



JAMES ALEXANDER

- 9 MAY 2016

INSPECTION REPORT FOR CHANGE OF USE & UNAUTHORISED WORKS – SQUATTERS RUN THREDBO

DEVELOPMENT ASSESSMENT AND SYSTEMS PERFORMANCE RECEIVED - JINDABYNE

CONSENT AUTHORITY:	NSW Dept. of Planning
PROPERTY:	Squatters Run Shop 2 (Unit 34) Mowamba Place Thredbo
INSPECTION DATE:	17/11/15
PHOTOGRAPHS Y/N:	Yes
DESCRIPTION OF UNAUTHORISED DEVELOPMENT:	The sub-floor area at the rear of the above shop is being used as a merchandise storage area, ski tuning workshop and staff tea preparation area/kitchen.
BCA CLASSIFICATION:	Class 6 retail shop and ancillary storage area.
PURPOSE OF THIS REPORT:	To determine the works required to permit the storage space at the rear of shop 2 Squatters Run to be used as part of the shop, i.e. Class 6, comprising storage of merchandise, tea preparation area and boot and ski adjusting area.
TYPE OF CONSTRUCTION:	Type A
REFERENCE:	JAA 1535 REV B dated 5/5/16

COMPLIANCE ISSUES:	<p>An inspection was requested to determine if the sub-floor space at the rear of the shop could be used for its current purpose (described above) and be compliant with the Building Code of Australia 2015 (BCA). Furthermore, that this report be prepared to accompany an application for a Building Certificate for the unauthorised development.</p> <p>The following is an assessment of the current use with respect to compliance with the BCA Deemed-to-Satisfy provisions:</p> <p>Part B Structural/geotechnical: it was noted that the area had been excavated without the remaining sheer batter being retained and provided with provisions for sub-soil drainage. It is recommended that a geotechnical and structural engineer inspect the batter and provide advice with respect to the need for retaining walls and sub-soil drainage to ensure structural adequacy of the development. It is understood that geotechnical and structural designs for the retaining wall have been completed, an Order for the works to be carried out issued by the Dept of Planning, and works are largely complete.</p> <p>Spec C1.1 Fire resisting construction: The floor/ceiling separation between the storage area and class 2 residential units above is required under Table 3 to achieve an FRL of 180/180/180. The concrete slab which forms the floor separation will likely achieve this FRL given it is a 200 thick concrete slab. No works are required to the existing concrete slab over the subject room.</p> <p>C3.12 Openings in floors and ceilings for services: The floor is penetrated by sanitary plumbing pipework in a number of locations. These penetrations have not been protected with fire resisting covering or the like. Fire collars are required to be installed to each penetration to comply with C3.12 or pipework</p>
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enclosed with fire resisting construction.



Figure 1 – Intumescent fire collars are required to be post fitted to plumbing penetrations.

D1.6 Dimensions of exits and paths of travel to exits: The path of travel between the storage shelving is less than 1m. This may be addressed via an Alternative Solution report given low population, low frequency of use and the fact it is used by staff only.



Figure 2 - Distance between shelving units is less than 1m.

E1.6 Portable fire extinguisher: the area is required to be served by a portable fire extinguisher in accordance with AS 2444.

Spec E2.2a and G4.8 Smoke detection and alarm systems: the area is required to be served by a network of smoke and or thermal detectors connected to the buildings smoke detection system in accordance with AS 1670.1-2004. The area is also required to be served by audible warning from the building building occupant warning system. This may require the installation of new sounders to the area to comply with AS 1670.1-2004.

Part E4 and G4.4 Emergency lighting: the area is required to be fitted with emergency lighting in accordance with AS 2293.1-2005 to illuminate the path of travel to the exit.

F1.9 Damp-proofing: provisions in accordance with this clause to ensure floors and walls are not subject to rising damp from the excavated fill must be installed as part of any upgrade works to the area.

F3.1(b) Height of rooms and other spaces: the use as a storage area and "tea preparation" room permits a reduced head height of 2.1m. The use as a ski tuning workshop however requires a head height of 2.4m. The actual head height is less than 2.4m in part. This may be addressed via an Alternative Solution report given low population, low frequency of use and the fact it is used by staff only.

F4.4 and F4.5 Artificial lighting and ventilation: the room is required to be served by artificial lighting which appears to be the case, and mechanical ventilation in accordance with AS/NZS 3666.1. No mechanical ventilation was identified and is required to be installed or borrowed from the shop if permitted under the Standard.

