standard in the Building code.

This matter is being considered at the national level by AFAC (Australian Fire and Emergency Services Council) the ACBA (Australian Building Codes Board), but it will take some time before standards are set and published.

In the absence of an agreed national standard, CFS is working on guidelines for organisations to manage the bushfire risk to facilities and occupants of Special Fire Protection Assets. These recommendations provide more clarity about the standards recommended for a building to be used to shelter in place during a bushfire or during fire danger days.

**For a Refuge building to offer relative safety during a bushfire, CFS recommends that:**

- A Refuge Building meet a maximum Bushfire Attack Level (BAL) of 12.5 kw/m\(^2\) at an FDI of 100 as set out in AS3959-2009 *Construction of Buildings in Bushfire Prone Areas*.
- Active bushfire protection measures are installed and implemented to improve the relative safety of a Refuge building
- Emergency planning and exercises are in place and include the activation and use of the Refuge Building
- Staffing of a facility is adequate at all times during the bushfire season to activate the use and active bushfire protection of the Refuge building.

Q. **What do you classify as a Special Fire Protection Asset??**

Assets classed as Special Fire Protection are those where the occupants may be more vulnerable to bush fire attack for one or more of the following reasons:

- They may be less educated in relation to bush fire impacts (e.g. tourists)
- They may have reduced capacity to evaluate risk and to respond adequately to the threat
- They may present organisational difficulties for relocation and/or management
- They may be more vulnerable due to stress and anxiety arising from bush fire and smoke
- There may be significant communication barriers
- Supervision during a bush fire may be difficult
- Logistical arrangements to support the number of residents or occupants may be complicated in terms of alternative accommodation, transport, health care and food supplies.

Assets considered as Special Fire Protection include:

- School campuses
- Disability housing
- Childcare
- Hospitals
- Day centres
- Tourism accommodation
- Aged care
- Retirement villages

\(^3\) *Performance Standard for Private Bushfire Shelters 2010 - Part 1*

*Australian Building Codes Board, April 2010*
Q. What sort of preparations do we need to shelter in place during fire danger weather or during a bushfire?

Shelter-in place requires a very high level of passive bushfire protection measures as you will not necessarily have the capacity to actively defend the building/s. Having to care for vulnerable people such as frail aged people, children or people with disabilities while defending a building can compromise firefighting efforts and hence the safety of all present. Anyone who cannot make a significant contribution to the active defense of a building should be relocated to your designated Refuge well before a bushfire threatens.

For a "Special Protection Asset" (see below) to offer relative safety in a bushfire prone area CFS recommends the following:

- That site bushfire risk is mitigated through appropriate vegetation management and building standards to meet a maximum Bushfire Attack Level (BAL) of 12.5 kw/m² at a FDI of 100 as set out in AS3959-2009 Construction of Buildings in Bushfire Prone Areas.
- That where this standard cannot be met for the entire site, it is recommended that a building is nominated as a Refuge and that vegetation management and building standards are implemented to meet a maximum BAL of 12.5 kw/m² at an FDI of 100 for this building.
- That an Emergency Planning Committee is formed to coordinate the development of the Emergency Plan (Bushfire) and the implementation of Emergency Response exercises (Bushfire) in line with CFS messages and AS 3745-2010 Planning for Emergencies in Facilities to ensure that the facility is prepared for an emergency and that the Refuge building is used as specified.

As there may be some circumstances in which even very well-prepared buildings are unlikely to survive and there is an unreasonable risk to your lives, you must identify the triggers that will prompt you to relocate the occupants of your facility.