Galleria – Myer Mall & ELP

NCC 2022 Section J4 Report

Vicinity Centres

Job No:	1030734
Doc ref:	1030734-RPT-SY-001
Revision:	D
Revision date:	09 September 2025

Project title	Galleria – Myer Mall & ELP	**Job number**
Report title	NCC 2022 Section J4 Report	1030734

Document revision history

Revision ref	Issue date	Purpose of issue / description of revision
—	28 February 2025	Schematic Design
A	05 March 2025	Glazing performance alteration
B	10 July 2025	Partial removal of soffit insulation, addition of roof insulation
C	30 July 2025	Removal of ceiling layer to new tenancies, updated glazing performance, dark colour cladding to time zone, updated references and notes in Appendices
D	09 September 2025	Updated BCA Compliance memo and addressed client comments

Document validation (latest issue)

9/9/2025

X

Principal author

Signed by: p.pandiselvam

9/09/2025

X

Checked by

Signed by: O.Grimaldi

9/09/2025

X

Verified by

Signed by: O.Grimaldi

Executive summary

Cundall has been engaged by Vicinity Centres to provide a National Construction Code 2022 (NCC) Section J4 assessment for the Galleria – Myer Mall & ELP project. To meet the requirements of Part J4D4 to Part J4D7, it is proposed to adopt the Verification Method J1V3. All other elements of Part J4 Building fabric are to meet the relevant Deemed-to-Satisfy Provisions and are the responsibility of others.

Based on the J1V3 assessment undertaken, the following sets out the minimum requirements to be adopted during completion of design documentation to meet the requirements of NCC Part J4D4 to Part J4D7.

Conditioned envelope, minimum thermal performance requirements

Building Component	Building Envelopment Element	Proposed (Actual Design) (m^2.K/W)
Roof or ceiling	Metal deck roof to new tenancy areas: Metal deck roofing, 120mm roof spacer system, fitted with **145mm insulation blanket R3.6** with **inward facing reflective foil laminate**, thermally broken by spacer system (assumed 2%), cavity, **80mm insulation blanket R1.8** with **inward facing reflective foil laminate**. Note: Roof colour SA has been estimated based on white paint.	R_T5.8 (SA ≤ 0.30)
	Metal deck roof to existing tenancies: **In-situ roof with ceilings as per Compliance Memo from the building certifier (BCA) (Ref: no: 160015) issued 8 September 2025 (see Appendix D).**	No additional insulation requirement
External Wall	Lightweight wall: CFC cladding, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard. Note: Wall colour SA has been estimated based on white paint	R_T1.5 (SA ≤ 0.30)
	Lightweight wall (only for Timezone): CFC cladding, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard. Note: Wall colour SA has been estimated based on dark paint	R_T1.5 (SA ≤ 0.70)
	Heavyweight wall: Precast concrete, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard. Note: Wall colour SA has been estimated based on white paint.	R_T1.5 (SA ≤ 0.30)
Internal Wall	Lightweight wall: Plasterboard, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard.	R_T1.6
Floor (direction downwards)	Suspended slab: (Only to storeroom under Cotton on 1- 163) Concrete slab, **rigid board insulation R1.75**.	R_T2.0

Glazing, minimum thermal performance requirements

Glazing Element	Proposed (Actual Design) U-value (W/m². K) / SHGC
All aspects glazed windows / doors	≤ 5.50 / ≤ 0.73
North and south entry doors	≤ 5.50 / ≤ 0.73

Contents

1.0 Introduction

1.1 Background

Cundall has been engaged by Vicinity Centres to provide a National Construction Code 2022 (NCC) Section J4 assessment for the Galleria – Myer Mall & ELP project. Given the project's complexity and the significant renovations being undertaken, an alternative selection to the deemed-to-satisfy (DtS) Part J4D6 glazing requirements is proposed. Therefore, to meet the requirements of Part J4D4 to Part J4D7, it is proposed to adopt the Verification Method J1V3. All other elements of Part J4 Building fabric are to meet the relevant Deemed-to-Satisfy Provisions.

1.2 Purpose

The purpose of this report is to identify the minimum thermal performance requirements for review and coordination by the design team in design documentation during the completion of the schematic design phase. Thermal performance requirements nominated at this stage have not yet been coordinated with other disciplines, and no detailed thermal bridging calculations have been undertaken. Detailed thermal performance calculations for conditioned envelope façade, floor, and roof types will be undertaken as documentation and schedules with detailed build up information is provided (cladding, framing information, wall thicknesses and spatial allowances for thermal insulation and thermal breaks etc.)

1.3 Applicable Performance Requirements and Scope (Only to New Areas)

The relevant NCC Performance Requirement is J1P1, Energy use. Compliance with J1P1 Energy Use is to be met via a Performance Solution complying with NCC Part A2G4, A Combination of Solutions. The Performance Solution is to be shown to comply through a combination of the following Assessment Methods:

- A2G2 (2) (b) (i) A Verification Method provided in the NCC. The NCC Verification Method J1V3 is proposed to demonstrate compliance for Parts J4D4 to J4D7 only.
- A2G3 (1) compliance with the Deemed-to-Satisfy Provisions is to be used for all remaining Parts of Section J (evidence to be provided separately by others).

As proposed building services are being designed to meet the minimum DTS requirements, the J1V3 assessment shall only be required to demonstrate:

- The greenhouse gas emissions of the proposed building with the same services as the reference building are not more than that of the reference building.
- In the proposed building with the same services as the reference building, a thermal comfort level of between a Predicted Mean Vote of -1 to +1 is achieved across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation of the building.

1.4 Reference documents

The following resources were used throughout this verification exercise:

- Project design documents per Appendix A
- NCC 2022, Building Code of Australia, Volume One; and
- NCC 2022 Volume One facade calculator.
- Compliance Memo_160015 from building certifier (BCA)

1.5 Software Package

The software package IES Virtual Environment has been used as the basis for all J1V3 calculations. IES is validated in accordance with ANSI/ASHRAE Standard 140.

1.6 Limitations and Disclaimers

This report considers the building for compliance against Part J4D4 to Part J4D7of the NCC 2022 Volume 1, and only considers the design from an energy efficiency perspective when assessed against the operational profiles, modelling parameters and internal heat gains shown in NCC Specification 33 to 35.

The thermal performance requirements indicated in this report are to be determined and achieved in accordance with AS/NZS 4859.2. The standard comprises a calculation method that considers the impact of thermal bridges on the thermal performance of a façade. Depending on the extent of the thermal bridges within a façade, extra insulation or thermal breaks may be required for a façade to be compliant. As such, achieving the as-built thermal performance of elements shall be the responsibility of the relevant contractors.

Cundall are not responsible for verifying the compliance or suitability of any individual product, system, or construction.

2.0 Modelled Parameters

2.1 Building Particulars

The project is situated in Morley, Western Australia.

