E1.0 Bushfire-Prone Areas Code

E1.1 Purpose of the Bushfire-Prone Areas Code

E1.1.1 The purpose of this code is to ensure that use and development is appropriately designed, located, serviced, and constructed, to reduce the risk to human life and property, and the cost to the community, caused by bushfires.

E1.2 Application of this Code

E1.2.1 This code applies to:

- (a) subdivision of land that is located within, or partially within, a bushfire-prone area;
- (b) a use, on land that is located within, or partially within, a bushfire-prone area, that is a vulnerable use or hazardous use.
- E1.2.2 A permit is required for all use and development to which this code applies that is not exempt from this code under clause E1.4.

E1.3 Definition of Terms in this Code

E1.3.1 In this code, unless the contrary intention appears:

Term	Definition
accredited person	means as defined in the Act.
bushfire attack level (BAL)	means the bushfire attack level as defined in Australian Standard AS3959:2018 Construction of buildings in bushfire-prone areas.
bushfire hazard management plan	dmeans as defined in the Act.
bushfire protection measures	means the measures that might be used to reduce the risk of bushfire attack and the threat to life and property in the event of bushfire.
bushfire-prone area	 (a) land that is within the boundary of a bushfire-prone area shown on an overlay on a planning scheme map; or (b) where there is no overlay on a planning scheme map, land that is within 100m of an area of bushfire-prone vegetation equal to or greater than 1ha.

bushfire-prone vegetation	means contiguous vegetation including grasses and shrubs but not including maintained lawns, parks and gardens, nature strips, plant nurseries, golf courses, vineyards, orchards or vegetation on land that is used for horticultural purposes.
carriageway	means the section of road formation which is used by traffic, and includes all the area of the traffic lane pavement together with the formed shoulders.
contiguous	means separated by less than 20m.
fire fighting water point	means the point where a fire appliance is able to connect to a water supply for fire fighting purposes. This includes a coupling in the case of a fire hydrant, offtake or outlet, or the minimum water level in the case of a static water body.
fire hydrant	means as defined in Australian Standard AS 2419.1-2005 Fire hydrant installations, Part 1: System design, installation and commissioning.
group home	means use of land for residential accommodation for people with disabilities.
hardstand	means as defined in Australian Standard AS 2419.1-2005 Fire hydrant installations, Part 1: System design, installation and commissioning.
hazard management area	means the area, between a habitable building or building area and bushfire-prone vegetation, which provides access to a fire front for fire fighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which will significantly contribute to the spread of a bushfire.
hazardous use	E1.3 Bushfire-Prone Areas Code means a use where:
	(a) the amount of hazardous chemicals used, handled, generated or stored on a site exceeds the manifest quantity as specified in the Work Health and Safety Regulations 2012; or
	(b) explosives are stored on a site and where classified as an explosives location or large explosives location as specified in the <i>Explosives Act</i> 2012.
hose lay	means the distance between two points established by a fire hose laid out on the ground, inclusive of obstructions.
property access means the carriageway which provides vehicular access from carriageway of a road onto land, measured along the centre	

	carriageway, from the edge of the road carriageway to the nearest point of the building area.		
respite centre	means use of land for respite care for the sick, aged or persons with disabilities.		
static water supply	means water stored in a tank, swimming pool, dam, or lake, that is available for fire fighting purposes at all times.		
tolerable risk	means the lowest level of likely risk from the relevant hazard:		
	(a) to secure the benefits of a use or development in a relevant hazard area; and		
	(b) which can be managed through:		
	(i) routine regulatory measures; or		
	(ii) by specific hazard management measures for the intended life of each use or development.		
TFS	means Tasmania Fire Service.		
vulnerable use	E1.3 Bushfire-Prone Areas Code means a use that is within one of the following Use Classes:		
	(a) Custodial Facility;(b) Educational and Occasional Care;		
	(c) Hospital Services;		
	(d) Residential if for respite centre, residential aged care home, retirement home, and group home.		
water corporation	means the corporation within the meaning of the Water and Sewerage Corporation Act 2012.		

E1.4 Use or Development Exempt from this Code

The following use or development is exempt from this code:

- (a) any use or development that the TFS or an accredited person, having regard to the objective of all applicable standards in this code, certifies there is an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures; and
- (b) adjustment of a boundary in accordance with clause 9.3 of this planning scheme.

