GROUPDLA

Building Code of Australia 2022 Report

Report for BCA Compliance

PROJECT NAME: Anytime Fitness – Unit 9, 4-8 Inman Road, Cromer NSW 2099
PROJECT NUMBER: **GDL230479.1**
DATE: **8/11/2023**

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REVISION HISTORY

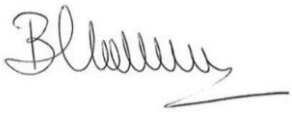
Revision	Date	Details	Authorised	
			Name/Position	Signature
1	29/09/2023	Draft	Prepared: Lindsay Dodds Senior Building Regulations Consultant	
			Reviewed: Brett Clabburn Director	
1	8/11/2023	Revision 1	Prepared: Lindsay Dodds Senior Building Regulations Consultant	
			Reviewed: Brett Clabburn Director	

Table 1 – Revision History

1.0 EXECUTIVE SUMMARY

The report is for the assessment of the subject development known as Anytime Fitness – Unit 9, 4-8 Inman Road, Cromer to assess compliance with the National Construction Code, Volume 1, Class 2-9 Buildings, Building Code of Australia 2022 ("BCA")..

The information submitted at this stage of the design is considered to be detailed to the extent where the development of a BCA Summary Report is possible and therefore this report is a final version and suitable to accompany the DA submission.

In order for Group DLA to confirm the design complies with the BCA, the following items listed in Table 3 below are required to be clarified, submitted, illustrated, etc. as the case may be:

1.1 Additional Information required for further assessment.

Item No.	Item	Comment	BCA Clause
A	Structure	Structural Engineer to Confirm the building is sufficient for the proposed new use.	Part B1
E	Fire Hydrants	Location of Fire Hydrants to be demonstrated on CC/CDC stage plans and an appropriate FPAS accredited consultant shall confirm adequate coverage is achieved in accordance with AS2419.1-2021	E1D2
F	Sanitary Facilities	Applicant to confirm proposed occupant numbers	Part F4

Table 3 – Request for Further Information

2.0 INTRODUCTION

This BCA review has been limited to the Architectural Drawings which detail sufficient information to allow a full BCA report to be produced. However, as the design drawings develop the architectural plans will need to be reassessed as necessary to ensure a complete BCA assessment is concluded.

The report is prepared based on a review of the documentation listed in Table 6 and the information provided by the client and is intended for their use only.

2.1 Current Legislation

The applicable legislation governing the BCA version for buildings is the Environmental Planning and Assessment Act 1979.

The provisions of this Act require that all new building works are carried out in accordance with the Building Code of Australia (BCA). The applicable version of the BCA to be adopted will be the BCA version in force when the Construction Certificate or Complying Development Certificate is applied for on the NSW e-Planning Portal.

The BCA is now updated every three (3) years, the next updated will be BCA 2025 which is anticipated to come into force on the 1st May 2025.

2.2 Change of Use

The proposed works include a change of use (Warehouse to Public Gym) and will require confirmation that the structural capacity and fire protection of building will be appropriate to the new use and that the building will comply with Category 1 fire safety provisions as appropriate to the new use. These requirements are specified under Division 2 Clause 14 of the Environmental Planning & Assessment (Development Certification & Fire Safety) Regulation 2021 and will need to be satisfied by the certifier prior to the issue of a Construction Certificate or CDC.

2.3 Fire Brigade

As per BCA 2022 Clause A2G2(4) all Performance Solutions are required to undertake a Performance Based Design Brief (PBDB) process, NSW Fire Brigades have advised (https://www.fire.nsw.gov.au/page.php?id=9154) that they will only provide their stakeholder input via a Fire Engineering Brief Questionnaire (FEBQ) process prepared and lodged by the engaged Fire Safety Engineer. This applies to all projects irrespective of the approval process, Crown, REF, CDC or Construction Certificate projects, if there are any Performance Solutions affecting fire safety all need to undertake this stakeholder engagement with NSW Fire Brigade which the Fire Safety Engineering will lodge.

Construction Certificates - the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulations 2021 (EP&A Reg 2021), Section 27 (previously Clause 144 of the Old Regulation), requires buildings the subject of Construction Certificate approval to have the Fire Engineering Report to be referred to Fire Brigade within seven (7) days of lodgement of the CC application on the NSW Government e-Planning Portal in certain cases.