F4.5 and F4.6 Sound insulation rating of floors and internal services: sound separation in accordance with this clause is required to sound separate the subject area from the class 2 unit above as sound may travel through the floor and service penetrations. Compliance with these clauses cannot be determine via a visual inspection. The concrete is 200 thick is therefore likely to achieve compliance. The plumbing pipework in the storage area is to be wrapped with acoustic insulation.

General issues identified

Electrical conduits: the 100 diameter electrical conduits as shown in figure 3 below, may carry high voltage cabling and as such may not be permitted to be located within a workshop area. Advice from Kosciuszko Thredbo with respect to conduits is that a wall must be constructed in front of the pipework to prevent damage.

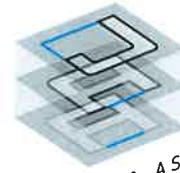


Figure 3 - Electrical conduits located in workshop area.


EXCLUSIONS:

This report excludes any works not outlined above, however specifically excludes the following:

- Determining compliance with Part D3, the Access to Premises Standard and Part J of the BCA, other than the matters identified in this report;
- Addressing any matters that are outside the scope or limitations of the BCA;
- This report does not provide concessions for any Alternative Solution or exemptions from the requirements of the BCA;
- Operational checks of the fire safety measures and equipment unless specified in this report.

CONCLUSION:	<p>The proposal to use the subject room as a storeroom, tea preparation room, and ski tuning workshop, basically as part of the existing shop, class 6.</p> <p>The assessment has determined that the space can be BCA compliant as a class 6 (compliance with Performance Requirements is achieved via DTS and Alternative solution) in the event that the following items are adequately completed as part of a DA process:</p> <p>Upgrade upgrade in accordance with the Deemed-to-Satisfy provisions of the BCA</p> <ol style="list-style-type: none"> 1. Complete retaining wall and provide certification from structural engineer that wall has been completed in accordance with the structural design. 2. Fit intumescent fire collars to the PVC pipe penetrations in the concrete slab, in accordance with C3.12 and C3.15 to prevent fire spread to the residential unit above. 3. Install a 4.kg ABE Portable Fire Extinguisher in the space with required signage in accordance with AS 2444. 4. A membrane is to applied to the retaining wall to prevent moisture penetrating the wall. Given the difficulty associated with access to the rear of the wall, the membrane can be applied to the face of the wall in accordance with manufacturers specification and engineering details 5. Install artificial lighting in accordance with section J of the BCA and AS 3000. 6. Install mechanical ventilation in accordance with F4.5(b), AS 3666.1and AS 1668.2. 7. Wrap exposed PVC pipework with acoustic insulation in accordance with F5.6 to prevent the transfer of sound from the proposed space to the unit above. <p>Upgrade items resulting from Alternative Solution prepared under J2 FER 0197 dated 17 April 2016.</p> <ol style="list-style-type: none"> 8. Smoke detection in accordance with AS 1670.1-2004 shall be installed in the storage space. The detector/s shall be connected to the building's Fire Indicator Panel and building occupant warning system in accordance with AS 1670.1-2004. Where subject to spurious signals the detector/s install may be thermal type. Audible waring within the space must comply with AS 1670.1 such that occupants of the space must be able to hear the general building alarm in the event of activation. 9. Emergency lighting is required to be provided within the building in accordance with AS 2293.1-2005 to illuminate the path of travel to the exit. 10. A partition wall is to be constructed between the workshop area and the area containing electrical conduits. A service door is to be
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	<p>installed in the wall. The door is to be keyed for access by Kosciuszko Thredbo personnel only.</p> <p>11. Where services or other building elements encroach into the space below 2.2m they are to be highlighted. In order to highlight these reduced head height areas, a strip of high visibility warning tape is to be installed at the lower edge of the services where applicable. This tape will provide warning to very tall occupants that the head height at the bulkhead is low.</p> <p>12. The recommendations of the FER must form part of the essential safety provisions for the building to ensure the recommendations of this report are complied with throughout the building operation.</p>
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CERTIFYING AUTHORITY:	James Alexander Accreditation no. BPB0002 Building Certifier & Fire Engineer ME(Fire Safety) B.App.Sc(Bldg) Grad Dip Build Surv.
SIGNATURE:	
DECISION DATE:	5 April 2016
COMPANY:	James Alexander & Associates P/L
ADDRESS:	PO Box 169, Jindabyne NSW 2627

Note: For this certificate to be valid it must be signed by the above accredited certifier.