Table 2-1, Building Particulars

Building Detail	Response
BCA Class:	6
Building Type & Function:	Shopping Centre Commercial Tenants
Floor Area (approx.)	Ground Floor: 11,033 m² First Floor: 16,715 m²
Effective Height:	2 Storey
Climate Zone:	5

2.2 Building Geometry

The general form of the building has been represented in the modelling software in Figure 2.1. The new works for the Myer Mall & ELP have been shown in dashed lines in Figure 2.2.

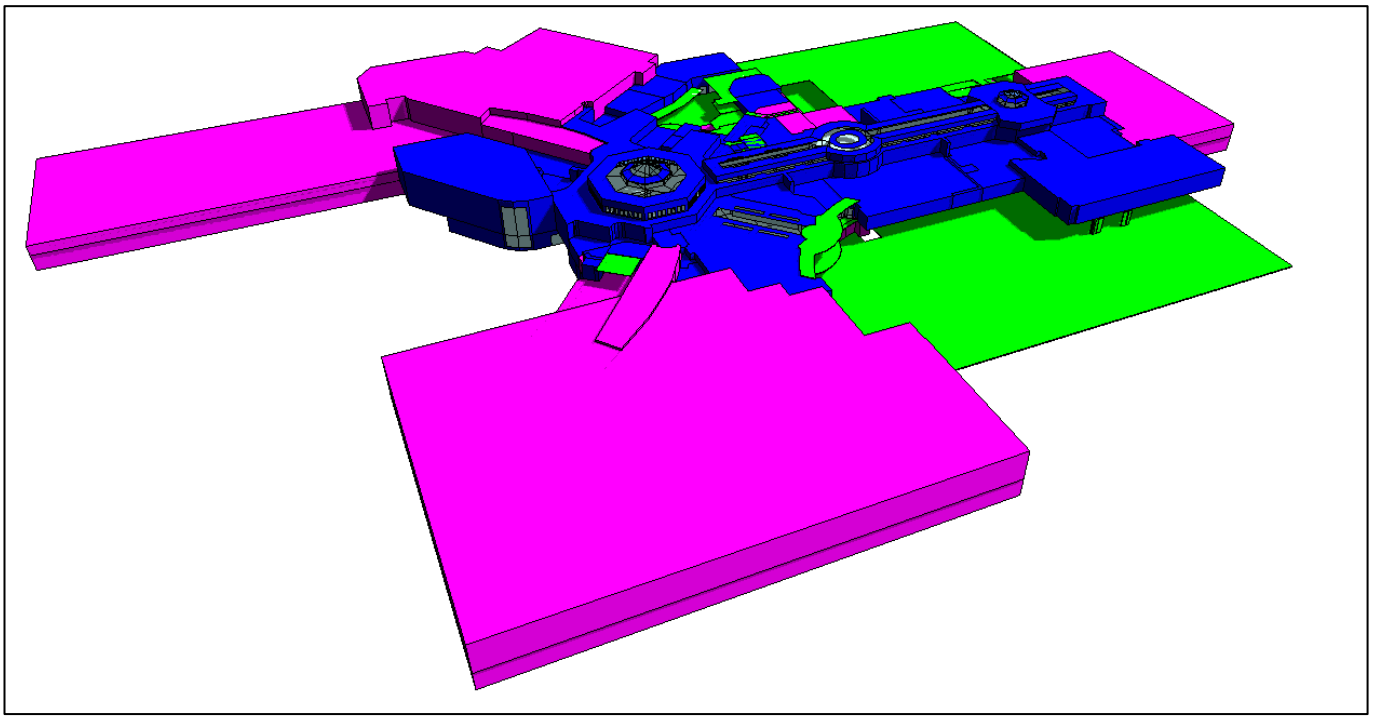


Figure 2.1: General building form in IESVE

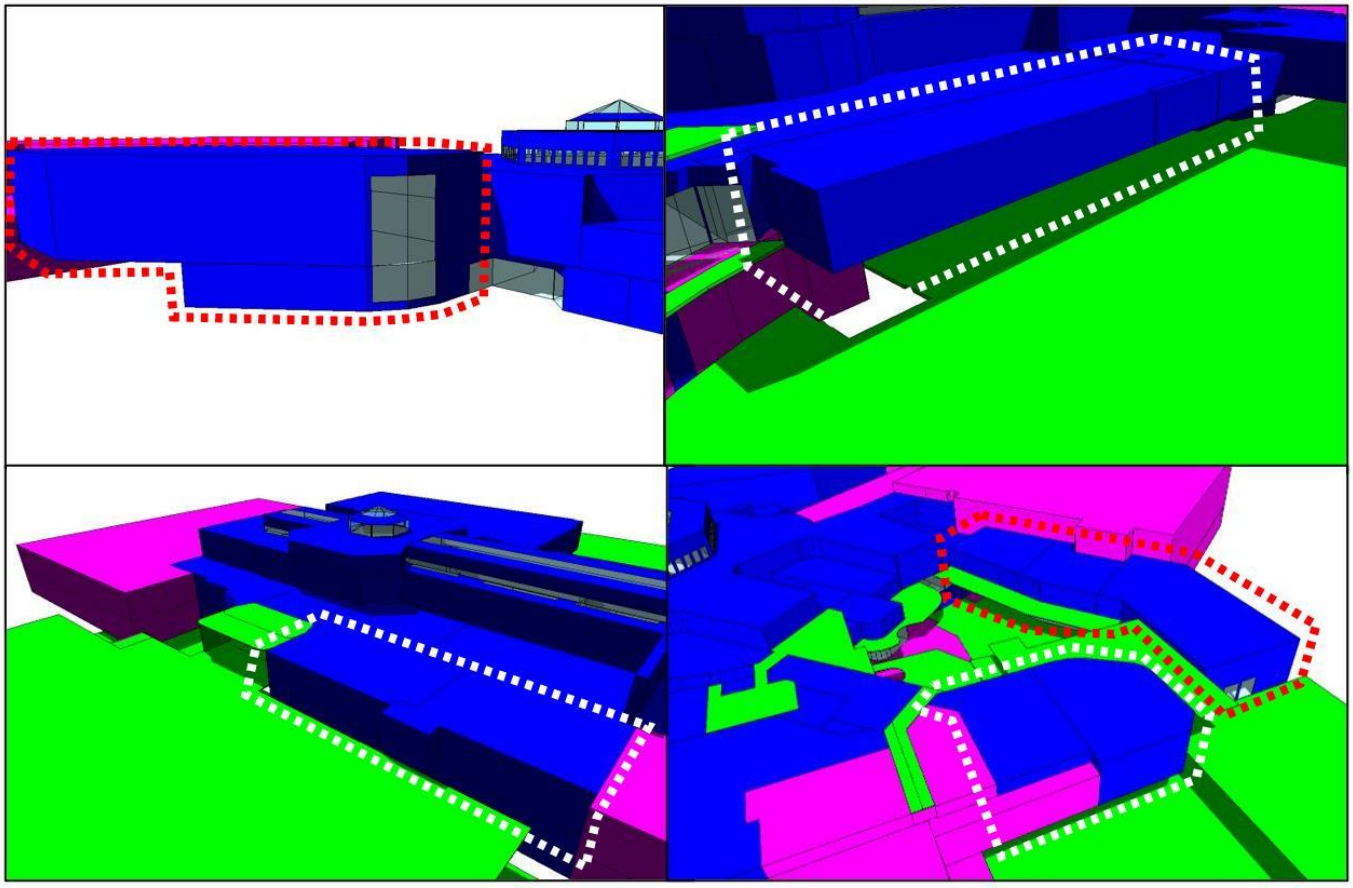


Figure 2.2: Shopping Centre new works under assessment

Note – *As per the NCC Handbook, shading is not included in the DTS (reference) model.*

2.3 Calculation Parameters

The following calculation parameters have been defined for the proposed building and reference building in accordance with NCC Specification 34.