Section 27 of the EP&A 2021 Regs defines which fire engineering reports need to be referred, and generally relates to Category 2 Fire Safety Provisions (defined in the Act) and/or for cladding performance solutions[1], and the floor area of a fire compartment in general terms exceeds 2000 m^2 or the floor area of the building exceeds 6000 m^2, the Section 27 referral to the FRNSW is to be assessed and lodged by the engaged Registered Certifier assessing the Construction Certificate**.**

[1]***Category 2 fire safety provision means the following provisions of the Building Code of Australia, namely, CP9, EP1.3, EP1.4, EP1.6, EP2.2 and EP3.2 in Volume One of that Code.***

Under recent changes to the legislation and Fire brigade advice, for Section 27 referrals of the Fire Engineering Report the fire brigade are required to respond within 10 days advising whether or not they will be proceeding with a review and providing the Initial Fire Safety Report. If so, they have not more than 28 days from the initial lodgement to provide their report or the Certifier can choose to invoke the provisions of Clause 144(6A)(c) and issue the Construction Certificate after 28 days of officially lodging the Clause 144 application; further consultation is required on this issue with the engaged Certifier as in almost all cases the Certifier will await comments and adopt any recommendations made by NSW Fire & Rescue which may have programme implications to be planned for.

2.4 Limitations

This report does not constitute or include, nor imply or audit any assessment of the following;

- This assessment is limited to the developed documentation at the date of this report and as referenced within the “Documentation Assessed” section of the Report.
- Preparation of performance provisions of the BCA are excluded.
- This report does not include assessment of the documentation against the provisions of the Disability Discrimination Act 1992 or (Access to Premises Buildings) Standards 2010, BCA 2022 Part D4 and Clauses F4D5, F4D14.
- Travel distances have been assessed on an open plan basis with an allowance made for travel around pending fixed structures. No consideration has been given to any future fixed structures and accordingly, further assessment will be required in the event of floor plan or fixture amendments if and when these are provided formally.
- This report excludes any form of Certification Work as defined in the regulations, and is for BCA Compliance purposes only
- Generally, the assessment does not include a detailed assessment of Australian Standards.
- Requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, ARTC, Department of Planning, Liquor Licensing Act 1997 and the like; and
- Demolition Standards not referred to by the BCA;
- Work Healthy and Safety Act 2011 (Safety in Design);
- The National Construction Code – Plumbing Code of Australia Volume 3;
- The capacity of design of any Electrical, Fire, Hydraulic or Mechanical Services;
- Structural and services drawings have not been reviewed, nor any consideration given to the structural capacity (or inherent FRL’s) of the building.
- Section J matters are to be documented and confirmed by a suitably qualified Section J Consultant or Services Consultant as applicable.
- Fire Engineering matters should be documented and confirmed by a Grade C10 Accredited Fire Safety Engineer (or Certifier – Fire Safety under new regulation).
- External Wall Weatherproofing – should external walls be proposed s part of these works a Performance Solution for the design of the new/proposed external walls is to be provided by others.

3.0 BUILDING DESCRIPTION

3.1 Building Development

The development subject of this report is located at 4-8 Inman Road, Cromer, corner of S Creek Road. The building comprises 2 storeys and is known as Unit 9.

The building contains the following levels.

- Basement Storage
- Ground Floor
- Mezzanine*

*The mezzanine level is exempt from being counted as a storey for the purpose of this assessment. Refer to BCA Clause C2D3 below.

The proposed development involves the refurbishment of which includes the following areas:

- Ground Floor
- Mezzanine

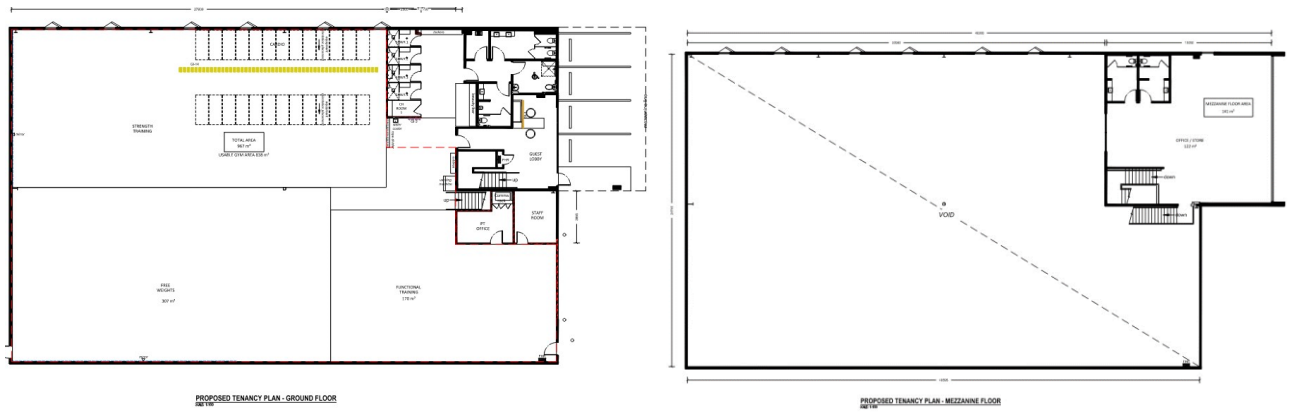


Figure 2 – Proposed development

3.2 Building Description

BCA Class	Level	Description/Use Proposed
9b	Basement, Ground Floor & Level 1 Mezzanine	Indoor Recreational Facility (Gym)

