BUSHFIRE ATTACK LEVEL ASSESSMENT REPORT

OWNERS DETAILS

Name: _____

Postal Address: _____

Contact Number: _____ Email: _____

PROPERTY DETAILS

Number: _____ Street/Road: _____

Suburb/Town: _____ Postcode: _____

PROPOSED BUILDING WORK

Proposed Work: _____

(i.e. construction of dwelling, extension to dwelling, construction of garage)

BUSH FIRE ATTACK LEVEL (BAL)

Step 1: Relevant fire danger index: (see Clause 2.2.2)

FDI 50 ❑ (Alpine Areas) FDI 100 ❑ (Victoria General – excluding Alpine areas)

Step 2: Assess the vegetation within 100m in all directions (tick relevant group)

Note 1: Refer to Table 2.3 and Figures 2.3 & 2.4 for description and classification of vegetation.

Note 2: If there is no classified vegetation within 100 m of the site then the BAL is LOW for that part of the site.

VEGETATION CLASS (see Table 2.3)	☐ **North** ☐ **North-East**	☐ **South** ☐ **South-West**	☐ **East** ☐ **South-East**	☐ **West** ☐ **North-West**
Group A Forest and type	☐ Tall open forest ☐ Tall woodland ☐ Open forest ☐ Low open forest ☐ Pine plantation	☐ Tall open forest ☐ Tall woodland ☐ Open forest ☐ Low open forest ☐ Pine plantation	☐ Tall open forest ☐ Tall woodland ☐ Open forest ☐ Low open forest ☐ Pine plantation	☐ Tall open forest ☐ Tall woodland ☐ Open forest ☐ Low open forest ☐ Pine plantation
Group B Woodland and type	☐ Woodland ☐ Open woodland ☐ Low woodland ☐ Low open woodland ☐ Open shrubland	☐ Woodland ☐ Open woodland ☐ Low woodland ☐ Low open woodland ☐ Open shrubland	☐ Woodland ☐ Open woodland ☐ Low woodland ☐ Low open woodland ☐ Open shrubland	☐ Woodland ☐ Open woodland ☐ Low woodland ☐ Low open woodland ☐ Open shrubland
Group C Shrubland and type	☐ Closed heath ☐ Open heath ☐ Low shrubland	☐ Closed heath ☐ Open heath ☐ Low shrubland	☐ Closed heath ☐ Open heath ☐ Low shrubland	☐ Closed heath ☐ Open heath ☐ Low shrubland
Group D Scrub and type	☐ Closed scrub ☐ Open scrub	☐ Closed scrub ☐ Open scrub	☐ Closed scrub ☐ Open scrub	☐ Closed scrub ☐ Open scrub
Group E Mallee/Mulga	☐ Tall shrubland	☐ Tall shrubland	☐ Tall shrubland	☐ Tall shrubland
Group F Rainforest and type	☐ Tall closed forest ☐ Closed forest ☐ Low closed forest	☐ Tall closed forest ☐ Closed forest ☐ Low closed forest	☐ Tall closed forest ☐ Closed forest ☐ Low closed forest	☐ Tall closed forest ☐ Closed forest ☐ Low closed forest

Group G Grassland	☐ Low open shrubland ☐ Hummock grassland ☐ Closed tussock grassland ☐ Tussock grassland ☐ Open tussock ☐ Sparse open tussock ☐ Dense sown pasture ☐ Sown pasture ☐ Open herbfield ☐ Sparse open herbfield ☐ Tussock moorland	☐ Low open shrubland ☐ Hummock grassland ☐ Closed tussock grassland ☐ Tussock grassland ☐ Open tussock ☐ Sparse open tussock ☐ Dense sown pasture ☐ Sown pasture ☐ Open herbfield ☐ Sparse open herbfield ☐ Tussock moorland	☐ Low open shrubland ☐ Hummock grassland ☐ Closed tussock grassland ☐ Tussock grassland ☐ Open tussock ☐ Sparse open tussock ☐ Dense sown pasture ☐ Sown pasture ☐ Open herbfield ☐ Sparse open herbfield ☐ Tussock moorland	☐ Low open shrubland ☐ Hummock grassland ☐ Closed tussock grassland ☐ Tussock grassland ☐ Open tussock ☐ Sparse open tussock ☐ Dense sown pasture ☐ Sown pasture ☐ Open herbfield ☐ Sparse open herbfield ☐ Tussock moorland
EXCLUSIONS (where applicable)	Circle relevant paragraph descriptor from clause 2.2.3.2.			
	b c d e f	b c d e f	b c d e f	b c d e f