E1.5 Use Standards

E1.5.1 Vulnerable Uses

Objective:

Vulnerable uses can only be located on land within a bushfire-prone area where tolerable risks are achieved through mitigation measures that take into account the specific characteristics of both the vulnerable use and the bushfire hazard.

Acceptable Solutions	Performance Criteria	
Acceptable Solutions	r errormance errerna	
A1	P1	
No Acceptable Solution.	A vulnerable use must only be located in a bushfire-prone area if a tolerable risk from bushfire can be achieved and maintained, having regard to:	
	(a) the location, characteristics, nature and scale of the use;	
	(b) whether there is an overriding benefit to the community;	
	(c) whether there is no suitable alternative lower-risk site;	
	(d) the emergency management strategy and bushfire hazard management plan; and	
	(e) other advice, if any, from the TFS.	
A2	P2	
An emergency management strategy, endorsed by the TFS or accredited person, that provides for mitigation measures to achieve and maintain a level of tolerable risk that is specifically developed to address the characteristics, nature and scale of the use considering:	No Performance Criterion.	
(a) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability;		

(b)	the ability of occupants of the vulnerable use to:	
	(i) protect themselves and defend property from bushfire attack;	
	(ii) evacuate in an emergency; and	
	(iii) understand and respond to instructions in the event of a bushfire; and	
(c)	any bushfire protection measures available to reduce risk to emergency service personnel.	
А3		Р3
con mea	ushfire hazard management plan that tains appropriate bushfire protection asures that is certified by the TFS or an redited person.	No Performance Criterion.

E1.5.2 Hazardous Uses

Objective:

Hazardous uses can only be located on land within a bushfire-prone area where tolerable risks are achieved through mitigation measures that take into account the specific characteristics of both the hazardous use and the bushfire hazard.

Acceptable Solutions	Performance Criteria
A1	P1
No Acceptable Solution.	A hazardous use must only be located in a bushfire-prone area if a tolerable risk from bushfire can be achieved and maintained, having regard to: (a) the location, characteristics, nature and scale of the use; (b) whether there is an overriding benefit to the community; (c) whether there is no suitable alternative lower-risk site;

		 (d) the emergency management strategy and bushfire hazard management plan as specified in A2 and A3 of this Standard; and (e) other advice, if any, from the TFS.
An emergency management strategy, endorsed by the TFS or accredited person, that provides for mitigation measures to achieve and maintain a level of tolerable risk that is specifically developed to address the characteristics, nature and scale of the use having regard to:		No Performance Criterion.
(a)	the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability; and	
(b)	available fire protection measures to:	
	(i) prevent the hazardous use from contributing to the spread or intensification of bushfire;	
	(ii) limit the potential for bushfire to be ignited on the site;	
	(iii) prevent exposure of people and the environment to the hazardous chemicals, explosives or emissions as a consequence of bushfire; and	
	(iv) reduce risk to emergency service personnel.	
А3		Р3
A bushfire hazard management plan that contains appropriate bushfire protection measures that is certified by the TFS or an accredited person.		No Performance Criterion.

E1.6 Development Standards

E1.6.1 Subdivision: Provision of hazard management areas

Objective:

Subdivision provides for hazard management areas that:

- (a) facilitate an integrated approach between subdivision and subsequent building on a lot;
- (b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce the radiant heat levels, direct flame attack and ember attack at the building area; and
- (c) provide protection for lots at any stage of a staged subdivision.

Acceptable Solutions

Performance Criteria

A1

- (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or
- (b) The proposed plan of subdivision:
 - shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a staged subdivision;
 - (ii) shows the building area for each lot;
 - (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas; and
 - (iv) is accompanied by a bushfire hazard management plan that addresses all the individual lots and that is certified by the TFS or accredited person, showing hazard management areas equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of Australian Standard

P1

A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to:

- (a) the dimensions of hazard management areas;
- (b) a bushfire risk assessment of each lot at any stage of staged subdivision;
- (c) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability;
- (d) the topography, including site slope;
- (e) any other potential forms of fuel and ignition sources;
- separation distances from the bushfireprone vegetation not unreasonably restricting subsequent development;
- (g) an instrument that will facilitate management of fuels located on land external to the subdivision; and
- (h) any advice from the TFS.

AS 3959:2018 Construction of buildings in bushfire-prone areas; and

(c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.