Table 4 – Building Class (or part)

Characteristic	Description
BCA Classifications:	9b
Type of Construction:	B
Floor Area:	1148m^{2}*
Rise in Storeys:	2
BCA Effective Height:	7m Approx
Climate Zone:	5
Importance Level (BCA Table B1D3a):	2

*Floor Area is only indicative of the proposed works and not the whole building

Table 5 – Building Characteristic

3.3 Documentation Assessed

The architectural plans are still under development to the extent that a complete BCA assessment can be concluded.

This report is based on the following documentation prepared by Archi Spectrum.

Description	Drawing No.	Revision	Date
Site Plan	DA01.01	B	08/11/2023
Existing Tenancy Plan – Ground Floor	DA02.01	B	08/11/2023
Existing Tenancy Plan – Mezzanine Floor	DA02.02	B	08/11/2023
Proposed Tenancy Plan – Ground Floor	DA03.01	B	08/11/2023
Proposed Tenancy Plan – Mezzanine Floor	DA03.02	B	08/11/2023
Existing Elevations	DA04.01	B	08/11/2023
Proposed East Elevation	DA04.02	B	08/11/2023
Site Analysis	DA05.01	B	08/11/2023
Notification Drawings	N01.01	B	08/11/2023

Fire Compartmentation Plan – Ground Floor	GA902	F	15/12/2021
Warehouse Elevations – Sheet 1	GA301	P4	18/02/2022
Overall Sections – Sheet 1	GA350	P3	29/11/2021

Table 6 – Documentation Assessed

Supplementary Documentation:
The following supplementary documentation has also informed the assessment report herein.

- Notice of Determination issued by Northern Beaches Council Application number DA2019/1346 dated 19/08/2020.
- Council approved & stamped architectural document set associated with DA2019/1346.

3.4 Assumptions

Assumptions made in the preparation of the report are identified below.

1. The surrounding units within this building are Class 7b and therefore Type C Construction
2. Disabled Access, Section J Energy Efficiency and External Wall weatherproofing are excluded from this report, and details relating to these elements are located in others reports/documentation.

4.0 BCA COMPLIANCE DISCUSSION & DESIGN CONSIDERATIONS

The following comprises a summary of the key compliance issues that will need to be addressed prior to the issue of a Construction Certificate.

Section B – Structure

1. **Part B1 – Structural Provisions -** Structural Engineer to confirm that the building/ structure, associated materials and forms of construction will resist loads determined by the Australian Standards included in this part.

   Comments*: Design Certificate by practicing engineer required prior to the issue of the Construction Certificate for any structural work.*

Section C – Fire Resistance

2. **C2D2 – Type of Construction –** The building is to be constructed of Type B Construction (Specification 5, S5C21)

3. **C2D3 –** Calculation of Rise in Storeys - The rise in storeys is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space above ground level. A storey is not counted if it is situated partly below the finished ground and the underside of the ceiling is not more than 1 m above the average finished level for the 12 m distance where the ground is lowest.

   Comments*: Elevation & Section details provided show that the subject building has a rise in storeys of two (2) comprising of the basement storage level and ground floor. The mezzanine office level has not been counted as a storey for the purpose of this clause as it is less than 200sqm and 1/3 of the overall floor area and therefore granted exemption from this calculation in accordance with C2D3 (4) (a).*

4. **C2D10 – Non-combustible building elements –** In a building of Type B construction any building elements and their components in external walls must be non-combustible.

   Comments: *Capable of Complying –Details demonstrating compliance are to be provided at construction certificate stage if any work is proposed to the external walls.*

5. **C2D11 – Fire Hazard Properties** - Fire hazard properties of new materials must comply with C2D11 of the BCA and Specification 7, including floor, walls and ceiling linings, air handling ductwork, insulations, sarking-type materials and attachments, or be considered non-combustible in accordance with AS1530.1 as defined by the BCA.

   - Critical radiant flux not less than: 2.2 (non-sprinkler protected buildings); 1.2 (sprinkler protected buildings); 2.2 (fire-isolated stairs).