Step 3: Distance of the site from classified vegetation (see clause 2.2.4)

DISTANCE TO VEGETATION	**Show distances in metres**			
	North	**South**	**East**	**West**

Step 4: Determine the effective slope of land under the classified vegetation

EFFECTIVE SLOPE	**North**		**South**		**East**		**West**	
	Upslope							
Slope under the classified vegetation (taken from the building)	Upslope/0°	❑	Upslope/0°	❑	Upslope/0°	❑	Upslope/0°	❑
	Downslope							
	>0 to 5	❑	>0 to 5	❑	>0 to 5	❑	>0 to 5	❑
	>5 to 10	❑	>5 to 10	❑	>5 to 10	❑	>5 to 10	❑
	>10 to 15	❑	>10 to 15	❑	>10 to 15	❑	>10 to 15	❑
	>15 to 20	❑	>15 to 20	❑	>15 to 20	❑	>15 to 20	❑

Step 5: Determination of Bushfire Attack Level (BAL)
Refer to Table 2.4.2 for FDI 100 (Victoria General) or Table 2.4.4 for FDI 50 (Alpine areas)

Using the relevant table, determine the Bushfire Attack Level (BAL) for each of the vegetation classifications determined at Step 2, the distance from the site determined at Step 3 and the effective slope determined at Step 4.

Select the highest Bushfire Attack Level (BAL) obtained above.

The BAL for this site is: ❑ **Low** ❑ **12.5** ❑ **19** ❑ **29** ❑ **40** ❑ **FZ**

Date of assessment: ______________________

ASSESSORS DETAILS

Name: ____

Postal Address: ____

Contact Number: ____________________ Email: ______________________________

STATEMENT: I have taken all reasonable steps to ensure that the information provided in this assessment is accurate and reflects the conditions on and around the site and allotment on the date of this assessment.

Signed: _____

Date: _____

ATTACHMENTS:

- Site plan: (attachment 1)
- Photographs:
  North and East aspect vegetation (attachment 2)
  South and West aspect vegetation (attachment 3)

Notes _____

NOTES Extract from AS3959-2009 - Section 2 Determining the Bushfire Attack Level (BAL)

CLAUSE 2.2.2 Step 1 – Relevant Fire Danger Index (FDI)
The relevant FDI shall be determined in accordance with Table 2.1 for the identified jurisdiction or region within a jurisdiction.

TABLE 2.1 – Jurisdictional and Regional Values for FDI

State/Region		FDI
Australian Capital Territory		100
New South Wales	(a) Greater Hunter, Greater Sydney, Illawarra/Shoalhaven, Far South Coast and Southern Ranges fire weather districts	100
	(b) NSW Alpine Areas	50
	(c) NSW general (excluding alpine areas, Greater Hunter, Greater Sydney, Illawarra/Shoalhaven Far South Coast and Southern Ranges fire weather districts)	80
Northern Territory		40
Queensland		40
South Australia		80
Tasmania		50
Victoria	(a) Victoria Alpine Areas	50
	(b) Victoria General (excluding alpine areas)	100
Western Australia		80

Notes:
1. The FDI values may be able to be refined within a jurisdiction or region where sufficient climatological data is available and in consultation with the relevant regulatory authority.
2. The FDI values were provided by the Australian Fire and Emergency Service Authorities Council (AFAC)
3. Alpine and sub-alpine areas are defined as per the Building Code of Australia, Volume Two.

CLAUSE 2.2.3 Step 2 – Vegetation Classification

2.2.3.1 General
Vegetation shall be classified in accordance with Table 2.3 and Figures 2.4(A) to 2.4(G). Where there is more than one vegetation type, each type shall be classified separately with the worst case scenario (predominant vegetation is not necessarily the worst case scenario) applied.
Note: Classification of vegetation should not be based solely on the edge of the vegetation, which may be invaded by weeds.

2.2.3.2 Exclusions – Low threat vegetation and non-vegetated areas
The Bushfire Attack Level shall be classified BAL – LOW where the vegetation is one or a combination of any of the following:
(a) Vegetation of any type that is more than 100m from the site.
(b) Single areas of vegetation less than 1ha in area and not within 100m of other areas of vegetation being classified.
(c) Multiple areas of vegetation less than 0.25ha in area and not within 20m of the site, or each other.
(d) Strips of vegetation less that 20m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20m of the site or each other or other areas of vegetation being classified.
(e) Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.
(f) Low threat vegetation, including grassland managed in a minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated gardens, commercial nurseries, nature strips and wind breaks.

