



STEVE WATSON
& PARTNERS

CFC – 13 Percy Street, Auburn

BCA Assessment Report

Report 2020/1889 R1.0

Prepared for Fabcot Pty Ltd
16th September 2021



Steve Watson and Partners Pty Ltd

SYDNEY	Level 17, 456 Kent Street, Sydney NSW 2000 Phone +61 2 9283 6555 Fax +61 2 9283 8500
MELBOURNE	Level 8, 350 Queen Street MELBOURNE, Victoria 3000 Phone: +61 3 9380 5552 Fax: +61 3 9380 5558
BRISBANE	Level 4, 276 Edward Street BRISBANE, QLD 4000 +61 7 3088 2333 Fax: +61 7 3088 2444
CANBERRA	Suite 8, 14 Lonsdale Street, Braddon ACT 2612 +61 2 6100 6606 Fax: +61 2 6100 6609

info@swpartners.com.au www.swpartners.com.au

ABN 33 600 478 402

Principal Certifying Authority - Steve Watson & Partners



Project Contacts

Client: Fabcot Pty Ltd

Architect: Nettleton Tribe

SWP Quality System

Job Number/Ref: 2020/1889 Revision Number: R1.0 Issue Date: 16th September 2021

Revision History

Rev No	Date	Revision Details	Author	Verifier
R1.0	16/09/2021	Preliminary Certification Audit for S4.55 Submission	Joshua Hawke	Nick Hontas

Disclaimer:

This report is based on a desktop audit of preliminary DA documentation only.

Details contained in the report address issues of significance to broad BCA compliance relevant to this stage of design resolution.

This report is based on a review of the DA design documentation only. It represents a compliance report for “documentation to this point in time” and will be subject to amendment and further detailed assessment at the Construction Certificate stage.



Introduction

An assessment of the proposed design of the 13 Percy Street, Auburn has been undertaken against the Deemed-to-Satisfy (DtS) provisions of the relevant sections of the Building Code of Australia 2019 (Amendment 1) and the applicable Building Regulations.

Summary of BCA Parameters

Building Use:	Industrial (Office, Carpark and Warehouse)
Class of Occupancy:	Class 5, 7a and 7b
Type of Construction required:	Type A (large-isolated)
Rise in Storeys:	4 Storeys (Due to Mezzanine 2 having internal height >6m)
Effective Height:	6.575m (RL14.375 – RL7.80)

Description of Proposal

The proposed development involves the construction of a warehouse development located in Auburn for the use by Woolworths as a distribution facility. The development contains automated racking, a multi storey office component and a multi deck carpark and loading dock facility





Assessment

Steve Watson and Partners have undertaken a review of the proposed design that will form part of the application to Cumberland City Council. We confirm the design as shown on the drawings referenced below are capable of achieving compliance with the BCA and the Disability (Access to Premises – Buildings) Standards 2010.

Further detailed regulatory reviews will need to be progressively undertaken as the design develops to ensure compliance is achieved, in particular Section J and Access. Compliance is proposed to be achieved by satisfying the relevant DtS provisions and/or JV3 Assessment undertaken by qualified consultant(s).

Other aspects of the design are proposed to be addressed by way of Performance Solutions to meet the relevant Performance Requirements of the BCA. A detailed review at Construction Certificate stage will need to be undertaken to confirm however, it is anticipated the following compliances issues will need to be addressed via a Performance Solution through the projects fire engineer (LCI) include:

- A reduction of fire rating of building elements (incl. combustibility of external signage and external walls) – Clause & Specification C1.1 & Clause C1.14;
- Perimeter vehicular access – Clause C2.4;
- Extended travel distances – Clause D1.4 & D1.5;
- Aggregate egress width – Clause D1.6;
- Travel via non-fire isolated exits – Clause D1.9;
- Nature and operation of automatic sliding doors – Clause D2.19;
- Fire hydrant and sprinkler systems (incl. pump room locations, associated infrastructure and type of system having regard to nature of the foods stored and temperatures expected within facility) – Clause E1.3, E1.5 & Specification E1.5;
- Length of fire hose reels - Clause E1.4;
- Smoke hazard management – Clause & Specification E2.2a & b; and
- Design and operation of exit signs – Clause E4.8



Referenced Drawings

The following documentation issued by Nettleton Tribe was used in the preparation of this report:

Drawing No.	Title	Issue	Drawn By
DA000	Cover page	D	Nettleton Tribe Architects
DA001	Site plan	C	Nettleton Tribe Architects
DA002	Demolition plan	C	Nettleton Tribe Architects
DA011	Ground floor plan	J	Nettleton Tribe Architects
DA012	Office L1, carpark and WH mezz floor plan	F	Nettleton Tribe Architects
DA013	Roof plan	C	Nettleton Tribe Architects
DA014	Mezz 1 Floor Plan	E	Nettleton Tribe Architects
DA015	Office floor plans	C	Nettleton Tribe Architects
DA021	Elevations – sheet 1	E	Nettleton Tribe Architects
DA022	Elevations – sheet 2	E	Nettleton Tribe Architects
DA025	Signage elevations	B	Nettleton Tribe Architects
DA030	Sections	P2	Nettleton Tribe Architects
DA031	Sections	E	Nettleton Tribe Architects
DA051	Shadow Diagrams	B	Nettleton Tribe Architects
DA091	Perspectives – Sheet 1	B	Nettleton Tribe Architects