   - Material Groups: 1, 2 & 3 (see table directly from the BCA)

     Comments*: Capable of Complying – Details demonstrating compliance are to be provided at construction certificate stage.*

6. **C2D14 – Ancillary Elements –** Ancillary elements fixed or installed to the external wall of the building must be non-combustible.

   Comments: *Capable of Complying –Details demonstrating compliance are to be provided at construction certificate stage if any work is proposed to the external walls. This will include any attachments to external walls such as business identification signs. Any proposed signs or other proposed attachments will need to be demonstrated as non-combustible or achieve a Group number 1 or 2 in accordance with C2D14 (h).*

7. **C3D3 – General floor area & volume limitations –** The size of any fire compartment must not exceed the maximum floor area and volume set out in table C3D3.

   Comments: *Compliance achieved* –the proposed works are restricted to internal fit out works of the existing tenancy with no extension or increase in gross floor area proposed. It is noted that unit 9 is fire separated from the remainder of the building creating a self-contained fire-compartment within the limitations of table C3D3.

8. **C3D8 – Separation by Fire Walls –** A part of a building separated by a fire wall my be treated as separate building for purposes of Part C, D & E in the NCC 2022.

   Comments: *Capable of complying – Architectural documentation provided to Group DLA demonstrates that the intertenancy wall between unit 9 and the adjacent unit 8 is a fire wall rated to 4 hours. Further investigations and confirmation of this shall be provided to the certifier prior to the issue of a Construction Certificate or Complying Development Certificate.*

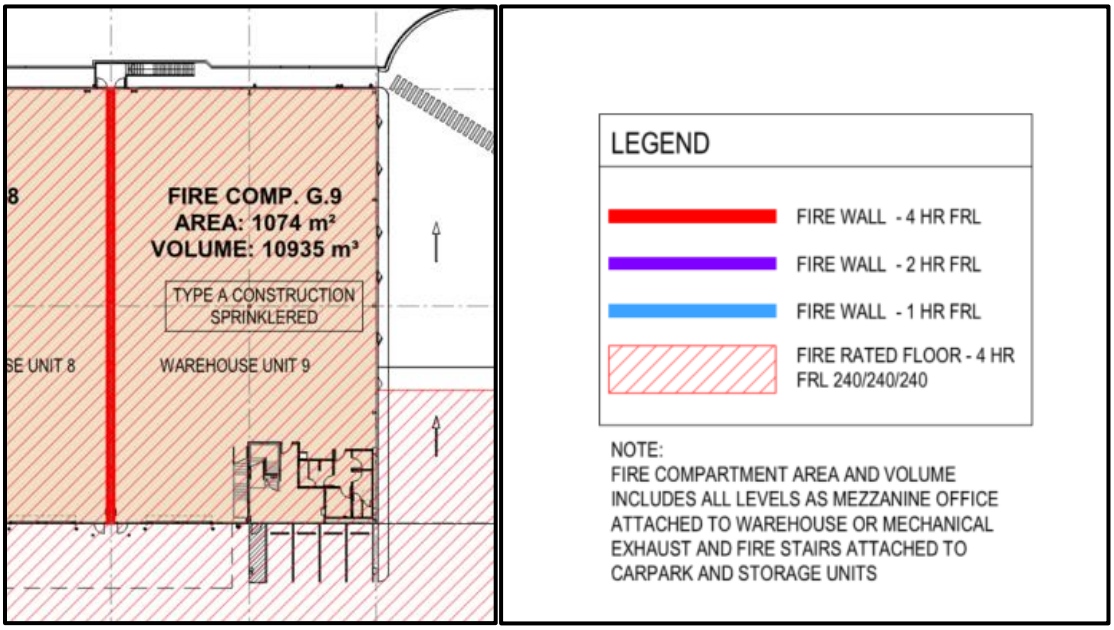


Figure 3 – Existing Fire Compartmentation & Fire Rating

9. **C3D9 – Separation of Classifications –** Separate classifications will either need to be separated by a fire wall achieving the higher FRL requirement between the two classes, or alternatively the higher FRL must apply to both areas subject to Specification 5.

   Comments: *Capable of Complying –Details demonstrating compliance are to be provided at construction certificate stage. It is assumed that the subject tenancy is adequately fire separated from the remainder of the building. Architectural plans / site photographs required to confirm compliance. Architect / engineer to confirm as suitable.*

Section D – Access & Egress

10. **D2D3 – Number of Exits Required** – The building must have 2 exits provided from the building

    ***Comments**: Compliance Achieved*

11. **D2D5 – Exit Travel Distances –** Exit travel distances within the building are required to be not more than 20m to a point of choice between alternative exits, 40m to the nearest exit and no more than 60m between two exits.

