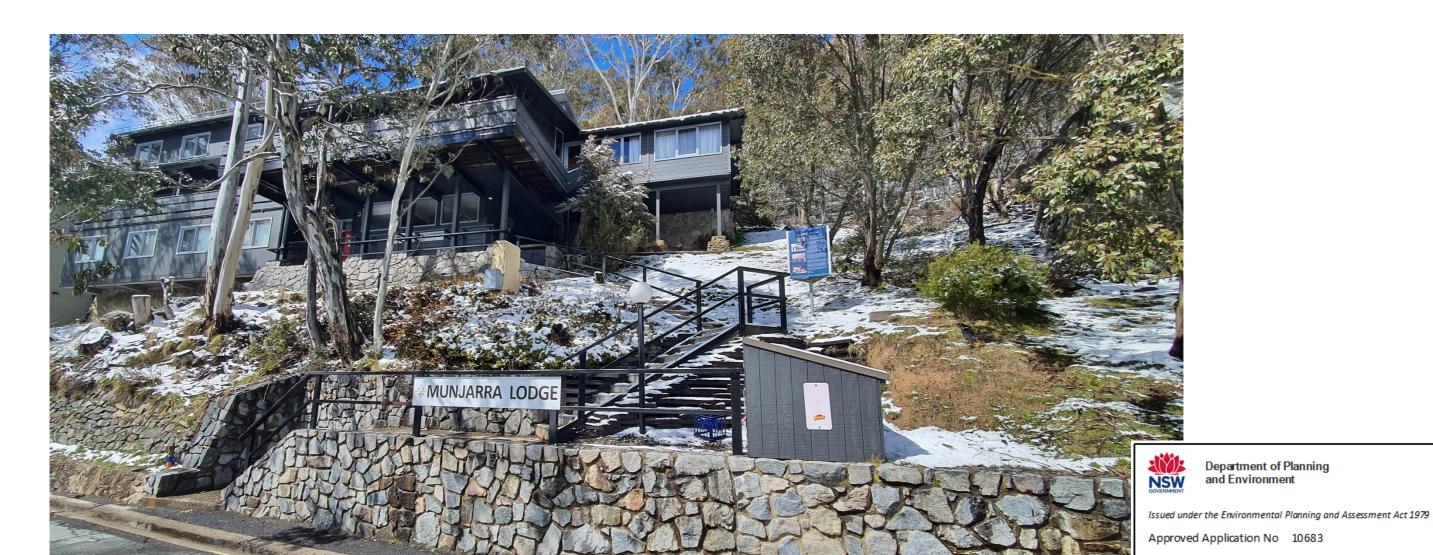
## Bushfire Construction Assessment Report for Wood Store and Bike Storage.



# Munjarra Lodge

13 Bobuck Lane Thredbo NSW

DATE: May 2022

**REPORT NO: 22125** 

**REVISION: 01** 

APPLICANT: Munjarra Lodge

PREPARED BY: COMPLETE BUSHFIRE REPORTS

- Preparation of Bushfire Reports for Development in Bushfire Prone Areas
- Bushfire Attack Level (BAL) Certificates
- Bushfire Evacuation Plans
- Construction Solutions & Advice for Bushfire Prone Areas



Granted on the 15 August 2023

27 of 30

Signed M Brown

Sheet No



## **BUSHFIRE CONSTRUCTION ASSESSMENT**

### **COMPLETE BUSHFIRE REPORTS**

ABN 63 637 759 758

PO BOX 642 JINDABYNE NSW 2627

Phone: (02) 6456 7176

Email: <a href="mailto:info@completeplanning.com.au">info@completeplanning.com.au</a>
Web: <a href="mailto:completeplanning.com.au">completeplanning.com.au</a>

This document is copyright © 2021.