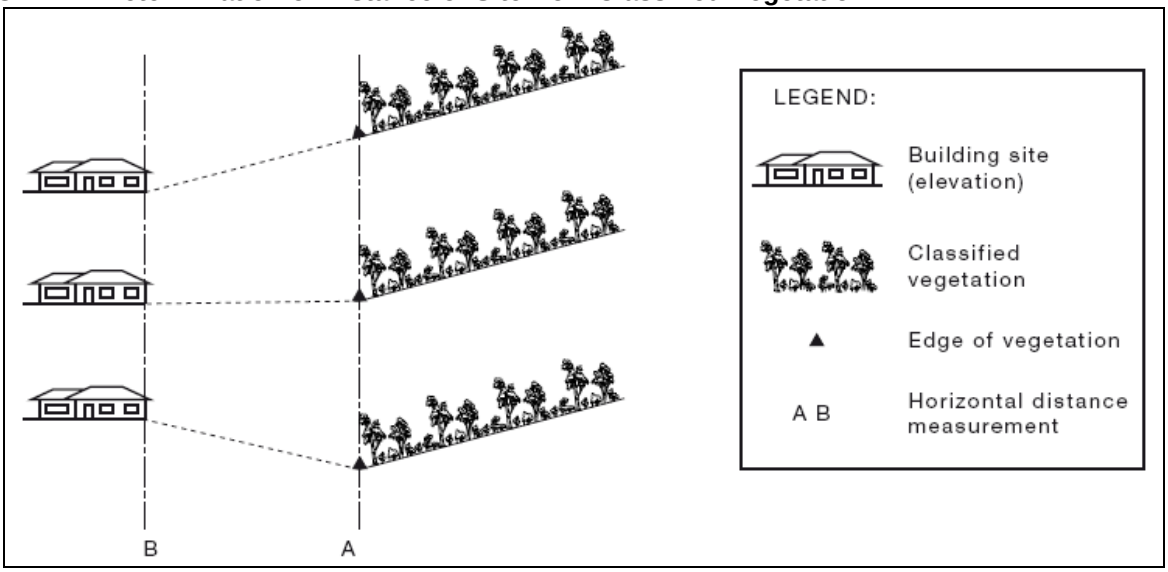
CLAUSE 2.2.4 Step 3 – Distance of the site from classified vegetation

For each vegetation type classified in Clause 2.2.3 determine the distance of the site from the classified vegetation, measured in the horizontal plane (see Figure 2.1, Point A to Point B).

Notes:

1. The measurement of distance A to B is measured in plan (i.e. horizontally) and is taken to the external wall of the proposed building, or for parts of the building that do not have external walls (including carports, verandahs, decks, landings, steps and ramps), to the supporting posts or columns. The following parts of the building are excluded when determining the distance A to B;
   (a) Eaves & roof overhangs
   (b) Rainwater & domestic fuel tanks
   (c) Chimneys, pipes, cooling or heating appliances or other services
   (d) Unroofed pergolas
   (e) Sun blinds
   (f) Landings, terraces, steps and ramps not more than 1m in height.
2. In the three illustrations below, the distance A to B is the same horizontal distance from the classified vegetation to the site. The area between A and B may contain vegetation not required to be classified in accordance with Clause 2.2.3.

FIGURE 2.1 Determination of Distance of Site from Classified Vegetation



CLAUSE 2.2.5 Step 4 – Effective Slope of Land under the Classified Vegetation

'Slope' refers to the slope under the classified vegetation in relation to the building – not the slope between the vegetation & the building.

For each vegetation type classified in Clause 2.2.3, determine the effective slope (in degrees) of the land under the classified vegetation and whether it is upslope or downslope in relation to the site (see Figure 2.2).

Effective slope of land under classified vegetation is prescribed in degrees, approximate slope rations and percentages. As fire travels slower down a hill, all classified vegetation that is upslope will assume a value of 0^{o} (i.e. flat land). Table 2.2 provides comparisons between degrees, slope rations and percentages.

C2.5 The slope of the land under the classified vegetation is much more important than the slope of the land between the site and the edge of the classified vegetation. The slope of the land under the classified vegetation has a direct influence on the rate of fire spread, the severity of the fire and the ultimate level of radiant heat flux. For Method 1 it is not important to determine the slope of the land between the site and the edge of the classified vegetation (See Figure 2.1, Point B to Point A). The further the distance the less radiant heat reaches the site. It may be necessary to consider the slope under the classified vegetation for distances greater than 100m in order to determine the effective slope for that vegetation classification.