    ***Comments**: Compliance Achieved*

12. **D2D7 – Heights of exit paths of travel to exits and doorways –** In a path of travel to a required exit, the unobstructed height throughout must not be less than 2m, except the unobstructed height of any doorway may be reduced to not less than 1980mm.

    ***Comments:** Compliance Achieved*

13. **D2D8 – Width of exits and paths of travel to exits –** The unobstructed width of each required exit or path of travel to an exit must not be less than 1m.

    ***Comments**: Compliance Achieved*

14. **D2D14 – Travel via non fire-isolated stairways** – A non-fire isolated stairway serving as a required exit must provide continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided. In a class 6 building, the distance from any point on a floor to a point of egress to a road or open space by way of required non fire-isolated stairway must not exceed 80m.

    ***Comments**: Compliance Achieved*

15. **D2D15 – Discharge from Exits –** An exit must not be blocked at the point of discharge and where necessary suitable barriers must be provided to prevent vehicles from blocking the exit or access to it

    ***Comments**: Capable of Complying - Details demonstrating compliance are to be provided at Construction Certificate Stage*

16. **D3D14/ D3D15/ D3D17/ D3D18/ D3D19/ D3D22 – Stairways, Balustraudes and Handrails -** Stairways, balustrades and handrails to achieve the minimum requirements of the BCA. Floor finishes will be required to achieve the correct slip resistance in accordance with AS 4586-2013, and associated handbooks HB197 and HB198.

    ***Comments:** Capable of Complying – Details demonstrating compliance are to be provided at Construction Certificate Stage*

17. **D3D24/ D3D25/ D3D26 – Doors and Latches –** Al egress doorways must swing in the direction of egress and must be readily openable without a key from the side that faces a person seek egress, by a signle handed downward or pushing action on a single device which is located between 900mm and 1100mm from the floor.

    Comments: *Non-Compliant – It is noted that the door to the southwest corner of the existing tenancy contains a Fire Hose Reel and is intended to be used as an "exit" as defined by the BCA. As such the door should swing outwards in the direction of egress to meet BCA Clause D3D25 (b). It is noted however, that compliant travel distances may be achieved without relying on this door as an exit and as such we recommend the Fire Hose Reel be re-located to be adjacent to the nominated "exits" in this instance to comply with Part E1D3.*

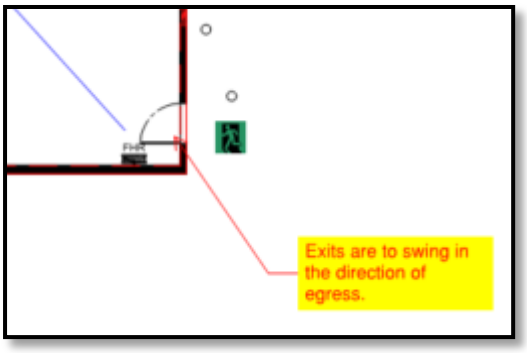


Figure 4 – Exits required to swing in the direction of egress.

18. **Part D4 – Access for Disability -** The extent of access required depends on the classification of the building. Buildings and parts of buildings must be accessible as set out in Table D3.1 unless exempted by Clause D3.4. The building is required to comply with AS1428.1-2009.

    Comments: *A DDA Consultant should be engaged to provide an assessment*

Section E –Services & Equipment

19. **E1D2 – Fire Hydrant -** Fire hydrant coverage is required to be provided to the all buildings in accordance with AS2419.1-2005.

    Comments: *Capable of Complying – Details demonstrating compliance are to be provided at Construction Certificate Stage.*

    *Location of Fire Hydrants to be demonstrated on CC stage plans and an appropriate FPAS accredited consultant shall confirm adequate coverage is achieved in accordance with AS2419.1-2021

20. **E1D3 – Fire hose Reels -** Fire hose reel coverage is required to be provided to Class 5 / 6 parts in accordance with AS2441-2005.

    Adequate coverage achieved in accordance with E1D3, it is recommended to ensure that Fire Hose Reels are located within 4m of each "exit" as defined by the BCA prior to the issue of a Construction Certificate / Complying Development Certificate.

    Comments: *Capable of Complying – Details demonstrating compliance are to be provided at Construction Certificate Stage*

21. **E1D14 – Portable Fire Extinguishers -** To be provided and designed in accordance with AS 2444-2001

    Comments: *Capable of Complying – Details demonstrating compliance are to be provided at Construction Certificate Stage*

22. **E2D3 – Smoke Hazard Management -** The building is required to be provided with the following smoke hazard management systems as required by E2D3.