#### DISCLAIMER

The recommendations provided in the summary of this report are a result of the analysis of the proposal in relation to the requirements of Planning for Bushfire Protection 2019. Utmost care has been taken in the preparation of this report however there is no guarantee of human error. The intention of this report is to address the submission requirements for Development Applications on bushfire prone land. There is no implied assurance or guarantee the summary conditions will be accepted in the final consent and there is no way Accent Town Planning is liable for any financial losses incurred should the recommendations in this report not be accepted in the final conditions of consent. This bushfire assessment provides a risk assessment of the bushfire hazard as outlined in the PBP 2019 and AS3959 2018. It does not provide protection against any damages or losses resulting from a bushfire event.

### **EXECUTIVE SUMMARY**

An Assessment of the existing wood store and proposed bike storage area at Munjarra Lodge 13 Bobuck Lane Thredbo NSW against the provisions set out in the NSW Planning for Bushfire Protection document 2019 has been carried out by Accredited Bushfire Consultant – Matthew Stewart FPAA No 27149.

The structures are capable of compliance to the requirements of

- Flame Zone, subject to the following provisions.
  - 1) Sliding doors are to be installed to the wood store.
    - i) The sliding doors and door system must achieve FRL-/30/-
    - ii) The sliding doors shall be tight fitting in the frames.
  - 2) The wood store enclosure is to be provided with non-combustible grid mesh with a maximum allowable aperture size of 2mm.
  - 3) The barrier enclosing the wood store is to be constructed with non-combustible grid mesh with a maximum aperture size of 2mm.
  - 4) The sheet roof to the wood store is to be constructed to comply to the requirements of Appendix H of AS3959 or use a system tested to AS1530.8.2.

A copy of Appendix H is provided at the end of this report or a System tested to AS1530.8.2; for example.

TBA Firefly - TBA Firefly BAL-FZ Roof System (Outside 10 Metre Vegetation)

Non-combustible grid mesh (as required for Alpine areas) is to provided to the deck of the bike storage area. The maximum allowable aperture size of the mesh shall be 2mm.