Where the slope of the land under the classified vegetation is downhill from the edge of the classified vegetation nearest the site, it is considered 'downslope' regardless of the slope of the land between the site and the edge of the classified vegetation (see Figure 2.2).

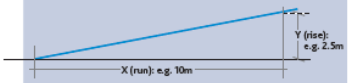
Where the slope of the land under the classified vegetation is uphill from the edge of the classified vegetation nearest the site, it is considered 'upslope' regardless of the slope of the land between the site and the edge of the classified vegetation (see Figure 2.2).

TABLE 2.2 – Slope Comparisons

Degrees	Ratio	Percentages
45	1:1	100
34	1:1.5	66
26	1:2	50
21	1:2.5	40
18	1:3	33
15	1:3.5	28
14	1:4	25
12	1:4.5	22
11	1:5	20
10	1:5.5	18
9	1:6	16
9	1:6.5	15
8	1:7	14
8	1:7.5	13

Degrees	Ratio	Percentages
7	1:8	12
7	1:8.5	11
6	1:9	11
6	1:10	10
5	1:11	9
5	1:12	8
4	1:13	8
4	1:14	7
4	1:15	7
4	1:16	6
3	1:17	6
3	1:18	5.5
3	1:19	5
3	1:20	5

Most people will determine the angle of their slope of land visually. However to accurately assess the slope in degrees, the diagram below will help with converting the gradient or ratio of the land to the slope in degrees.



The ratio of a slope is expressed comparing the length of the run to each 1 unit of measurement of the rise. To work out the length of the run for each unit rise, divide the run by the rise.

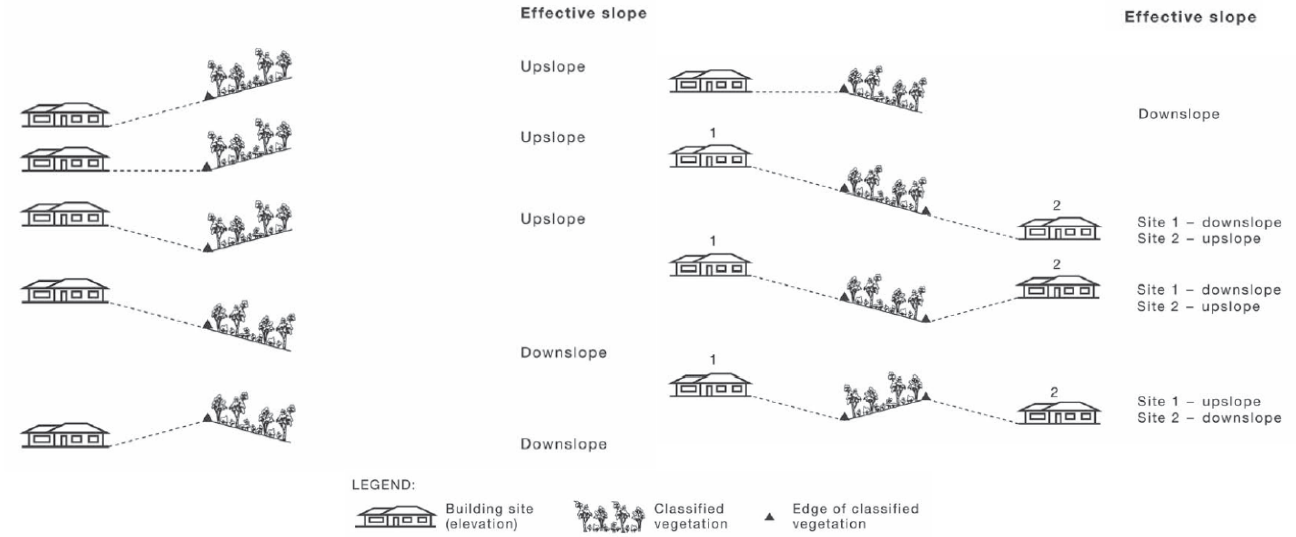
$$\frac{X\ (=10m)}{Y\ (=2.5m)} = 4$$

The ratio is then expressed as 1:4 (that is for each 1m of rise, there is 4m of run)

Note: The table to the left then converts this 1:4 ratio to 14 degrees.