Table 2-2 J1V3 Reference and proposed model parameters

Parameter	Details		
Climate File	AUS_WA_Perth_946100_IWEC.epw		
Space Temperatures	18°CDB to 25°CDB in conditioned spaces with transitory occupancy 21°CDB to 24°CDB in all other conditioned spaces		
HVAC System Type, Cooling	Electric	For the purposes of this assessment a system with an AEER of 3.10 has been assumed.	
HVAC System Type, Heating	Electric	For the purposes of this assessment a system with an ACOP of 3.10 has been assumed.	
Infiltration Rates	0.7 air changes per hour throughout all zones when there is no mechanically supplied outdoor air 0.35 air changes per hour at all other times		
Operational Loads	Internal heat gains for appliances and equipment	Class 6 building	5 W/m^2
	Occupants Loads	Per person	75 W Sensible 55 W Latent
	Lighting Heat Gains	Class 6 building	14 W/m^2
	Area per person	Class 6 building	5 m^2/person
Outdoor Air	10 L/s/person to all habitable conditioned areas per AS 1668.2-2012		
Operational Profiles	As per NCC 2022 Specification 35		
Emissions Factor, Electricity	WA [191 kg CO_2-e/GJ]		
Emissions Factor, Gas	WA [51.5 kg CO_2-e/GJ]		
Predicted Mean Vote (PMV)	Metabolic Rate (W/m^2)	Per Occupant Loads	
	Clothing Level (Iclu (clo))	October – March	0.60
		April – September	1.10
	Nominal air speed (m/s)	January – December	0.15

As outlined in Section 1.2, this assessment considers reference services only, therefore some parameters (such as internal lighting loads and outdoor air provisions) may vary from the actual design.

2.4 Building Fabric Properties

2.4.1 Fabric Properties

Based on the J1V3 assessment undertaken, Table 2-3 and Table 2-4 sets out the minimum thermal performance requirements for building fabric and glazing elements to be adopted during completion of design documentation. The thermal envelope for the building has been visually illustrated in Appendix B. It is the responsibility of the architect/design team to ensure that all areas of the building envelope comply with the specified thermal performance.

Critical layers that significantly impact the thermal performance of each element have been **bolded** in the table. The project architect is advised to carefully review and confirm the proposed building fabric constructions for accuracy and practical feasibility.

Note on existing building elements: Only the new building works have been assessed and documented below. All existing building elements have been considered DtS compliant with Section J4 for the purposes of this assessment.

Table 2-3 Thermal performance requirements, building fabric elements for the development

Building Component	Building Envelopment Element	Reference (DtS Design) (m^2.K/W)	Proposed (Actual Design) (m^2.K/W)
Roof or ceiling	Metal deck roof: Metal deck roofing, 120mm roof spacer system, fitted with **145mm insulation blanket R3.6** with **inward facing reflective foil laminate**, thermally broken by spacer system (assumed 2%), cavity, **80mm insulation blanket R1.8** with **inward facing reflective foil laminate.** Note: Roof colour SA has been estimated based on white paint.	R_T3.7 (SA = 0.45)	R_T5.8 (SA ≤ 0.30)
	Metal deck roof to existing tenancies: **In-situ roof with ceilings as per Compliance Memo from the building certifier (BCA) (Ref: no: 160015) issued 8 September 2025 (see Appendix D).**	No additional insulation requirement	No additional insulation requirement
External Wall	Lightweight wall: CFC cladding, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard. Note: Wall colour SA has been estimated based on white paint	R_T1.4 (SA = 0.60)	R_T1.5 (SA ≤ 0.30)
	Lightweight wall (only for Timezone) CFC cladding, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard. Note: Wall colour SA has been estimated based on dark paint	R_T1.4 (SA = 0.60)	R_T1.5 (SA ≤ 0.70)
	Heavyweight wall: Precast concrete, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard. Note: Wall colour SA has been estimated based on white paint.	R_T1.4 (SA = 0.60)	R_T1.5 (SA ≤ 0.30)

Building Component	Building Envelopment Element	Reference (DtS Design) (m^2.K/W)	Proposed (Actual Design) (m^2.K/W)
Internal Wall	Lightweight wall: Plasterboard, **35mm top hat**, **outward facing reflective sarking**, 92mm steel stud (**thermal bridging parameters** - 450mm stud C-C and 1200mm noggins C-C assumed), fitted with **insulation R2.7**, plasterboard.	R_T1.4	R_T1.6
Floor (direction downwards)	Suspended slab (Only to storeroom under Cotton on 1- 163) Concrete slab, **rigid board insulation R1.75**.	R_T2.0	R_T2.0

Table 2-4 Thermal performance requirements, glazing

Glazing Element	Reference (DtS Design) U-value (W/m^2. K) / SHGC	Proposed (Actual Design) U-value (W/m^2. K) / SHGC
All aspects glazed windows / doors	5.80 / 0.57	≤ 5.50 / ≤ 0.73
North and South Entry doors	5.80 / 0.57	≤ 5.50 / ≤ 0.73

All glazing properties are based on AFRC figures for the total glazing system (glass + frame).

2.4.2 Total R-Value and total U-Value Performance Requirements

Compliance with the thermal performance requirements nominated in this report must be demonstrated in construction by the Contractor in accordance with the following:

- AS/NZS 4859.2 for a roof or floor; or
- NCC Specification 37 for wall-glazing construction; or
- Determined in accordance with Specification 39 or Section 3.5 of CIBSE Guide A for soil or sub-floor spaces.

2.4.3 Shading

The reference modelling excludes all shading elements of the proposed design. This approach is consistent with NCC 2022 Volume 1, Specification 34 Modelling parameters for J1V3. The proposed modelling includes for all shading elements of the proposed design.