Photo 1: Wood Store Location

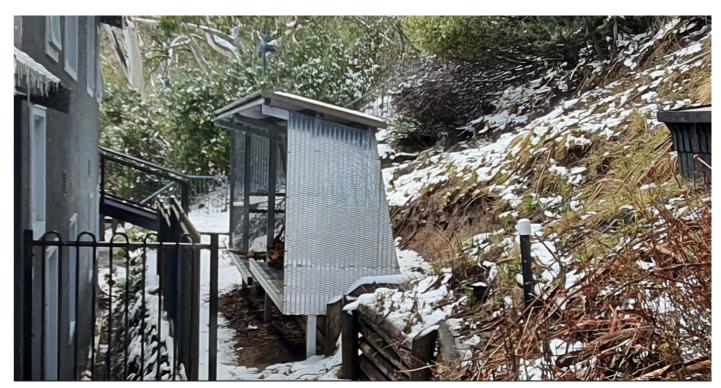


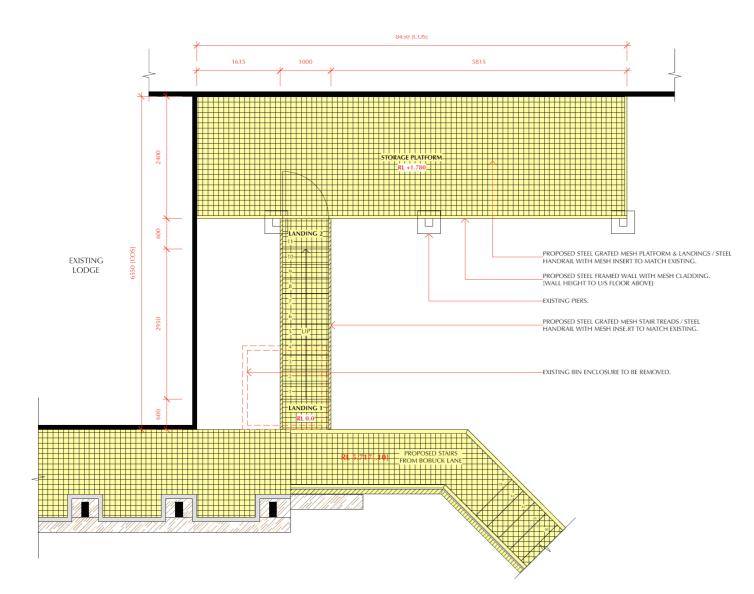
Photo 2: Wood Store



Photo 3: Bike Store Location



Figure 4: Bike Storage Area





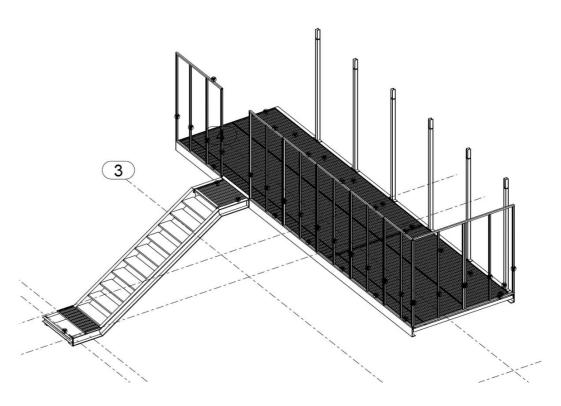


Table 1: BAL-FZ compliance table

	BAL FLAME ZONE (FZ) - CONSTRUCTION REQUIREMENTS					
#	Element Name	Sub Element number	Sub Element name	Requirement	Compliance	
9.1		General		A building assessed in Section 2 as being BAL-FZ shall conform with Section 3 and Clauses 9.2 to 9.8 and have a minimum setback distance of 10 m from the edge of the classified vegetation.  In circumstances where the 10 m setback distance between the building and the edge of the classified vegetation cannot be achieved, those elements of the building that are less than 10 m from the edge of the classified vegetation shall conform with AS 1530.8.2.  The details for roof systems specified in Appendix H are the result of testing to AS 1530.8.2 and are deemed to satisfy solutions for the purpose of this Standard.  Any element of construction or system that satisfies the test criteria of AS 1530.8.2 may be used in lieu of the applicable requirements contained in Clauses 9.2 to 9.8.  NOTES:  1 BAL-FZ is primarily concerned with protection from flame contact together with ember attack and radiant heat of more than 40 kW/m².  2 Construction in BAL-FZ may require reliance on measures other than construction. The requirements for construction of a building BAL-FZ may be regulated by the building authorities having jurisdiction in the States and Territories of Australia.	The existing wood store and bike storage is not within 10m from the edge of the classified vegetation.	
9.2	Subfloor supports		Enclosed subfloor option  Unenclosed subfloor option	This Standard does not provide construction requirements for subfloor supports where the subfloor space is enclosed with a wall that conforms with Clause 9.4.  Where the subfloor space is unenclosed, systems, including support posts, columns, stumps, piers and poles, shall-  (a) have an FRL of at least 30/-/- and shall be non-combustible; or  (b) be a system conforming with AS 1530.8.2; or  (c) be a combination of Items (a) and (b).  NOTE: This requirement applies to the subject building only and not to verandas, decks, steps, ramps and landings (see Clause 9.7).	Capable of Compliance The subfloor of the wood store and bike storage area are unenclosed. The structural design for the bike store indicates the post supports are steel. The supports to the woodstore is steel.	
		9.3.1	Concrete slabs on ground	No construction requirements for concrete slabs on ground.	No concrete slab on ground proposed.	
		9.3.2	Elevated F	loors		
	Floors	9.3.2.1	Enclosed as for 9.4	This Standard does not provide construction requirements for elevated floors, including bearers, joists and flooring, where the subfloor space is enclosed with a wall that conforms with Clause 9.4.	N/A. the subfloor to the wood and bike store are not enclosed.	
		9.3.2.2	Unenclosed	Where the subfloor space is unenclosed, the floor system, including bearers, joist and flooring, shall-  (a) have an FRL of at least 30/30/30 and the surface material shall be non-combustible; or  (b) have the underside of the combustible elements of the floor system protected with a 30 min resistance to incipient spread of fire system; or  (c) conform with AS 1530.8.2 when tested from the underside; or  (d) be a combination of any of Items (a), (b) or (c).	Capable of compliance The floors to the wood store and bike store are constructed using non-combustible steel framing.	