FIGURE 2.2 – Determination of Effective Upslope and Downslope

Note: Effective 'slope' refers to the slope under the classified vegetation in relation to the building – not the slope between the classified vegetation and the building



CLAUSE 2.2.6 Step 5 – Determination of Bushfire Attack Level (BAL)

The determination of Bushfire Attack Level (BAL) for a site using Method 1 shall be determined in accordance with the following:

(a) Select the relevant table from table 2.4.2 to 2.4.5 based on the FDI determined at Clause 2.2.2 (Step 1).
(b) Using the relevant table, determine the Bushfire Attack Level (BAL) for each of the vegetation classifications determined at Clause 2.2.3 (step 2), the distance from the site determined at Clause 2.2.4 (Step 3) and the effective slope determined at Clause 2.2.5 (Step 4).
(c) Select the highest Bushfire Attack Level (BAL) obtained from Item (b) above.

Notes:

1. The determination in Tables 2.4.2, 2.4.3, 2.4.4 and 2.4.5 are based on input values contained in Table 2.4.1.
2. A worked example of determining the Bushfire Attack Level (BAL) is shown in Appendix A and is based on inputs contained in Table 2.4.1.
3. Where any of the input values contained in Table 2.4.1 are not appropriate for the site being assessed, the assessment should adopt the detailed approach given in Appendix B (Method 2)

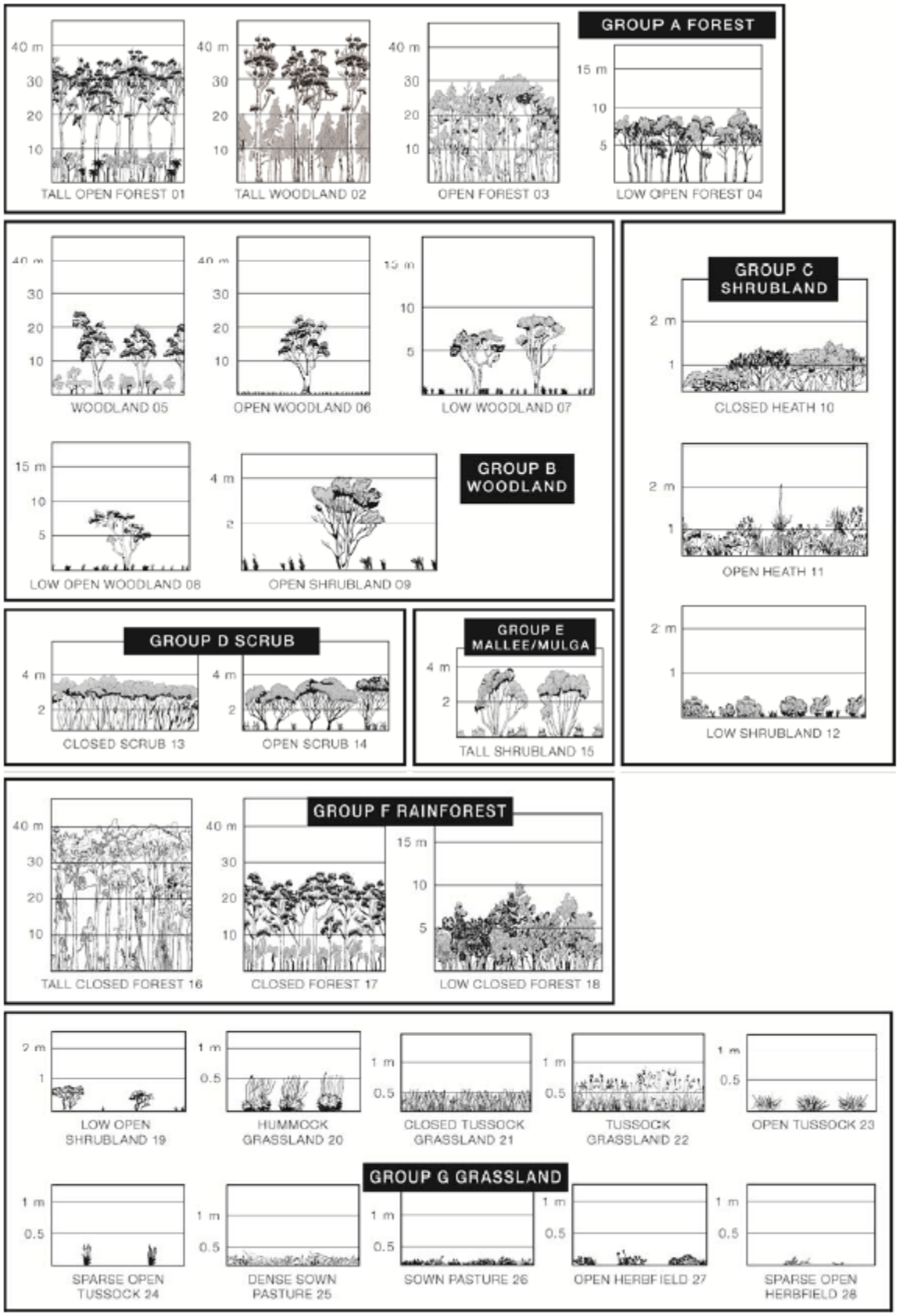
TABLE 2.3 - Classification of Vegetation