E1.6.2 Subdivision: Public and fire fighting access

Objective:

Access roads to, and the layout of roads, tracks and trails, in a subdivision:

- (a) allow safe access and egress for residents, firefighters and emergency service personnel;
- (b) provide access to the bushfire-prone vegetation that enables both property to be defended when under bushfire attack and for hazard management works to be undertaken;
- (c) are designed and constructed to allow for fire appliances to be manoeuvred;
- (d) provide access to water supplies for fire appliances; and
- (e) are designed to allow connectivity, and where needed, offering multiple evacuation points.

P1

Acceptable Solutions

Α1

- (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant specific measures for public access in the subdivision for the purposes of fire fighting; or
- (b) A proposed plan of subdivision showing the layout of roads, fire trails and the location of property access to building areas is included in a bushfire hazard management plan that:
 - (i) demonstrates proposed roads will comply with Table E1, proposed private accesses will comply with Table

Performance Criteria

A proposed plan of subdivision shows access and egress for residents, fire-fighting vehicles and emergency service personnel to enable protection from bushfires, having regard to:

- (a) appropriate design measures, including:
 - (i) two way traffic;
 - (ii) all weather surfaces;
 - (iii) height and width of any vegetation clearances;
 - (iv) load capacity;
 - (v) provision of passing bays;

	E2 and proposed fire trails will comply with Table E3; and		(vi) traffic control devices;(vii) geometry, alignment and slope of
(ii)	is certified by the TFS or an accredited		roads, tracks and trails;
	person.		(viii) use of through roads to provide for connectivity;
			(ix) limits on the length of cul-de-sacs and dead-end roads;
			(x) provision of turning areas;
			(xi) provision for parking areas;
			(xii) perimeter access; and
			(xiii) fire trails;
		(b)	the provision of access to:
			(i) bushfire-prone vegetation to permit the undertaking of hazard management works; and
			(ii) fire fighting water supplies; and
		(c)	any advice from the TFS.

Table E1 Standards for roads

Element		Requirement			
A.	Roads	Unless the development standards in the zone require a higher standard, the following apply:			
		(a) two-wheel drive, all-weather construction;			
		(b) load capacity of at least 20t, including for bridges and culverts;			
		(c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;			
		(d) minimum vertical clearance of 4m;			
		(e) minimum horizontal clearance of 2m from the edge of the carriageway;			
		(f) cross falls of less than 3 degrees (1:20 or 5%);			
		(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;			
		(h) curves have a minimum inner radius of 10m;			

(i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;
(j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and
(k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard AS1743:2018 Road signs-Specifications.

Table E2 Standards for property access

Element		Requirement
A.	Property access length is less than 30m; or access is not required for a fire appliance to access a firefighting water point.	There are no specified design and construction requirements.
В.	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	The following design and construction requirements apply to property access: (a) all-weather construction; (b) load capacity of at least 20t, including for bridges and culverts; (c) minimum carriageway width of 4m; (d) minimum vertical clearance of 4m; (e) minimum horizontal clearance of 0.5m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; (h) curves with a minimum inner radius of 10m; (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and

		terminate with following:	a turning area for fire appliances provided by one of the
		(i) a turning	circle with a minimum outer radius of 10m; or
		(ii) a property	access encircling the building; or
		(iii) a hammei	head 'T' or 'Y' turning head 4m wide and 8m long.
C	. Property	e following desig	n and construction requirements apply to property access:
	access length is) the requireme	nts for B above; and
	200m or greater.) passing bays o every 200m.	f 2m additional carriageway width and 20m length provided
С). Property	e following desig	n and construction requirements apply to property access:
	access length is) complies with	requirements for B above; and
	greater than 30m, and access) passing bays o provided every	f 2m additional carriageway width and 20m length must be v 100m.
	is provided		
	to 3 or		
	more		
	properties.		
1	1		

Table E3 Standards for fire trails

Element		Requirement
A. All f	(a) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	The following design and construction requirements apply: a) all-weather, 4-wheel drive construction; b) load capacity of at least 20t, including for bridges and culverts; c) minimum carriageway width of 4m; d) minimum vertical clearance of 4m; e) minimum horizontal clearance of 2m from the edge of the carriageway; f) cross falls of less than 3 degrees (1:20 or 5%); g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle; h) curves with a minimum inner radius of 10m; i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed fire trails, and 10 degrees (1:5.5 or 18%) for unsealed fire trails;

		(j) gates if installed at fire trail entry, have a minimum width of 3.6m, and if locked, keys are provided to TFS; and
		(k) terminate with a turning area for fire appliances provided by one of the following:
		(i) a turning circle with a minimum outer radius of 10m; and
		(ii) a hammerhead 'T' or 'Y' turning head 4m wide and 8m long.
В.	Fire trail	The following design and construction requirements apply:
	length is 200m or	(a) the requirements for A above; and
	greater.	(b) passing bays of 2m additional carriageway width and 20m length provided every 200m.