				BAL FLAME ZONE (FZ) - CONSTRUCTION REQUIREN	IENTS
#	Element Name	Sub Element number	Sub Element name	Requirement	Compliance
	External Walls	9.4.1	Walls	The exposed components of external walls shall be as follows:  (a) Non-combustible material including the following provided the minimum thickness is 90 mm:  (i) Full masonry or masonry veneer walls with an outer leaf of clay, concrete, calcium silicate or natural stone.  (ii) Precast or in situ walls of concrete or aerated concrete.  (iii) Earth wall including mud brick. Or	N/A No external walls are proposed to the wood store and bike storage area. The wood store and bike store are provided with metal screens.
9.4				<ul> <li>(b) A system conforming with AS 1530.8.2 when tested from the outside. or</li> <li>(c) A system with an FRL of 30/30/30 or -/30/30 when tested from the outside. or</li> <li>(d) A combination of any of Items (a), (b) or (c).</li> </ul>	
		9.4.2	Joints	<ul> <li>All joints in the external surface material of walls shall be covered, sealed, overlapped, backed or butt-jointed.</li> </ul>	Noted.
		9.4.3	Vents and weepholes	Except for exclusions provided in Clause 3.6, vents and weepholes in external walls shall be screened with a mesh made of corrosion-resistant steel or bronze.	Noted.  No external walls will be provided to the wood store or bike storage area.  The wood store and bike store are provided with metal screens.
	External glazed elements and assemblie s and external doors	9.5.1	Bushfire shutters	Where fitted, bushfire shutters shall conform with-  (a) Clause 3.7, except that perforations are not acceptable over the door system; and  (b) AS 1530.8.2 when tested from the outside.	No shutters proposed.
9.5		9.5.2	Screens for windows and doors	<ul> <li>Where fitted, screens for windows and doors shall have a mesh or perforated sheet made of corrosion-resistant steel or bronze.</li> <li>The frame supporting the mesh or perforated sheet shall be metal. Screen assemblies shall be attached using metal fixings.</li> </ul>	N/A No windows are proposed.
		9.5.3	Windows and sidelights	<ul> <li>(a) be completely protected by a bushfire shutter that conforms with Clause 3.7 and Clause 9.5.1; or</li> <li>(b) the openable portion of the window shall be screened internally or externally with a screen that conforms with Clause 3.6 and Clause 9.5.2; and either- (i) the window system shall have an FRL of at least -/30/-; or (ii) the window system shall conform with AS 1530.8.2 when tested from the outside.</li> </ul>	N/A No windows are proposed.
		9.5.4	Doors – side hung external doors (including French doors, panel fold and bi-fold doors)	Side-hung external doors, including French doors, panel fold and bi-fold doors, shall-  (a) be completely protected by bushfire shutters that conform with Clause 3.7 and Clause 9.5.1. or  (b) conform with the following:  (i) All door systems, including door frames and doors with glazed panels, shall-  (A) have an FRL of at least -/30/-; or  (B) conform with AS 1530.8.2 when tested from the outside.  (ii) Doors shall be tight-fitting to the door frame and to an abutting door, if applicable.  (iii) Weather strips, draught excluders or draught seals shall be installed at the base of side-hung external doors.  (iv) Seals shall not compromise the FRL or the performance achieved in AS 1530.4.	N/A.  No side hung doors are proposed to the wood store or bike shed.