Vegetation classification (see Tables 2.4.2–2.4.5)	Vegetation type	Figure No. in Fig. 2.3 and Figs 2.4(A) to 2.4(G)	Description
A Forest	Tall open forest Tall woodland	01 02	Trees over 30 m high; 30–70% foliage cover (may include understorey ranging from rainforest and tree ferns to low trees and tall shrubs). Found in areas of high reliable rainfall. Typically dominated by eucalypts.
	Open forest Low open forest	03 04	Trees 10–30 m high; 30–70% foliage cover (may include understorey of sclerophyllous low trees and tall scrubs or grass). Typically dominated by eucalypts.
	Pine plantation	Not shown in Figure 2.3	Trees 10–30 m in height at maturity, generally comprising Pinus species or other softwood species, planted as a single species for the production of timber.
B Woodland	Woodland Open woodland	05 06	Trees 10–30 m high; 10–30% foliage cover dominated by eucalypts; understorey or low trees to tall shrubs typically dominated by Acacia, Callitris or Casuarina.
	Low woodland Low open woodland Open shrubland	07 08 09	Low trees and shrubs 2–10 m high; foliage cover less than 10%. Dominated by eucalypts and Acacias. Often have a grassy understorey or low shrubs. Acacias and Casuarina woodlands grade to Atriplex shrublands in the arid and semi-arid zones.
C Shrubland	Closed heath Open heath	10 11	Found in wet areas and/or areas affected by poor soil fertility or shallow soils. Shrubs 1–2 m high often comprising Banksia, Acacia, Hakea and Grevillea. Wet heaths occur in sands adjoining dunes of the littoral (shore) zone. Montane heaths occur on shallow or water-logged soils.
	Low shrubland	12	Shrubs <2 m high; greater than 30% foliage cover. Understoreys may contain grasses. Acacia and Casuarina often dominant in the arid and semi-arid zones.
D Scrub	Closed scrub	13	Found in wet areas and/or areas affected by poor soil fertility or shallow soils; >30% foliage cover. Dry heaths occur in rocky areas. Shrubs >2 m high. Typical of coastal wetlands and tall heaths.
	Open scrub	14	Shrubs greater than 2 m high; 10–30% foliage cover with a mixed species composition.
E Mallee/ Mulga	Tall shrubland	15	Vegetation dominated by shrubs (especially eucalypts and acacias) with a multi-stemmed habit; usually greater than 2 m in height; <30% foliage cover. Understorey of widespread to dense low shrubs (acacias) or sparse grasses.
F Rainforest	Tall closed forest Closed forest Low closed forest	16 17 18	Trees 10–40 m in height; >90% foliage cover; understorey may contain a large number of species with a variety of heights.
G Grassland (See Note 1)	Low open shrubland Hummock grassland Closed tussock grassland Tussock grassland Open tussock Sparse open tussock Dense sown pasture Sown pasture Open herbfield Sparse open herbfield	19 20 21 22 23 24 25 26 27 28	All forms, including situations with shrubs and trees, if the overstorey foliage cover is less than 10%.
	Tussock Moorland	Not shown in Figure 2.3	All forms of vegetation where the overstorey is dominated by the species Buttongrass *Gymnoschoenus sphaerocephalus*. Only occurs as a significant vegetation type in Tasmania

Notes:

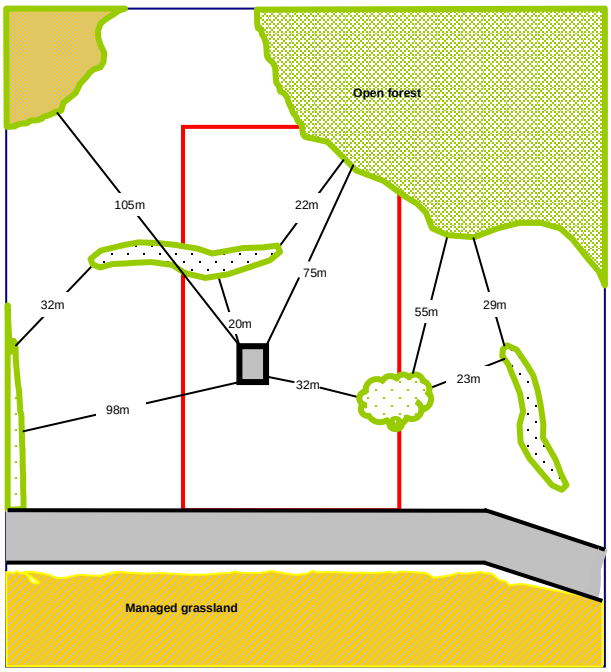
1. Grassland managed in a minimal fuel condition is regarded as low threat vegetation for the purpose of Clause 2.2.3.2.
2. Overstoreys of open woodland, low open woodland, tall open shrubland and low open shrubland should be classified to the vegetation type on the basis of their understoreys; others to be classified on the basis of their overstoreys.
3. Vegetation height is the average height of the top of the overstorey