3.0 Results

As summarised below, the J1V3 assessment results demonstrate the proposed solution is equal to, or better than the DtS requirements:

- The air conditioning achieves temperatures between 21°CDB and 24°CDB in conditioned spaces for more than 98% of hours of operation (including conditioned spaces with transitory occupancy).
- The greenhouse gas emissions of the proposed building with the same services as the reference building are not more than that of the reference building.
- In the proposed building with the same services as the reference building, a thermal comfort level of between a Predicted Mean Vote of -1 to +1 is achieved across not less than 95% of the floor area of all occupied zones for not less than 98% of the annual hours of operation of the building.

Therefore, based on the thermal performance requirements nominated in Section 2.4, compliance with Part J4D4 to Part J4D7 compliance has been demonstrated via Performance Solution method J1V3, Verification using a reference building.

Table 3-1, J1V3 Results

Emissions	Annual GHG Heating + Cooling Emissions (kgCO2-e)	Compliance (PASS / FAIL)
Reference Building (DtS)	448,408	**PASS**
Proposed Building	446,850	

PMV	% Operational Hours with -1.0 < PMV < 1.0	Compliance (PASS / FAIL)
Reference Building (DtS)	100%	**PASS**
Proposed Building	100%	

Temperature	% Operational Hours with temperature 21 - 24°CDB	Compliance (PASS / FAIL)
Reference Building (DtS)	100%	**PASS**
Proposed Building	100%	

Appendices

Appendix A Reference Documentation

Table 3-2, Reference documentation

Drawing / Reference Number	Document	Revision	Revision Date
GAL-BUC-AR-04-0L-0-01000	MLP GROUND FLOOR – WITH NAME	E	0606/2025
GAL-BUC-AR-04-1L-0-01002	MLP FIRST FLOOR – WITH NAME	E	0606/2025
1030734-SK-SY-001	THERMAL ENVELOPE MARKUP_BUCHAN	A	24/07/2025
GAL-BUC-AR-04-RF-0-17003	RED BLUE DIAGRAM ROOF PLAN	D	06/06/2025
GAL-BUC-AR-12-00-0-40001	ELEVATIONS NORTH & SOUTH ENTRANCES & EXTENSIONS	G	09/06/2025
GAL-BUC-AR-12-00-0-40002	ELEVATIONS PLAZA	G	13/06/2025
GAL-BUC-AR-12-00-0-40003	ELEVATIONS TERRACE	F	06/06/2025
160015	NCC BCA Compliance Memo_160015_Galleria Section J	0	08/09/2025

Appendix B NCC Conditioned Envelope Markups

Refer over page.

LEASE PLAN - GROUND

OUT OF SCOPE

OUT OF SCOPE

OUT OF SCOPE

LEGEND
- BOH
- CMQ
- Existing
- Existing Speciality New Fit-Out
- Food & Beverage - New
- New - Kiosk
- New - Mini Major
- New - speciality
- Specialty in scope
- Tenant Storage New

Roof to new tenancies:
Metal deck roofing, 120mm roof spacer system, fitted with 145mm insulation blanket R3.6 with inward facing reflective foil laminate, thermally broken by spacer system (assumed 2%), cavity, 80mm insulation blanket R1.8 with inward facing reflective foil laminate

Roof to existing tenancies:
In-situ roof with Ceilings

Suspended Slab:
Suspended concrete slab, rigidboard insulation R1.75

Internal Lightweight Wall:
Plasterboard, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard.

External Heavyweight Wall:
Precast concrete, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. NOTE: White colour wall with solar absorptance 0.3

External Heavyweight Wall:
Precast concrete, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. NOTE: White colour wall with solar absorptance 0.3

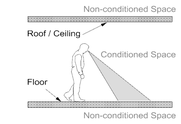
Rev.	Date	Description	Iss.	Appr.
A	28.03.25	FOR TENDER	BUC	
B	04.04.25	FOR TENDER	BUC	
C	07.05.25	FOR TENDER	BUC	VC
D	23.05.25	FOR BUILDING PERMIT	BUC	VC
E	06.06.25	FOR BUILDING PERMIT	BUC	VC

CUNDALL

Project Name: Myer Mall & ELP
Project Number: 1030734
Created by: Praveen Pandiselvam
Date: 30-Jul-2025

NCC Version: 2022
Climate Zone: 5
Building Class: Class 6

Notes:
- This mark-up is indicative only and requires approval by the client.
- This information is to be incorporated into the appropriate documentation.
- This advice relates to Section J1 only. Other sections by others.
- The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance.
- All glazing properties are based on AFRC figures for the total glazing system (glass and frame).
- Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments.
- Insulation performance is shown at finished floor level (refer sketch)
- Refer sketch for classification of NCC Envelope Floors, Ceiling and Roofs in relation to conditioned spaces



Legend:

Out of Scope / Existing External Thermal Envelope Wall: No new works required. R_T: 1.4 SA: 0.60

External Lightweight Wall: CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. R_T: 1.5 SA: 0.30

External Heavyweight Wall: Precast concrete, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. R_T: 1.5 SA: 0.30

Internal Lightweight Wall: CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. R_T: 1.6

Roof: Metal deck roofing, 120mm roof spacer system, fitted with 145mm insulation blanket R3.6 with inward facing reflective foil laminate, thermally broken by spacer system (assumed 2%), cavity, 80mm insulation blanket R1.8 with inward facing reflective foil laminate R_T: 5.8 SA: 0.30