    - AS1668.2 – 2012 Mechanical Ventilation System

    Comments: *Capable of Complying – Details demonstrating compliance are to be provided at Construction Certificate Stage*

23. **Part E4 – Exit Signs and Emergency Lighting -** Emergency lighting and exit signage to be provided in accordance with E4.2-E4.5complying with AS 2293.1 – 2018.

    Comments: *Capable of Complying – Details demonstrating compliance are to be provided at Construction Certificate Stage*

Section F – Health and Amenity

24. **Part F4 – Sanitary Facilities –** Facilities to be provided in accordance with Table F4D4a. Refer to below table on the suitability of the proposed sanitary facilities.

Class 9b Building – Sports Venues or the like (Participants)				
	Closet Pans	Urinals	Washbasins	Population Served
Male	2	3	3	20
Female	3	-	3	30

Class 3, 5, 6 and 9 other than schools (Employees)				
	Closet Pans	Urinals	Washbasins	Population Served
Male	2	3	3	20
Female	3	-	3	15

Comments*: Max Population of up to 70*

Note that the accessible facilities have been counted once for each gender.

Applicant to confirm the proposed occupant numbers.

25. **Part F5 – Ceiling Heights:**

    - Habitable portions accommodating not more than 100 persons: 2.4m min.
    - Habitable portions accommodating more than 100 persons: 2.7m min
    - Corridors, passageways, or the like accommodating not more than 100 persons: 2.4m min.
    - Corridors, passageways, or the like accommodating more than 100 persons: 2.7m min.
    - Kitchens, laundry or the like: 2.1m min.
    - Bathrooms, airlocks, storerooms or the like: 2.1m min.
    - Stairways, ramps, landings or the like: 2.0m min.

    Comments: *Compliance achieved.*

26. **Part F6 – Light and Ventilation:**

    - Artificial lighting to be in-compliance with AS1680.0.
    - The building will be provided with natural ventilation or mechanical ventilation in compliance with AS1668.2 and AS3666.1.
    - All WC's will be mechanically ventilated.

    Comments: *Capable of Complying – Details demonstrating compliance are to be provided at Construction Certificate Stage*

Section J – Energy Efficiency – *A Section J Report from a suitably qualified consultant required where any non-air-conditioned spaces are converted to obtain air-conditioning.*

5.0 ESSENTIAL FIRE SAFETY MEASURES (EFSM)

Below is a list of essential fire safety services that are required/expected to be installed / designed for the building, and the relevant standards of performance for each measure to be designed/constructed to. This table may be required to be updated as the design develops, the table is also reflective only of those measure that are required for the subject tenancy, there may be further fire safety measures installed in the wider building affecting the tenancy itself.

Subject to review following receipt of the Annual Fire Safety Statement

Fire Safety Measure	Standard of Performance	BCA 2022 Clause/Specification(s)	Existing Fire Safety Measures	Proposed Fire Safety Measures
Automatic fail-safe devices	--	D3D24, D3D26	☐	☐
Emergency lighting	AS 2293.1 – 2018	E4D2, E4D4, E4D8	☐	☐
Exit signs	AS 2293.1 – 2018	E4D5, E4D6, NSWWE4D6, E4D8, Spec 25	☐	☐
Fire hose reel systems	AS 2441 – 2005	E1D3	☐	☐
Fire hydrant systems	AS 2419.1 – 2021	E1D2, Spec 18	☐	☐
Fire seals (protecting openings in fire resisting components of the building)	AS 4072.1 – 2005 AS 1530.4 – 2014	C4D15, C4D16, Spec 13	☐	☐
Mechanical air handling systems	AS 1668.2 –2012	E2D3	☐	☐
Portable fire extinguishers	AS 2444 – 2001	E1D14	☐	☐
Fire Blankets	AS 2444-2001	E1D14	☐	☐

Table 7 – Essential Fire Safety Measures (EFSM)