Fire Rating Requirements – Type A Construction

Type A Construction: FRL of Building Elements				
Building element	Class of building - FRL: (in minutes)			
	Structural adequacy/Integrity/Insulation			
	2, 3 or 4 part	5, 9 or 7a	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is-				
For loadbearing parts-				
less than 1.5m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/60	120/ 90/ 90	180/180/120	240/240/180
3 or more	90/60/30	120/ 60/ 30	180/120/90	240/180/ 90
For non-loadbearing parts-				
less than 1.5 m	-/90/90	- /120/120	- /180/180	- /240/240
1.5 to less than 3 m	-/60/60	- / 90/ 90	- /180/120	- /240/180
3 m or more	- / - / -	- / - / -	- / - / -	- / - / -
EXTERNAL COLUMN not incorporated in an external wall-				
For loadbearing columns	90/ - / -	120/ - / -	180/ - / -	240/ - / -
For non-loadbearing columns	- / - / -	- / - / -	- / - / -	- / - / -
COMMON WALLS				
and FIRE WALLS	90/90/90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS-				
Fire-resisting lift and stair shafts-				
Loadbearing	90/90/90	120/120/120	180/120/120	240/120/120
Non-loadbearing	- /90/90	- /120/120	- /120/120	- /120/120
Bounding public corridors, public lobbies and the like-				
Loadbearing	90/90/90	120/ - / -	180/ - / -	240/ - / -
Non-loadbearing	- /60/60	- / - / -	- / - / -	- / - / -
Between or bounding sole-occupancy units-				
Loadbearing	90/90/90	120/ - / -	180/ - / -	240/ - / -
Non-loadbearing	- /60/60	- / - / -	- / - / -	- / - / -
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of Combustion-				
Loadbearing	90/90/90	120/ 90/ 90	180/120/120	240/120/120
Non-loadbearing	- /90/90	- / 90/ 90	- /120/120	- /120/120
OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES				
and COLUMNS	90/ - / -	120/ - / -	180/ - / -	240/ - / -
FLOORS	90/90/90	120/120/120	180/180/180	240/240/240
ROOFS	90/60/30	120/ 60/ 30	180/60/30	240/ 90/ 60



Statutory Fire Safety Measures

Measure	Standard of Performance
Automatic Fail Safe Devices	Scheduled devices release upon trip of smoke detection and/or sprinkler activation in accordance with BCA 2019 Amendment 1 Clause D2.21.
Automatic Fire Detection And Alarm System (<i>Smoke Detection System To Activate Smoke Exhaust System</i>)	BCA 2019 Amendment 1 Clause 5 of Specification E2.2a and AS 1670.1 – 2018
Automatic Fire Suppression Systems (<i>Sprinklers</i>)	BCA 2019 Amendment 1 Specification E1.5 and AS 2118.1 – 2017
Building Occupant Warning System	BCA 2019 Amendment 1 Clause 7 of Specification E2.2a and AS 1670.1 – 2018
Emergency Lighting	BCA 2019 Amendment 1 Clause E4.2, E4.4 and AS/NZS 2293.1 – 2018
Exit Signs	BCA 2019 Amendment 1 Clause E4.5, NSW E4.6, E4.8 and AS/NZS 2293.1 – 2018
Fire Alarm Monitoring System	BCA 2019 Amendment 1 Clause 8 of Specification E2.2a and AS 1670.3 – 2018
Fire Control Centre / Room	BCA 2019 Amendment 1 Specification E1.8
Fire Dampers	BCA 2019 Amendment 1 Clause C3.15 and AS 1668.1 – 2015
Fire Doors	BCA 2019 Amendment 1 Specification C3.4 and AS/NZS 1905.1 – 2015
Fire Hydrants Systems	BCA 2019 Amendment 1 Clause E1.3 and AS 2419.1 – 2005
Fire Seals Protecting Opening In Fire Resisting Components Of The Building	BCA 2019 Amendment 1 Clause C3.15, Specification C3.15, AS 1530.4 – 2014, AS 4072.1 – 2005 and installed in accordance with the tested prototype.
Hose Reel System	BCA 2019 Amendment 1 Clause E1.4 and AS 2441 – 2005
Mechanical Air Handling System (<i>Automatic Shut Down Of Air-Handling System</i>)	BCA 2019 Amendment 1 Clause E2.2 and AS 1668.1 – 2015
Mechanical Air Handling System (<i>Carpark Mechanical Ventilation System</i>)	BCA 2019 Amendment 1 Table E2.2a, Clause 5.5 of AS/NZ 1668.1 – 2015 and fans with metal blades suitable for operation at normal temperature may be used and the electrical power and control cabling need not be fire rated
Mechanical Air Handling System (<i>Automatic Smoke Exhaust System</i>)	BCA 2019 Amendment 1 Specification E2.2b
Perimeter Vehicle Access For Emergency Vehicles	BCA 2019 Amendment 1 Clause C2.4
Portable Fire Extinguishers	BCA 2019 Amendment 1 Clause E1.6 and AS 2444 – 2001
Warning And Operational Signs	BCA 2019 Amendment 1 Clauses E3.3

NOTE: Fire safety schedule may need to be amended subject to the inclusion of a fire engineered performance solution.



BUILDING CODE CONSULTANTS
BUILDING SURVEYORS AND CERTIFIERS

SYDNEY | MELBOURNE | BRISBANE | CANBERRA