				BAL FLAME ZONE (FZ) - CONSTRUCTION REQUIREM	IENTS	
#	Element Name	Sub Element number	Sub Element name	Requirement	Compliance	
		9.5.5	Doors – sliding doors	Sliding doors shall-  (a) be completely protected by a bushfire shutter that conforms with Clause 3.7 and Clause 9.5.1; or  (b) conform with the following:  (i) All sliding door systems, including those with glazed panels, shall-  (A) have an FRL of at least -/30/-; or  (B) conform with AS 1530.8.2 when tested from the outside.  (ii) Sliding doors shall be tight-fitting in the frames.	Compliance issue.  The sliding doors and door system to the wood store must achieve FRL-/30/- The sliding doors shall be tight fitting in the frames.	
		9.5.6	Doors – vehicle access doors	The following applies to vehicle access doors:  a) Vehicle access doors shall be non-combustible. b) Where the garage is attached to the building, the requirements of Clause 3.2.2(b) shall apply. c) All vehicle access doors shall be protected with suitable weather strips, draught excluders, draught seals or brushes. Door assemblies fitted with guide tracks do not need edge gap protection.  NOTES:  1. Refer to AS/NZS 4505 for door types. 2. Gaps of door edges or building elements should be protected as per Section 3. d) Weather strips, draught excluders, draught seals or brushes to protect edge gaps or thresholds shall be manufactured from materials having a flammability index not exceeding 5.  vehicle access doors shall not include ventilation slots.  The following applies to all types of roofs and roofing systems:	Not Applicable  No vehicle access doors are proposed.  No roof is proposed to the bike store	
	Roofs (including veranda and attached carport roofs,	9.6.1	General	<ul> <li>a) The roof/wall and roof/roof junction shall be sealed either by the use of fascia and eaves linings or by sealing between the top of the wall and the underside of the roof and between the rafters at the line of the wall. They shall also be protected in accordance with Clause 3.6.</li> <li>b) Roof ventilation openings, such as gable and roof vents, shall be fitted with ember guards made of non-combustible material or a mesh or perforated sheet conforming with Clause 3.6 and made of corrosion-resistant steel or bronze.</li> <li>c) Roof-mounted evaporative coolers are not permitted in BAL-FZ.</li> <li>d) Appendix H provides two generic systems for skillion, hipped and gabled roofs which are deemed to satisfy Clause 9.6 (BAL-FZ).</li> </ul>		
9.6		9.6.2	Tiled roofs	Tiled roofs shall conform with- a) Appendix H; or b) a system tested to AS 1530.8.2.	Not applicable. Tile roof is not proposed.	
	gutters and downpipe s)	9.6.3	Sheet roofs	Sheet roofs shall conform with-  (a) Appendix H; or  (b) a system tested to AS 1530.8.2.	The sheet roof to the wood store is to be constructed to comply to the requirements of Appendix H of AS3959 or use a system tested to AS1530.8.2.  A copy of Appendix H is provided at the end of this report or a  System tested to AS1530.8.2; for example.  TBA Firefly - TBA Firefly BAL-FZ Roof System (Outside 10 Metre Vegetation)  No roof is proposed to the bike store.	