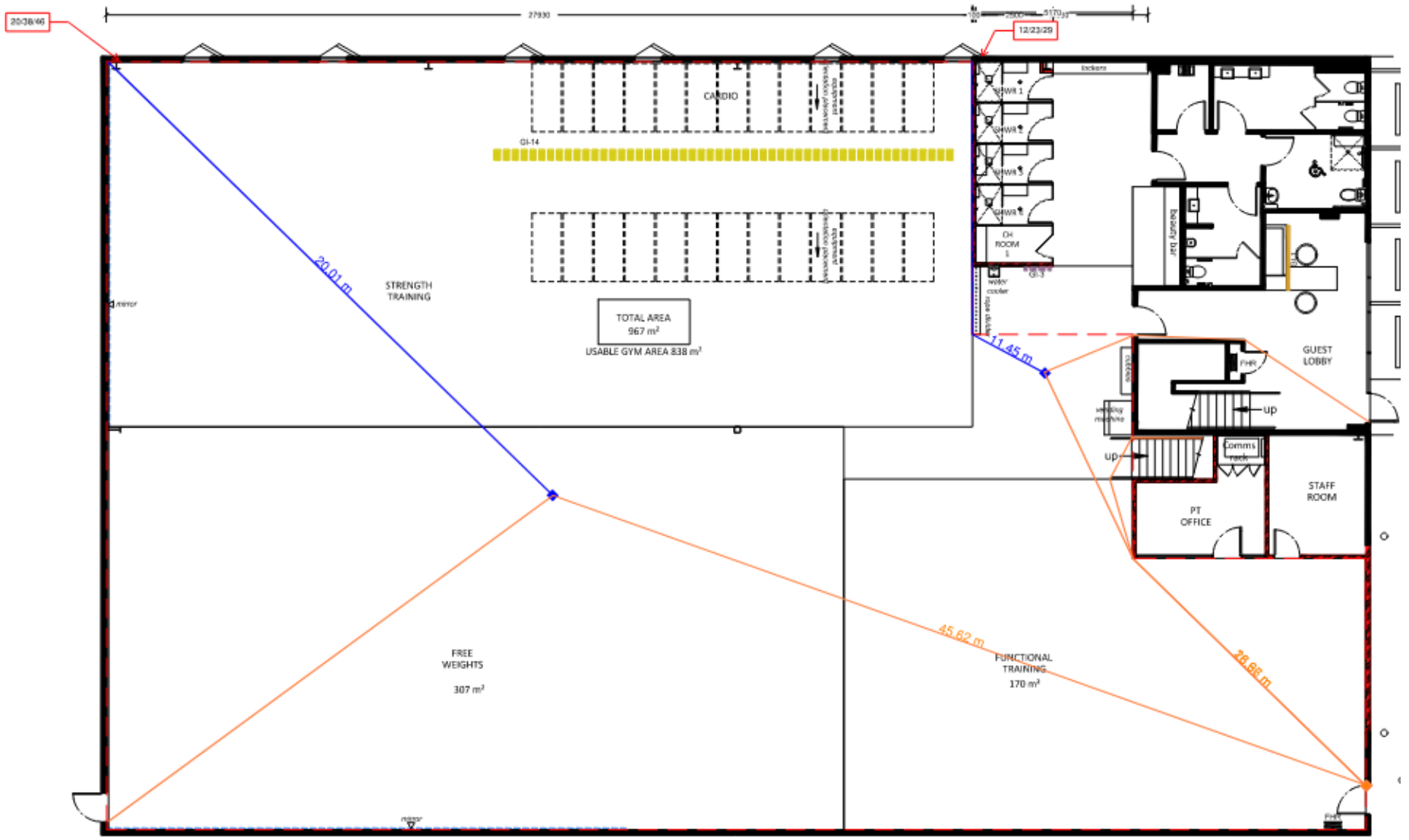
6.0 Fire Resistance Levels

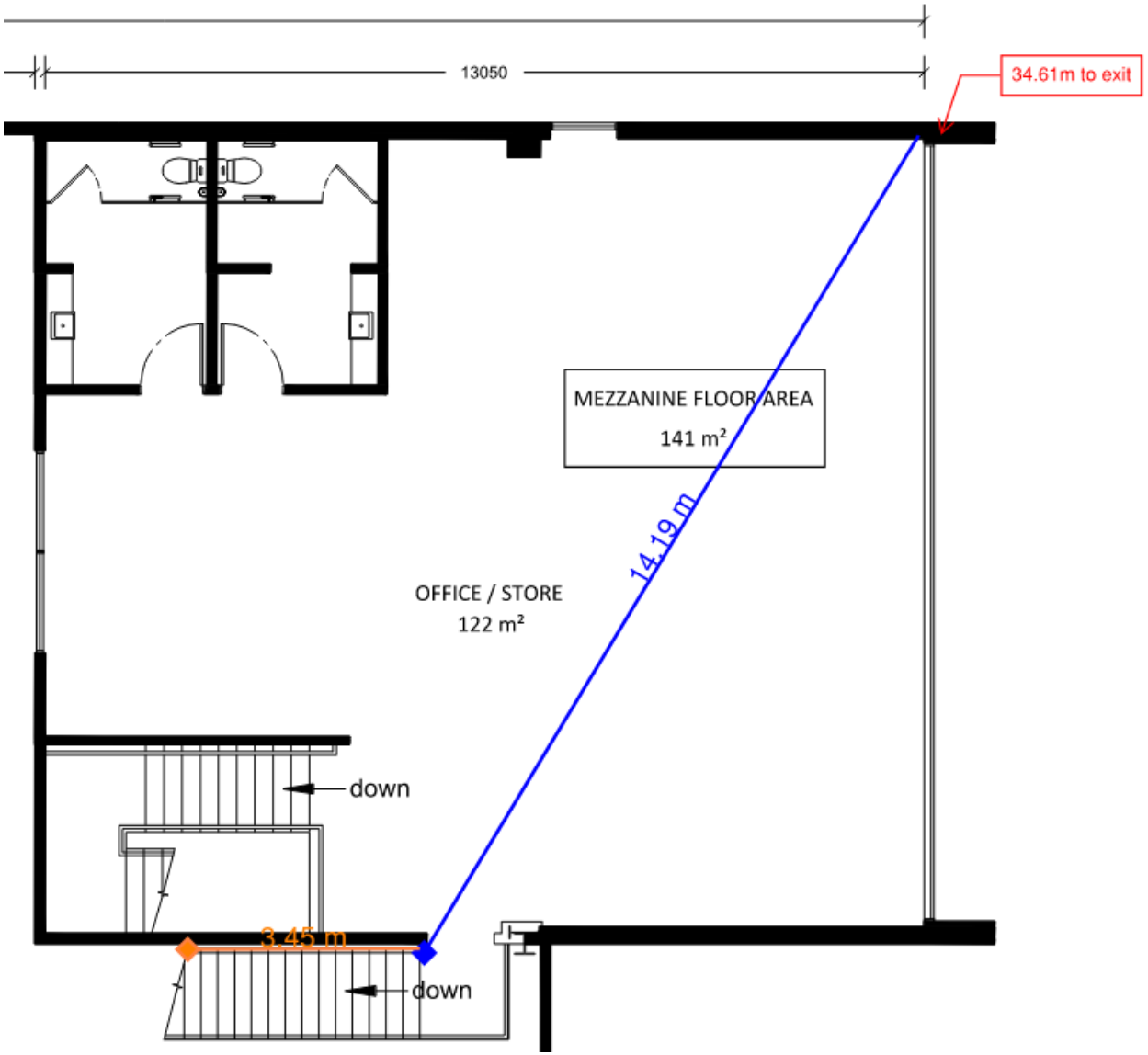
Item	Class 9b
Load bearing External Walls	
- Less than 1.5m to a fire source feature	120/120/120
- 1.5-less than 3m from a fire source feature	120/90/60
- 3-less than 9m from a fire source feature	120/30/30
- 9-less than 18m from a fire source feature	120/30/-
- 18m or more from a fire source feature	-/-/-
Non-Loadbearing External Walls	
- Less than 1.5m to a fire source feature	-/120/120
- 1.5-3m from a source feature	-/90/60
- 3m or more from a fire source feature	-/-/-
Loadbearing External Columns	
- Less than 18m	120/-/-
- 18m or more	-/-/-
Non-Load Bearing External Columns	-/-/-
Common Walls & Fire Walls	120/120/120
Stair & Lift Shafts Required to be fire-resisting.	
- Load bearing Stari & Lift Shaft	120/120/120
- Non-loadbearing Stair shaft only	-/120/120
Internal walls bounding sole occupancy units	
- Load bearing	120/-/-
- Non-loadbearing	-/-/-
Internal walls bounding public corridors, public lobbies and the like:	120/-/-
- Loadbearing	-/-/-
- Non-Loadbearing	
Other loadbearing internal walls and columns	120/-/-
Roofs	-/-/-

Appendix A:

Ancillary Information

- Travel Distance Markup


20/38/46
27930
12/23/29
CARDIO
GI-14
STRENGTH TRAINING
mirror
TOTAL AREA
967 m²
USABLE GYM AREA 838 m²
20.01 m
11.45 m
SHWR 1
SHWR 2
SHWR 3
SHWR 4
CH ROOM 1
water cooler
GI-3
lockers
laundry chute
GUEST LOBBY
FHR
cupboard
vending machine
up
up
Comms rack
STAFF ROOM
PT OFFICE
FREE WEIGHTS
307 m²
45.62 m
FUNCTIONAL TRAINING
170 m²
28.66 m
mirror
FHR


13050
34.61m to exit
MEZZANINE FLOOR AREA
141 m²
14.19 m
OFFICE / STORE
122 m²
down
3.45 m
down

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