Suspended Floor: Suspended concrete slab, rigidboard insulation R1.75 R_T: 2.0

Floor: Concrete slab on ground (no insulation) R_T: 2.0

VICINITY CENTRES

PERRON GROUP

IPS INSIGHT PROJECT SERVICES

Project
GALLERIA

COLLIER RD & WALTER RD W,
MORLEY | WESTERN AUSTRALIA

Project Number
19049B

Status

Date Plotted 6/06/2025 5:07:09 PM

Date Issued

Scale 1 : 300 @A0
0 3 6 12 18 24M

Drawing Title
MLP GROUND FLOOR - WITH NAME

Drawing Number
GAL-BUC-AR-04-0L-0-01000

Revision
E

BUCHAN

Perth Studio
+ 61 8 9211 9898 / **buchan.au**

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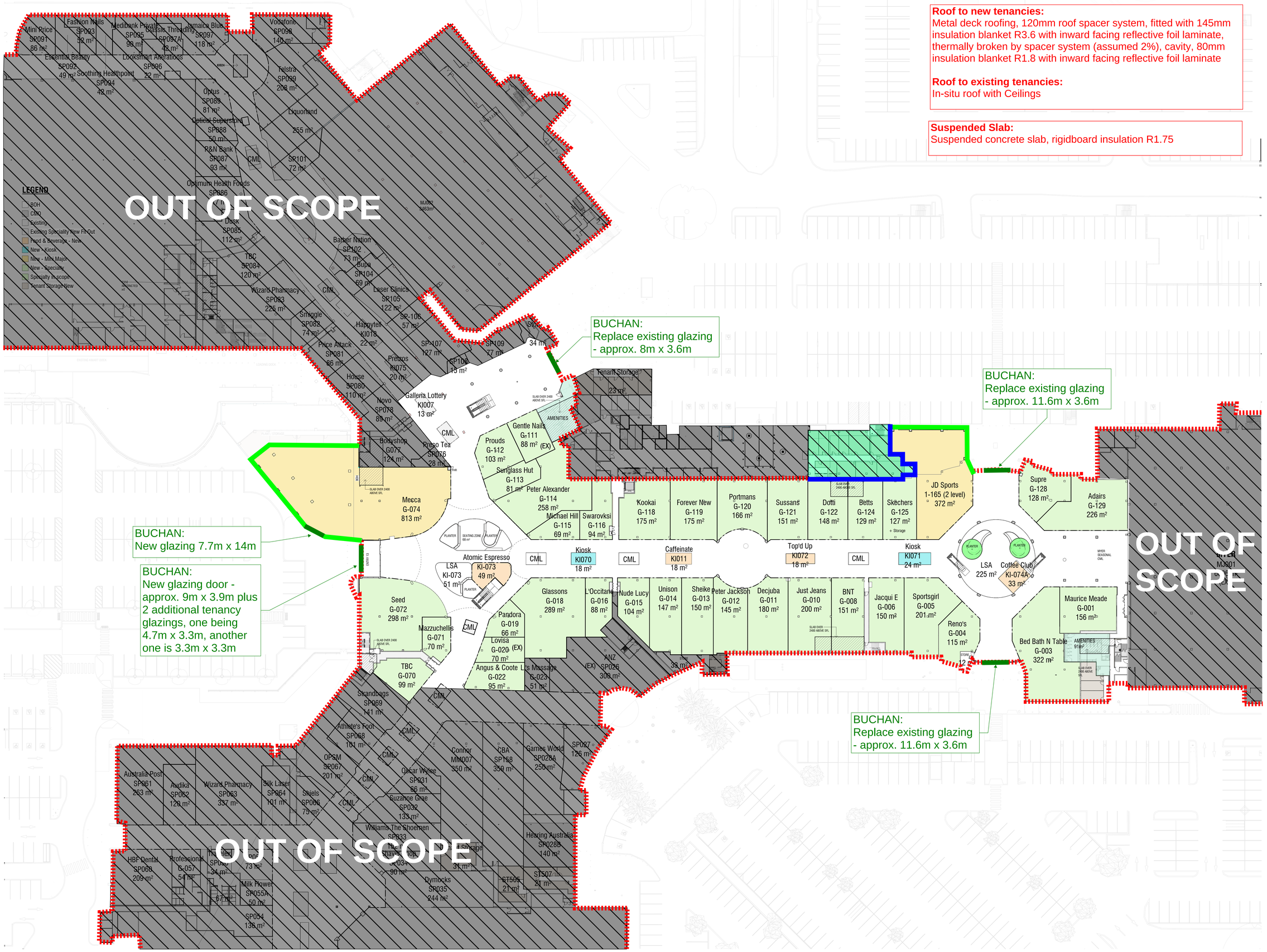
LEASE PLAN - GROUND



Roof to new tenancies:
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Roof to existing tenancies:
In-situ roof with Ceilings

Suspended Slab:
Suspended concrete slab, rigidboard insulation R1.75

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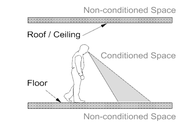

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External Lightweight Wall: CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. R_T: 1.5 SA: 0.30

External Heavyweight Wall: Precast concrete, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. R_T: 1.5 SA: 0.30

Internal Lightweight Wall: CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard. R_T: 1.6

Roof: Metal deck roofing, 120mm roof spacer system, fitted with 145mm insulation blanket R3.6 with inward facing reflective foil laminate, thermally broken by spacer system (assumed 2%), cavity, 80mm insulation blanket R1.8 with inward facing reflective foil laminate R_T: 5.8 SA: 0.30

Suspended Floor: Suspended concrete slab, rigidboard insulation R1.75 R_T: 2.0

Floor: Concrete slab on ground (no insulation) R_T: 2.0

VICINITY CENTRES

PERRON GROUP

IPS INSIGHT PROJECT SERVICES

Project
GALLERIA

COLLIER RD & WALTER RD W, MORLEY | WESTERN AUSTRALIA

Project Number
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Status

Date Plotted 6/06/2025 5:07:09 PM

Date Issued

Scale 1 : 300 @A0

0 3 6 12 18 24M

Drawing Title
MLP GROUND FLOOR - WITH NAME

Drawing Number
GAL-BUC-AR-04-0L-0-01000

Revision
E

BUCHAN

Perth Studio
+ 61 8 9211 9898 / **buchan.au**

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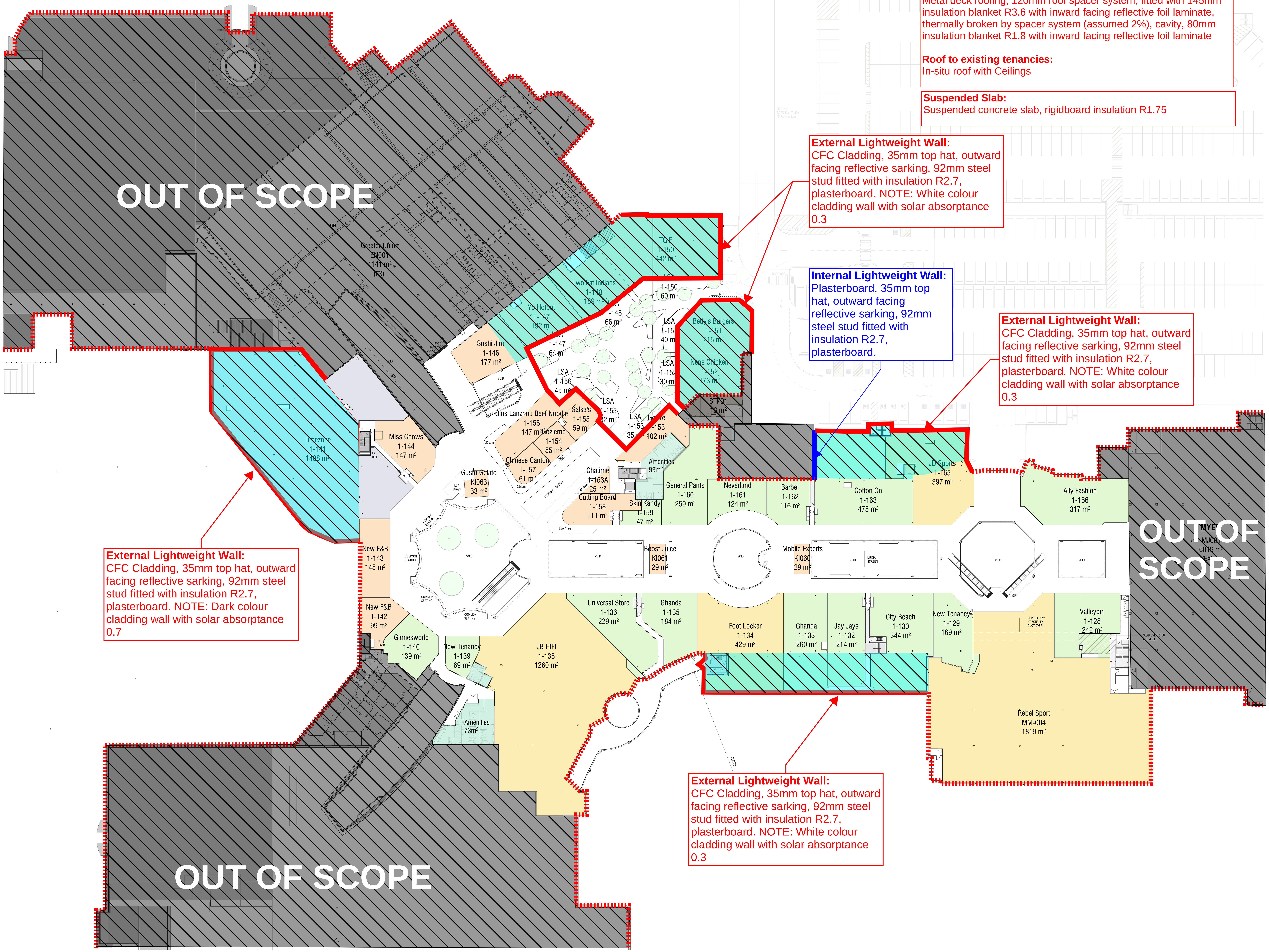
LEASE PLAN - LEVEL 1