			MENTS		
#	Element Name	Sub Element number	Sub Element name	Requirement	Compliance
				The following applies to veranda, carport and awning roofs:	The bike storage area is not proposed to be constructed with a roof.
				(a) A veranda, carport or awning roof forming part of the main roof space [see Figure D1(a), Appendix D] shall meet all the requirements for the main roof, as specified in Clause 9.6.1, 9.6.2, 9.6.3, 9.6.5 and 9.6.6.	The wood store roof is to be constructed in accordance with the requirements of Appendix H of AS3959 or using a proprietary system that achieves flame zone construction.
		9.6.4	Veranda, carport and awning [VCA] roofs	<ul> <li>(b) A veranda, carport or awning roof separated from the main roof space by an external wall [see Figures D1(b) and D1(c), Appendix D] conforming with Clause 9.4 shall have a non-combustible roof covering and the complete support structure shall be- <ul> <li>(i) of non-combustible material; or</li> <li>(ii) timber rafters lined on the underside with fibre-cement sheet a minimum of 6 mm in thickness, or with material conforming with AS 1530.8.2; or</li> <li>(iii) a system conforming with AS 1530.8.2; or</li> <li>(iv) a combination of any of Items (i), (ii) or (iii).</li> </ul> </li> </ul>	
				The following applies to roof penetrations:	N/A
				<ul><li>(a) Roof penetrations, including roof lights, roof ventilators, roof-mounted evaporative cooling units, aerials, vent pipes and supports for solar collectors or the like, shall be sealed. The material used to seal the penetration shall be non-combustible.</li><li>(b) Openings in vented roof lights, roof ventilators or vent pipes shall conform with Clause 3.6 and be made of corrosion-resistant steel, bronze or aluminium. This requirement does not apply to a room sealed gas appliance.</li></ul>	No roof penetrations are proposed.
				NOTE: A gas appliance designed such that air for combustion does not enter from, or combustion products enter into, the room in which the appliance is located. In the case of gas appliance flues, ember guards shall not be fitted.	
		9.6.5	Roof penetration	NOTE: AS/NZS 5601 contains requirements for gas appliance flue systems and cowls. Advice can be obtained from manufacturers and State and Territory gas technical regulators.	
			S	<ul> <li>(c) All overhead glazing shall be Grade A safety glass conforming with AS 1288.</li> <li>(d) Glazed elements in roof lights and skylights may be of polymer provided a Grade A safety glass diffuser, conforming with AS 1288, is installed under the glazing. Where glazing is an insulating glazing unit (IGU), Grade A toughened safety glass of minimum 4 mm in thickness shall be used in the outer pane of the IGU.</li> <li>(e) Flashing elements of tubular skylights may be of a fire-retardant material, provided the roof integrity is maintained by an under-flashing of a material having a flammability index not exceeding five.</li> <li>(f) Evaporative cooling units shall be fitted with non-combustible butterfly closers as close as practicable to the roof level or the unit shall be fitted with non-combustible covers with a mesh or perforated sheet with a maximum aperture of 2 mm, made of corrosion-resistant steel, bronze or aluminium.</li> </ul>	
				<ul><li>(g) Vent pipes made from PVC are permitted.</li><li>(h) Eaves lighting shall be adequately sealed and not compromise the performance of the element.</li></ul>	

BAL FLAME ZONE (FZ) - CONSTRUCTION REQUIRE					IENTS
#	Element Name	Sub Element number	Sub Element name	Requirement	Compliance
		9.6.6	Eaves linings, fascias and gables	<ul> <li>The following applies to eaves linings, fascias and gables:</li> <li>(a) Gables shall conform with Clause 6.4.</li> <li>(b) Eaves penetrations shall be protected in the same way as roof penetrations, as specified in Clause 6.6.5.</li> <li>(c) Eaves ventilation openings shall be fitted with ember guards in accordance with Clause 3.6 and made of corrosion-resistant steel, bronze or aluminium.</li> <li>Joints in eaves linings, fascias and gables may be sealed with plastic joining strips or timber storm moulds. This Standard does not provide construction requirements for fascias, bargeboards and eaves linings.</li> </ul>	Complies  No eaves proposed.
		9.6.7	Gutters and downpipes	<ul> <li>This Standard does not provide requirements for downpipes.</li> <li>If installed, gutter and valley leaf guards shall be non-combustible. Gutters shall be non-combustible.</li> <li>Box gutters shall be non-combustible and flashed at the junction with the roof with non-combustible materials.</li> </ul>	No gutters or downpipes are proposed.
		9.7.1	General	<ul> <li>Decking shall not be spaced.</li> <li>There is no requirement to enclose the subfloor spaces of verandas, decks, steps, ramps or landings.</li> </ul>	Compliance Issue Non-combustible grid mesh (as required for Alpine areas) is provided to the bike storage area. The maximum allowable aperture size of the mesh shall be 2mm.
9.7	Verandas, decks, steps, ramps and landings	9.7.2	Enclosed subfloor spaces of verandas, decks, steps, ramps and landings	9.7.2.1 Materials to enclose a subfloor space.  The subfloor spaces of verandas, decks, steps, ramps and landings are deemed to be 'enclosed' when the material used to enclose the subfloor space conforms with Clause 9.4; and all openings are protected in accordance with Clause 3.6 and made of corrosion- resistant steel or bronze.	N/A. The subfloor of the wood storage area are not enclosed.
				9.7.2.2 Supports  This Standard does not provide construction requirements for support posts, columns, stumps, stringers, piers and poles.	Noted
				9.7.2.4. Decking, stair treads and the trafficable surfaces of ramps and landings.  Decking, stair treads and the trafficable surfaces of ramps and landings shall be- (a) of non-combustible material; or (b) of fibre-cement sheet; or (c) a system conforming with AS 1530.8.2; or (d) a combination of any of Items (a), (b) or (c).	Noted
		9.7.3	Unenclosed subfloor spaces of verandas,	9.7.3.1 Supports Support posts, columns, stumps, stringers, piers and poles shall be- (a) of non-combustible material; or (b) a system conforming with AS 1530.8.2; or (c) a combination of Items (a) and (b).	Complies. The post supports to the wood store and bike shed are non-combustible (steel)
			decks, steps, ramps and landings	9.7.3.2 Framing Framing of verandas, decks, ramps or landings (i.e. bearers and joists) shall be- (a) of non-combustible material; or (b) a system conforming with AS 1530.8.2; or (c) a combination of Items (a) and (b).	Complies. The framing to the wood store and bike shed are non-combustible (steel)