FIGURE 2.3 – Classification of Vegetation - Summary



SITE PLAN - EXPLANATION AND EXAMPLE:
The site plan may be an indicative plan and not to scale. However, the site plan should show all vegetation within 100m of the building and include accurate distances from the external element of the building to the classified vegetation. It should also show all exclusions considered under clause 2.2.3.2 and the distances (where relevant) between the excluded vegetation and other excluded vegetation or classified vegetation, and the distances to the building.

EXAMPLE ONLY:



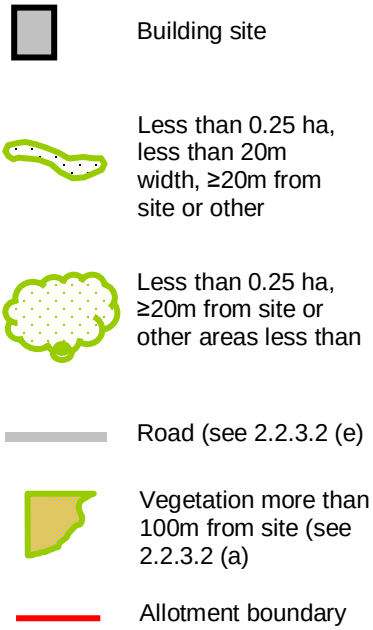


TABLE 2.4.2 – Determination of Bushfire Attack Level (BAL) – FDI 100 (1090K)

Vegetation classification	Bushfire Attack Levels (BALs)				
	BAL—FZ	BAL—40	BAL—29	BAL—19	BAL—12.5
	Distance (m) of the site from the predominant vegetation class				
	All upslopes and flat land (0 degrees)				
A. Forest	<19	19–<25	25–<35	35–<48	48–<100
B. Woodland	<12	12–<16	16–<24	24–<33	33–<100
C. Shrubland	<7	7–<9	9–<13	13–<19	19–<100
D. Scrub	<10	10–<13	13–<19	19–<27	27–<100
E. Mallee/Mulga	<6	6–<8	8–<12	12–<17	17–<100
F. Rainforest	<8	8–<11	11–<16	16–<23	23–<100
G. Grassland	<6	6–<9	9–<13	13–<19	19–50
	Downslope >0 to 5 degrees				
A. Forest	<24	24–<32	32–<43	43–<57	57–<100
B. Woodland	<15	15–<21	21–<29	29–<41	41–<100
C. Shrubland	<7	7–<10	10–<15	15–<22	22–<100
D. Scrub	<11	11–<15	15–<22	22–<31	31–<100
E. Mallee/Mulga	<7	7–<9	9–<13	13–<20	20–<100
F. Rainforest	<10	10–<14	14–<20	20–<29	29–<100
G. Grassland	<7	7–<10	10–<15	15–<22	22–<50
	Downslope >5 to 10 degrees				
A. Forest	<31	31–<39	39–<53	53–<69	69–<100
B. Woodland	<20	20–<26	26–<37	37–<50	50–<100
C. Shrubland	<8	8–<11	11–<17	17–<25	25–<100
D. Scrub	<12	12–<17	17–<24	24–<35	35–<100
E. Mallee/Mulga	<7	7–<10	10–<15	15–<23	23–<100
F. Rainforest	<13	13–<18	18–<26	26–<36	36–<100
G. Grassland	<8	8–<11	11–<17	17–<25	25–<50
	Downslope >10 to 15 degrees				
A. Forest	<39	39–<49	49–<64	64–<82	82–<100
B. Woodland	<25	25–<33	33–<45	45–<60	60–<100
C. Shrubland	<9	9–<13	13–<19	19–<28	28–<100
D. Scrub	<14	14–<19	19–<28	28–<39	39–<100
E. Mallee/Mulga	<8	8–<11	11–<18	18–<26	26–<100
F. Rainforest	<17	17–<23	23–<33	33–<45	45–<100
G. Grassland	<9	9–<13	13–<20	20–<28	28–<50
	Downslope >15 to 20 degrees				
A. Forest	<50	50–<61	61–<78	78–<98	98–<100
B. Woodland	<32	32–<41	41–<56	56–<73	73–<100
C. Shrubland	<10	10–<15	15–<22	22–<31	31–<100
D. Scrub	<15	15–<21	21–<31	31–<43	43–<100
E. Mallee/Mulga	<9	9–<13	13–<20	20–<29	29–<100
F. Rainforest	<22	22–<29	29–<42	42–<56	56–<100
G. Grassland	<11	11–<15	15–<23	23–<32	32–<50