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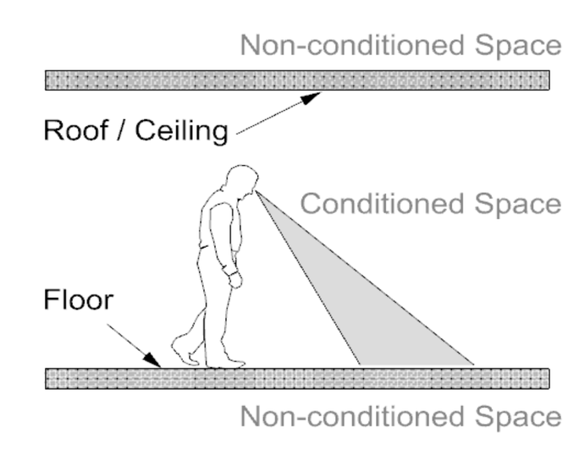
- Insulation performance is shown at finished floor level (refer sketch)
- Refer sketch for classification of NCC Envelope Floors, Ceiling and Roofs in relation to conditioned spaces



Legend:

Item	Description	Values
Out of Scope / Existing External Thermal Envelope Wall:	No new works required.	R_T: 1.4, SA: 0.60
External Lightweight Wall:	CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard.	R_T: 1.5, SA: 0.30
External Heavyweight Wall:	Precast concrete, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard.	R_T: 1.5, SA: 0.30
Internal Lightweight Wall:	CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard.	R_T: 1.6
Roof:	Metal deck roofing, 120mm roof spacer system, fitted with 145mm insulation blanket R3.6 with inward facing reflective foil laminate, thermally broken by spacer system (assumed 2%), cavity, 80mm insulation blanket R1.8 with inward facing reflective foil laminate	R_T: 5.8, SA: 0.30
Suspended Floor:	Suspended concrete slab, rigidboard insulation R1.75	R_T: 2.0
Floor:	Concrete slab on ground (no insulation)	R_T: 2.0

VICINITY CENTRES

P E R R O N G R O U P

iPS INSIGHT PROJECT SERVICES

Project
GALLERIA

COLLIER RD & WALTER RD W, MORLEY | WESTERN AUSTRALIA

Project Number
19049B

Status

Date Plotted 6/06/2025 5:06:47 PM

Date Issued

Scale 1 : 300 @A0

Drawing Title
MLP FIRST FLOOR - WITH NAME

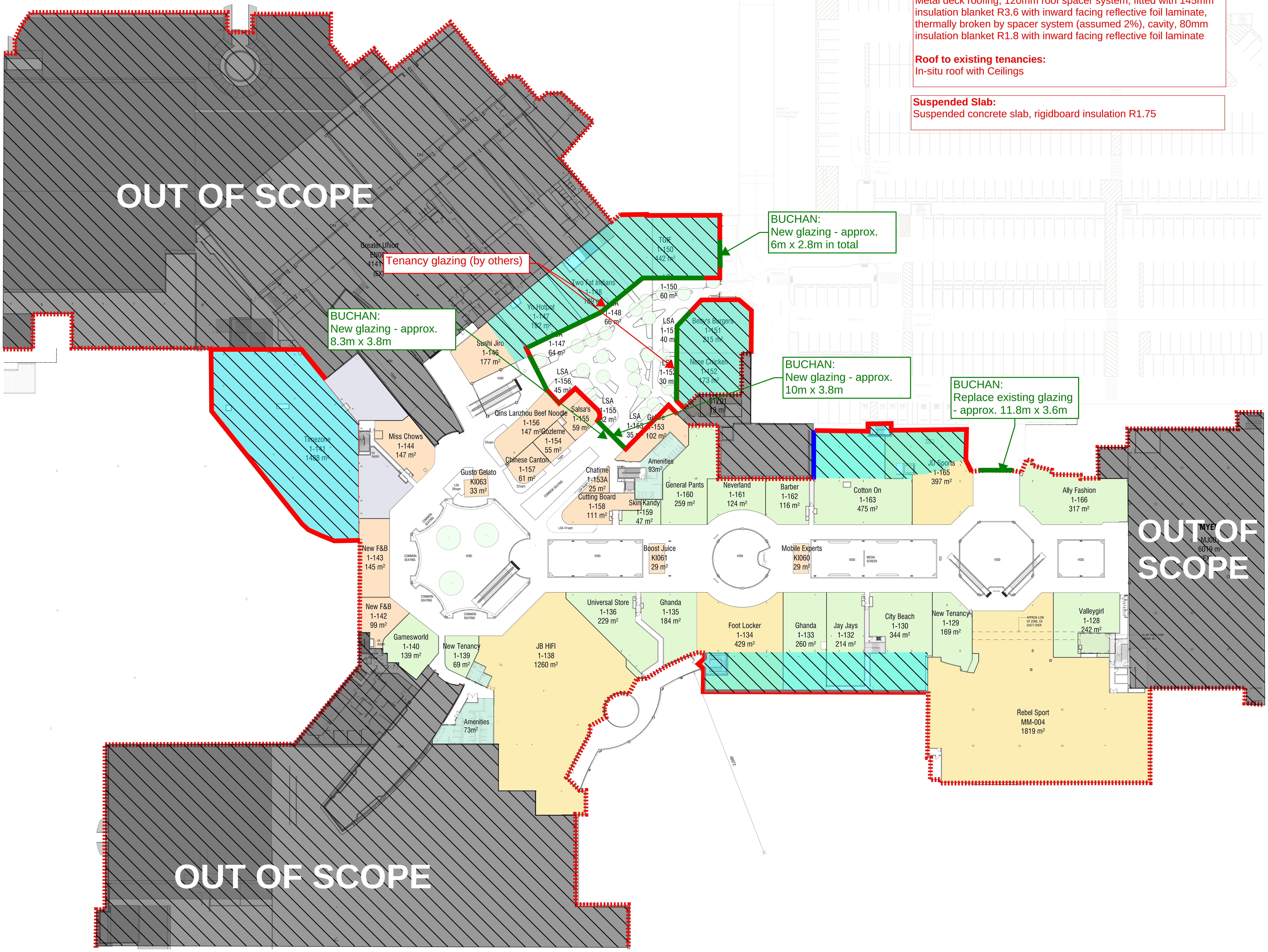
Drawing Number GAL-BUC-AR-04-1L-0-01002 Revision E