E1.6.3 Subdivision: Provision of water supply for fire fighting purposes

O	bi	e	ct	iν	e	

Adequate, accessible and reliable water supply for the purposes of fire fighting can be demonstrated at the subdivision stage and allow for the protection of life and property associated with the subsequent use and development of bushfire-prone areas.

Acc	eptable Solutions	Performance Criteria
A1		P1
	reas serviced with reticulated water by the er corporation:	No Performance Criterion.
(a)	TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of a water supply for fire fighting purposes;	
(b)	A proposed plan of subdivision showing the layout of fire hydrants, and building areas, is included in a bushfire hazard management plan approved by the TFS or accredited person as being compliant with Table E4; or	
(c)	A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire.	

A2	P2
In areas that are not serviced by reticulated water by the water corporation:	No Performance Criterion.
(a) The TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant provision of a water supply for fire fighting purposes;	
(b) The TFS or an accredited person certifies that a proposed plan of subdivision demonstrates that a static water supply, dedicated to fire fighting, will be provided and located compliant with Table E5; or	
(c) A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire.	

Table E4 Reticulated water supply for fire fighting

Ele	ement	Requirement		
A.	Distance between building area to be protected and water supply.	 The following requirements apply: (a) the building area to be protected must be located within 120m of a fire hydrant; and (b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area. 		
В.	Design criteria for fire hydrants	The following requirements apply: (a) fire hydrant system must be designed and constructed in accordance with TasWater Supplement to Water Supply Code of Australia WSA 03 – 2011-3.1 MRWA 2nd Edition; and (b) fire hydrants are not installed in parking areas.		
C.	Hardstand	A hardstand area for fire appliances must be: (a) no more than 3m from the hydrant, measured as a hose lay; (b) no closer than 6m from the building area to be protected;		

	(c)	a minimum width of 3m constructed to the same standard as the carriageway; and
	(d)	connected to the property access by a carriageway equivalent to the standard of the property access.

Table E5 Static water supply for fire fighting

Element		Requirement
A.	Distance between building area to be protected and water supply.	 The following requirements apply: (a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and (b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
B.	Static Water Supplies	A static water supply: (a) may have a remotely located offtake connected to the static water supply; (b) may be a supply for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times; (c) must be a minimum of 10,000L per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems; (d) must be metal, concrete or lagged by non-combustible materials if above ground; and (e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by: (i) metal; (ii) non-combustible material; or (iii) fibre-cement a minimum of 6mm thickness.
C.	Fittings, pipework and accessories (including stands and	Fittings and pipework associated with a fire fighting water point for a static water supply must: (a) have a minimum nominal internal diameter of 50mm; (b) be fitted with a valve with a minimum nominal internal diameter of 50mm;

	tank	be metal or lagged by non-combustible materials if above ground;	
	supports)	be metal or lagged by non-combustible materials if above ground;	
	, ,) if buried, have a minimum depth of 300mm;	
		provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment;	
		ensure the coupling is accessible and available for connection at all times;	
		ensure the coupling is fitted with a blank cap and securing chain (minimum 220mm length);	
		ensure underground tanks have either an opening at the top of not less than 250mm diameter or a coupling compliant with this Table; and	
		if a remote offtake is installed, ensure the offtake is in a position that is:	
		(i) visible;	
		(ii) accessible to allow connection by fire fighting equipment;	
		(iii) at a working height of 450 – 600mm above ground level; and	
		(iv) protected from possible damage, including damage by vehicles.	
D.	Signage for static water connections.	e fire fighting water point for a static water supply must be identified by a sign rmanently fixed to the exterior of the assembly in a visible location. The sign ust:	
		comply with water tank signage requirements within Australian Standard AS 2304:2019 Water storage tanks for fire protection systems; or	
) comply with the Tasmania Fire Service Water Supply Guideline published by the Tasmania Fire Service.	
E.	Hardstand	A hardstand area for fire appliances must be:	
		no more than 3m from the fire fighting water point, measured as a hose lay (including the minimum water level in dams, swimming pools and the like);	
) no closer than 6m from the building area to be protected;	
		a minimum width of 3m constructed to the same standard as the carriageway; and	
) connected to the property access by a carriageway equivalent to the standard of the property access.	