TABLE 2.4.4 – Determination of Bushfire Attack Level (BAL) – FDI 50 (1090K)

Vegetation classification	Bushfire Attack Levels (BALs)				
	BAL—FZ	BAL—40	BAL—29	BAL—19	BAL—12.5
	Distance (m) of the site from the predominant vegetation class				
	All upslopes and flat land (0 degrees)				
A. Forest	<12	12–<16	16–<23	23–<32	32–<100
B. Woodland	<7	7–<10	10–<15	15–<22	22–<100
C. Shrubland	<7	7–<9	9–<13	13–<19	19–<100
D. Scrub	<10	10–<13	13–<19	19–<27	27–<100
E. Mallee/Mulga	<6	6–<8	8–<12	12–<17	17–<100
F. Rainforest	<5	5–<6	6–<9	9–<14	14–<100
G(i). Grassland	<5	5–<6	6–<10	10–<14	14–<50
G(ii). Tussock Moorland	<7	7–<9	9–<14	14–<20	20–<100
	Downslope >0 to 5 degrees				
A. Forest	<14	14–<19	19–<27	27–<38	38–<100
B. Woodland	<9	9–<12	12–<18	18–<26	26–<100
C. Shrubland	<7	7–<10	10–<15	15–<22	22–<100
D. Scrub	<11	11–<15	15–<22	22–<31	31–<100
E. Mallee/Mulga	<7	7–<9	9–<13	13–<20	20–<100
F. Rainforest	<6	6–<8	8–<12	12–<17	17–<100
G(i). Grassland	<5	5–<7	7–<11	11–<16	16–<50
G(ii). Tussock Moorland	<8	8–<10	10–<16	16–<23	23–<100
	Downslope >5 to 10 degrees				
A. Forest	<18	18–<24	24–<34	34–<46	46–<100
B. Woodland	<11	11–<15	15–<23	23–<32	32–<100
C. Shrubland	<8	8–<11	11–<17	17–<25	25–<100
D. Scrub	<12	12–<17	17–<24	24–<35	35–<100
E. Mallee/Mulga	<7	7–<10	10–<15	15–<23	23–<100
F. Rainforest	<7	7–<10	10–<15	15–<22	22–<100
G(i). Grassland	<6	6–<8	8–<13	13–<19	19–<50
G(ii). Tussock Moorland	<9	9–<12	12–<18	18–<26	26–<100
	Downslope >10 to 15 degrees				
A. Forest	<22	22–<30	30–<41	41–<56	56–<100
B. Woodland	<14	14–<19	19–<28	28–<40	40–<100
C. Shrubland	<9	9–<13	13–<19	19–<28	28–<100
D. Scrub	<14	14–<19	19–<28	28–<39	39–<100
E. Mallee/Mulga	<8	8–<11	11–<18	18–<26	26–<100
F. Rainforest	<9	9–<13	13–<19	19–<28	28–<100
G(i). Grassland	<7	7–<10	10–<15	15–<22	22–<50
G(ii). Tussock Moorland	<10	10–<13	13–<20	20–<29	29–<100
	Downslope >15 to 20 degrees				
A. Forest	<28	28–<37	37–<51	51–<67	67–<100
B. Woodland	<18	18–<25	25–<36	36–<48	48–<100
C. Shrubland	<10	10–<15	15–<22	22–<31	31–<100
D. Scrub	<15	15–<21	21–<31	31–<43	43–<100
E. Mallee/Mulga	<9	9–<13	13–<20	20–<29	29–<100
F. Rainforest	<12	12–<17	17–<25	25–<35	35–<100
G(i). Grassland	<8	8–<11	11–<17	17–<25	25–<50
G(ii). Tussock Moorland	<11	11–<15	15–<23	23–<33	33–<100