BUCHAN

Perth Studio
+ 61 8 9211 9898 / buchan.au

File
Autodesk Docs://19049-R24-Galleria/GAL-BUC-AR-MOD-LEASING.rvt

LEASE PLAN - LEVEL 1



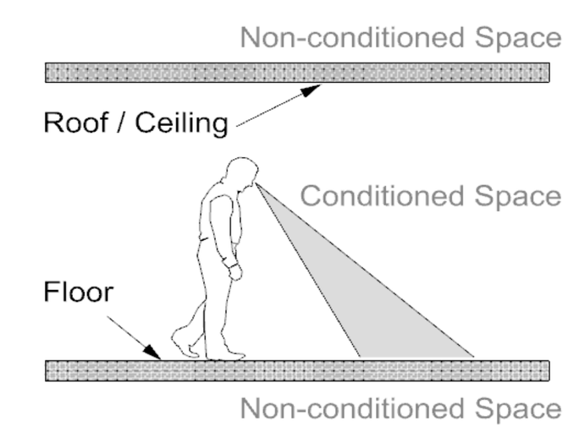
Roof to new tenancies:
Metal deck roofing, 120mm roof spacer system, fitted with 145mm insulation blanket R3.6 with inward facing reflective foil laminate, thermally broken by spacer system (assumed 2%), cavity, 80mm insulation blanket R1.8 with inward facing reflective foil laminate
Roof to existing tenancies:
In-situ roof with Ceilings
Suspended Slab:
Suspended concrete slab, rigidboard insulation R1.75
OUT OF SCOPE
OUT OF SCOPE
OUT OF SCOPE
Tenancy glazing (by others)
BUCHAN: New glazing - approx. 6m x 2.8m in total
BUCHAN: New glazing - approx. 8.3m x 3.8m
BUCHAN: New glazing - approx. 10m x 3.8m
BUCHAN: Replace existing glazing - approx. 11.8m x 3.6m
Greater Union
TGIF 1-150 442 m²
1-150 60 m²
Two Fat Indians 1-148
1-148 66 m²
Yo Hotpot 1-147 192 m²
1-147 64 m²
Sushi Jiro 1-146 177 m²
LSA 1-156 45 m²
Betty's Burgers 1-151 215 m²
LSA 1-151 40 m
Nene Chicken 1-152 173 m²
LSA 1-152 30 m
ST701 13 m²
Salsa's 1-155 59 m²
LSA 1-155 32 m²
LSA 1-153 35
Gelare 1-153 102 m²
Qins Lanzhou Beef Noodle 1-156 147 m²
Gozleme 1-154 55 m²
Chinese Canton 1-157 61 m²
Amenities 93m²
Chatime 1-153A 25 m²
Cutting Board 1-158 111 m²
Skin Kandy 1-159 47 m²
General Pants 1-160 259 m²
Neverland 1-161 124 m²
Barber 1-162 116 m²
Cotton On 1-163 475 m²
JD Sports 1-165 397 m²
Ally Fashion 1-166 317 m²
Timezone 1-141 1488 m²
Miss Chows 1-144 147 m²
Gusto Gelato KI063 33 m²
LSA 28sqm
New F&B 1-143 145 m²
New F&B 1-142 99 m²
Gamesworld 1-140 139 m²
New Tenancy 1-139 69 m²
Amenities 73m²
JB HIFI 1-138 1260 m²
Universal Store 1-136 229 m²
Ghanda 1-135 184 m²
Boost Juice KI061 29 m²
Mobile Experts KI060 29 m²
Foot Locker 1-134 429 m²
Ghanda 1-133 260 m²
Jay Jays 1-132 214 m²
City Beach 1-130 344 m²
New Tenancy 1-129 169 m²
Valleygirl 1-128 242 m²
Rebel Sport MM-004 1819 m²
MYER MJ001 6019 m²
APPROX LOW HT ZONE. EX DUCT OVER
SLAB OVER 2400 ABOVE SFL
VOID
MEDIA SCREEN
COMMON SEATING
48072

Rev.	Date	Description	Iss.	Appr.
A	28.03.25	FOR TENDER	BUC	
B	04.04.25	FOR TENDER	BUC	
C	07.05.25	FOR TENDER	BUC	VC
D	23.05.25	FOR BUILDING PERMIT	BUC	VC
E	06.06.25	FOR BUILDING PERMIT	BUC	VC

CUNDALL

Project Name:	Myer Mall & ELP
Project Number:	1030734
Created by:	Praaveen Pandiselvam
Date:	30-Jul-2025
NCC Version:	2022
Climate Zone:	5
Building Class:	Class 6

Notes:
- This mark-up is indicative only and requires approval by the client.
- This information is to be incorporated into the appropriate documentation.
- This advice relates to Section J1 only. Other sections by others.
- The R-values represent complete roof, wall and floor constructions, including air films/gaps and including allowance for thermal bridging. Complete constructions are to be shown for compliance.
- All glazing properties are based on AFRC figures for the total glazing system (glass and frame).
- Architect and/or contractor are to ensure compliance with the construction requirements of section J1. Including the calculation and application of R-value adjustments.
- Insulation performance is shown at finished floor level (refer sketch)
- Refer sketch for classification of NCC Envelope Floors, Ceiling and Roofs in relation to conditioned spaces



Legend:

	Out of Scope / Existing External Thermal Envelope Wall: No new works required.	R_T: 1.4 SA: 0.60
🟥	**External Lightweight Wall:** CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard.	R_T: 1.5 SA: 0.30
🟩	**External Heavyweight Wall:** Precast concrete, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard.	R_T: 1.5 SA: 0.30
🟦	**Internal Lightweight Wall:** CFC cladding, 35mm top hat, outward facing reflective sarking, 92mm steel stud fitted with insulation R2.7, plasterboard.	R_T: 1.6
🟦	**Roof:** Metal deck roofing, 120mm roof spacer system, fitted with 145mm insulation blanket R3.6 with inward facing reflective foil laminate, thermally broken by spacer system (assumed 2%), cavity, 80mm insulation blanket R1.8 with inward facing reflective foil laminate	R_T: 5.8 SA: 0.30
🟩	**Suspended Floor:** Suspended concrete slab, rigidboard insulation R1.75	R_T: 2.0
🟪	**Floor:** Concrete slab on ground (no insulation)	R_T: 2.0

VICINITY CENTRES

PERRON GROUP

INSIGHT PROJECT SERVICES

Project
GALLERIA

COLLIER RD & WALTER RD W, MORLEY | WESTERN AUSTRALIA

Project Number
19049B

Status

Date Plotted 6/06/2025 5:06:47 PM
Date Issued
Scale 1 : 300 @A0

Drawing Title
MLP FIRST FLOOR - WITH NAME

Drawing Number GAL-BUC-AR-04-1L-0-01002
Revision E

BUCHAN

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File
Autodesk Docs://19049-R24-Galleria/GAL-BUC-AR-MOD-LEASING.rvt

Appendix C NCC J4 Calculator Report

Refer over page.

Façade

Report

Calculator

Project Summary

Date
28/02/2025

Name
Mitchell Johnstone

Company
Cundall

Position
Sustainability Consultant

Building Name / Address
Galleria - Myer Mall & ELP

Building State

WA

Climate Zone

5

Building Classification
Class 6 - department stores, shopping centres

Storeys Above Ground
1

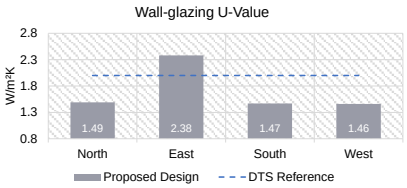
Tool Version
1.5 (May 2024)

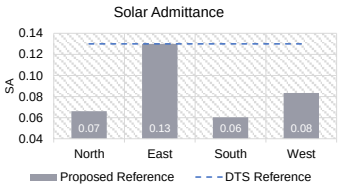
The summary below provides an overview of where compliance has been achieved for Specification S37 - Calculation of U-Value and solar admittance - Method 1 (Single Aspect) and Method 2 (Multiple Aspects).

Compliant Solution =
Non-Compliant Solution =

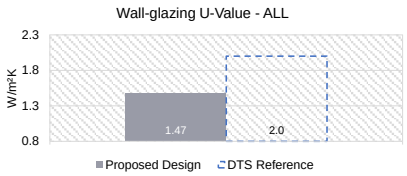
	Method 1				Method 2
	North	East	South	West	All
Wall-glazing U-Value (W/m².K)	1.49	2.38	1.47	1.46	1.47
Solar Admittance	0.07	0.13	0.06	0.08	
AC Energy V					216

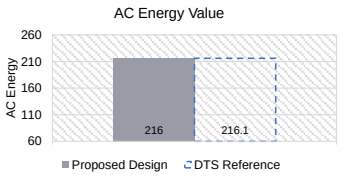
Method 1





Method 2





Project Details

	North	East	South	West
Glazing Area (m²)	190.7	316.6	287.9	139.1
Glazing to Façade Ratio	15%	33%	15%	15%
Glazing References	Uniform REF	Uniform REF	Uniform REF	Uniform REF
Glazing System Types	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)	DEFAULTS (GENERIC)
Glass Types	Uniform REF	Uniform REF	Uniform REF	Uniform REF
Frame Types	Aluminium	Aluminium	Aluminium	Aluminium
Average Glazing U-Value (W/m².K)	5.80	5.80	5.80	5.80
Average Glazing SHGC	0.57	0.57	0.57	0.57
Shading Systems	P2_H3.7_G0.1			
Wall Area (m²)	1057.8	649.7	1653.6	807.9
Wall Types	R1.4	R1.4	R1.4	R1.4
Methodology	Wall			
Wall Construction	R1.4	R1.4	R1.4	R1.4
Wall Thickness	300	300	300	300
Average Wall R-value (m²K/W)	1.40	1.40	1.40	1.40
Solar Absorbtance	0.7	0.7	0.7	0.7

Appendix D NCC BCA Compliance Memo

Refer over page.

NCC BCA COMPLIANCE MEMO

BCA Ref: 160015

PROJECT NAME	Galleria Shopping Centre redevelopment
PROJECT ADDRESS	4 Collier Road, Morley
TO	Kylie Judd and Rebecca Creamer, Multiplex
FROM	Mark Viska, BCA Consultants
CC	Andre Jones, Vicinity, Oliver Grimaldi, Cundall Design team
DATE	08 September 2025 Version 0
PURPOSE	Building Regulatory and NCC BCA Compliance – Section J (building fabric) compliance for proposed refurbishment scope

Kylie/Rebecca,

Further to previous verbal advice provided at a previous meeting to discuss the Section J requirements applicable to the proposed refurbishment scope, I can provide the following commentary.

The Building Regulations 2012 (the Regulations) identify the applicable building standard for new building work, which also applies to new building work proposed to an existing building. The applicable building standard is the current version of the NCC BCA, or a version that was in place within the previous 12 months. For the Galleria project, the applicable building standard is NCC BCA 2022 (Amendment 2). The applicable volume is Volume 1.

In general terms, the Regulations are not retrospective when applying the NCC BCA to an existing building except for a proposed change in building classification. For the Galleria project, the proposed refurbishment scope in the Myer Mall and former food court (both levels) does not result in a change of building classification ie. existing Class 6 retail/food and beverage areas retained as Class 6 areas.

For the building fabric provisions contained in Section J, we do not believe an upgrade to the existing building fabric is required except where there have been changes in use ie. new tenancy areas at Level 1 (former carpark) requiring underslab insulation at the underside of the Level 1 carpark slab (except where J1V3 modelling indicates otherwise). The new building work identified as **additions** would also need to meet current Section J building fabric provisions (northern and southern extensions to Myer Mall tenancies, new tenancies at Level 1 centre court, new retail/TZ extension).

Where the existing external walls and roof remain unchanged and the building classification in these areas remain unchanged, we do not believe an upgrade to the building fabric (additional insulation etc) is required, including areas where the existing tenancy ceiling is removed as part of the refurbishment works.

We also note that the original Galleria development was designed and completed at a time approximately 12-14 years prior to the adoption of commercial building energy efficiency provisions in the NCC BCA (BCA 2006).

We trust this confirms previous verbal advice. If you have any queries in relation to this memo, please do not hesitate to contact me on my direct landline 08 9265 1438, or my mobile 0418 849 982.

Mark Viska
Building Certification Manager
BCA Consultants (WA) Pty Ltd, BSC No. 2011

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