BAL FLAME ZONE (FZ) - CONSTRUCTION REQUIREMENTS						
	Element Name	Sub Element number	Sub Element name	Requirement	Compliance	
				9.7.3.3 Decking, stair treads and the trafficable surfaces of ramps and landings	Complies.  The decking and stair treads to the bike storage area is non-combustible grid mesh.	
				Decking, stair treads and the trafficable surfaces of ramps and landings shall be-  (a) of non-combustible material; or  (b) fibre-cement sheet; or  (c) a system conforming with AS 1530.8.2; or  (d) a combination of Items (a), (b) or (c).		
		9.7.4	Balustrades, handrails or other barriers	Those parts of the handrails and balustrades less than 125 mm from any glazing shall be of non-combustible material.  Those parts of the handrails and balustrades that are 125 mm or more from the building have no requirements.	Compliance issue.  The barrier enclosing the wood store is to be constructed with non-combustible grid mesh with a maximum aperture size of 2mm.	
		9.7.5	Veranda posts	Veranda posts shall be made from non-combustible material.	Post supports are non-combustible	
8	Water a	<ul> <li>Above-ground, exposed water supply pipes shall be metal.</li> <li>External gas pipes and fittings above ground shall be of steel or copper construct minimum wall thickness in accordance with gas regulations or 0.9 mm whichever The metal pipe shall extend a minimum of 400 mm within the building and 100 m ground.</li> </ul>			N/A No water of gas supply services are proposed to the wood store or bike storage area.	

#### APPENDIX H

#### GENERIC ROOF SYSTEMS

(Normative)

#### H3 SHEET ROOFS

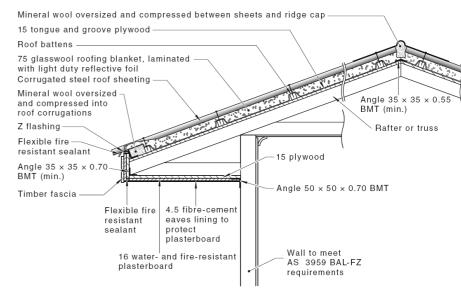
Sheet roof construction (see Figure H2) shall comprise the following:

- (a) A continuous membrane of 15 mm tongue and groove plywood fixed to timber or steel rafters or trusses. The face veneer shall be at right angles to the rafter or truss direction and the end joint over rafter edges or, if unavoidable, over a nogging. The plywood shall be continuous over more than one span and shall be fixed to the rafters or trusses where the fixing spacing shall be 150 mm centres at panel end and 300 mm centres at intermediate rafter, trusses or noggings. The plywood shall be fixed at not less than 10 mm from the panel edge. Fixings shall be—
  - hand-driven nails with 2.8 mm minimum diameter flathead or bullet head nails with a minimum length of 40 mm; or
  - (ii) gun-driven nails with 2.5 mm minimum diameter gun nails with a minimum length of 40 mm; or
  - (iii) self-drilled countersunk screws No. 8 × 30; or
  - (iv) a combination of (i), (ii) or (iii).
- (b) Timber batten with a maximum size of 45 mm × 90 mm (on flat), fixed through the plywood with fixings as required by the site location's tie-down requirements and the AS 1684 series.

01

Steel top hat battens 40 mm in height and nominally 0.55 mm in thickness fixed through the plywood to the roof framing as required by the site location's tie-down requirements.

- (c) A glasswool roofing blanket with a minimum R-value of R1.8 and a minimum thickness of 75 mm, laminated with light duty reflective foil, conforming with AS/NZS 4859.1 and having a density not less than 11 kg/m³, installed in accordance with AS 3999 with the reflective foil facing down and filling the void between the plywood membrane and the sheet roof.
- (d) Corrugated roof sheets with BMT between 0.42 mm to 0.6 mm conforming with AS 1445 fixed to battens with at least one fixing every second corrugation in the field of the roof and at the edge of the roof at locations such as fascia, hip, bargeboard and valley, fixed at every corrugation. Fixings shall be a self-drilling hex head screw, with EPDM seal and shank guard.
- (e) A mineral wool strip, 115 mm thick and 100 mm wide with a density of not less than 80 kg/m³, and having a fusion temperature in excess of 1120°C and long-term surface operating temperature of not less than 650°C, installed—
  - (i) between the sarking and the ridge cap; and
  - (ii) above the glasswool roofing blanket compressed to 50% of its thickness into the interface of the roof sheet, fascia and plywood membrane.
- (f) A minimum 35 mm × 35 mm × 0.55 mm BMT galvanized angle fixed at minimum 600 mm centres along the plywood membrane ridge line to cover gaps.
- (g) A 40 mm × 40 mm × 40 × 0.55 mm BMT galvanized Z flashing fixed at minimum 600 mm centres along the eaves end into the plywood membrane.
- (h) A flexible fire-resistant sealant installed between the Z flashing and fascia.
- (i) Fascias and bargeboards of a membrane of 15 mm plywood installed over timber or steel framing or trusses and including the following:
  - (i) A 16 mm water- and fire-resistant plasterboard conforming with AS/NZS 2588 and fixed into the plywood with 38 mm × 6 g screws at 150 mm centres. The butt joints between plasterboard sheets shall not fall on joints in the plywood. Joints shall be left open 6 mm to 10 mm wide and filled with fire-resistant sealant.
  - (ii) A timber fascia fixed to rafter or trusses in accordance with the AS 1684 series.
  - (iii) A minimum  $35 \times 35 \times 0.70$  mm BMT galvanized angle fixed at minimum 600 mm centres along the bottom truss corner or the interface of rafter to framing.
  - (iv) A flexible fire-resistant sealant installed at the interface of the 16 mm waterand fire-resistant plasterboard fixed to the eaves and the 16 mm water- and fireresistant plasterboard fixed to the fascia.
- (j) Eaves lining of a membrane of 15 mm plywood installed over timber or steel framing or trusses, and including the following:
  - (i) A 16 mm water- and fire-resistant plasterboard conforming with AS/NZS 2588, fixed into the plywood with 38 mm × 6 g screws at 150 mm centres. The butt joints between plasterboard sheets shall not fall on joints in the plywood.
  - (ii) A minimum of 4.5 mm fibre-cement eaves lining to protect the plasterboard fixed into the plywood.
  - (iii) A minimum 35 x 35 x 0.70 mm BMT galvanized angle fixed at minimum 600 mm centres along the plywood to wall stud interface.



NOTE: Requirements for the detail shown above are given in Paragraph H3.

DIMENSIONS IN MILLIMETRES

FIGURE H2 SHEET ROOF DETAIL