exchange

# Retail Tenancy Design & Fitout Requirements

VERSION 2 FEBRUARY 2021

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## Document Structure & Purpose

Welcome to Curtin and to Exchange. We look forward to having you become part of Curtin's first dedicated innovation precinct and a new urban heart in Perth's south.

The purpose of this document is to provide Retail Tenants (Tenants) with information about Curtin's design requirements, and the process required for obtaining design approval, undertaking the fitout, and receiving approval to commence trading.

The document is divided into three parts:

- Part One: Retail Tenancy Design Requirements The purpose of this section is to specify Curtin's design requirements for the Tenant fitout and will be used to assess the Tenant's design submissions.
- Part Two: Retail Process Requirements The purpose of this is to document the process for submitting design and fitout documentation.
- Part Three: Definitions The purpose of this is to define terms that are frequently used in this document.

In addition to the requirements explained in this document, Tenants will also receive the Site Access Requirements & Logistics Protocol document from the Builder. Tenants will need to comply with expectations and requirements in both documents.

To assist Retail Tenants, Curtin has appointed a Retail Tenancy Coordinator (RTC) and you will need to work closely and co-operatively with them as follows:

- Request the RTC confirm they have the most current version of this document as it will be amended from time to time
- Understand that the RTC is the Tenant's key contact with regard to design and fitout inquiries, resolving issues, and providing direction and approvals
- If the tenancy design requires any change to the base build, this is considered a Modification. The process for requesting a Modification is referenced in Part Two Process Requirements and will be managed by the RTC

If documents are contradictory, Curtin's Retail Tenancy Coordinator will clarify which requirement prevails.

We hope this information helps you understand how we can work together effectively.



# Part One: Design Requirements

Curtin is seeking a design outcome that delivers an exciting, high quality and inventive design approach that incorporates authentic materials that avoid an applied finish. This design approach to the Retail Tenancy fitout contributes to Curtin's ambition to create a distinctive experience for a variety of customers and visitors.

### GENERAL REQUIREMENTS

The Tenant or their appointed Consultant is required to:

- appoint a suitably qualified Architect/Designer and be able to demonstrate they have:
  - experience in retail tenancy design, including producing design and documentation working drawings
  - experience in the management of fitout construction on site
- integrate the requirements of the Environmentally Sustainable Design (ESD) Tenancy Requirements (Attachment B) into all aspects of the design
- refer to the Tenancy Plans for details relating to the specific tenancy
- verify all dimensions on site prior to commencing design and/or fitout
- visit the site to inspect and verify all site conditions prior to the commencement of design work
- produce accurate and complete working drawings and schedules, and at practical completion submit *As Constructed Drawings* that comply with the Landlord's drawing standards. These are available on the Curtin website <u>https://properties.curtin.edu.au/working-with-us/</u> or as requested from the RTC. (Tip! Please check the As Con standards at the start of the project so the portal doesn't reject your As Con submission at PC)
- ensure that the design does not modify, alter or affect tenancy Shopfronts as this is not permitted
- ensure that all designs and specifications:
  - will meet code and regulatory compliance
  - be safe, durable and fit for purpose
  - meet certification and licensing requirements
- understand that this document forms part of the Tenant's Agreement for Lease and they must read, understand and comply with all the requirements of the Agreement for Lease, including this document

### PART ONE STRUCTURE

Part One Design Requirements is separated into two sections: Internal and External. Individual elements are listed in these sections, and design requirements are specified as follows:

- must is a mandatory, positive obligation on the Tenant and their Consultants to meet this criteria
- must <u>not</u> is a mandatory obligation on the Tenant and their Consultants to meet this criteria by ensuring this element is absent from the design
- should is an expectation that the Tenant and their Consultants will strive to include the intent of this criteria in the design



### Internal

### Base Build: Walls & Columns

The Tenant <u>must</u>

- preserve in total the integrity of all 'feature' walls such as face brick and boarded facing concrete walls or columns, and therefore must not chase, make saw-cuts, holes or fixings (including conduits) unless this is expressly approved in writing when the Final Design submission is approved
- preserve in total the integrity of 'feature' base build walls, and therefore must not cover or clad 'feature' base build walls unless this is expressly approved in writing when the Final Design submission is approved. Services attached to or suspended from base build walls and columns must be considered as part of the integrated design intent.

### New Build: Walls & Columns

The new build walls and columns <u>must</u>

- be self-supporting
- be full height to conceal Back of House (BOH) areas from Front of House (FOH) areas
- allow for integration of any base build construction movement joints (where applicable)
- allow for adequate bracing or additional structural supports, noting inter-tenancy walls may not be load-bearing

The new walls <u>should</u>

- consider internal sight lines to the entry door and point of sale
- consider the use of screening, low walls, openings in walls to zone spaces without losing overall connection

#### **New Build: Flooring**

The flooring <u>must</u>

- be of high quality, durable finish that is non-absorbent and is easily cleaned
- be slip resistance and pendulum test certified
- achieve a seamless transition between public areas/foot paths and tenancy entry floor finish
- be appropriate for the area
- be laid according to relevant standards to prevent ponding of water and harbouring of pests
- finish at the lease line, and include for a flush metal transition strip at the junction between Tenant's floor finish to Landlord floor finish. No "outgos" will be permitted beyond the lease line
- allow for appropriate ramp/s or level changes to meet code compliance between internal Tenancy floor area and external Landlord floor area
- integrate the Tenant's flooring expansion joints to match the base building's construction movement joint detailing and colour where applicable
- include for a waterproof membrane underneath final floor finish if the tenancy has a wet area or food wash-down preparation area. The membrane must be turned up 300mm along the perimeter/inter-tenancy walls
- take cognisance of the base build floor slab set-down to allow for tenancy flooring. The Tenant is responsible for build-up screed as well as tenancy floor finish to achieve final levels

- take into consideration any potential heavy loading to floor areas. The Tenant must provide specifications of any heavy items as specified in **Part Two Process Requirements**
- allow for skirtings/kickboards within the tenancy design

The flooring *should* 

- integrate fully recessed, removable entry floor mats with flush perimeter metal trim for ease of cleaning and/or replacement
- use low fume water-based floor sealant products

#### Base Build: Underside of Slab/Ceilings

The Tenant <u>must</u>

 screen or treat the existing insulation and services unless expressly approved because the alternative meets a clear design intent

The Tenant <u>must not</u>

• chase, make saw-cuts, holes or fixings to base build underside slab/soffit without prior approval from the RTC and Builder

### New Build: Suspended Ceilings & Bulkheads

The suspended ceilings and bulkheads must

- be of a high standard of finish
- be articulated, incorporate design elements such as profiles, coffers and feature lighting
- incorporate access panels secured with an allen key lock to access base building services. Final locations, sizes and specification of access panels subject to approval of Final Design submission
- access panels must be flush and frameless
- integrate service requirements such as air-conditioning vents into the design
- be fixed to structural elements and must not be fixed to mechanical ductwork, hydraulic or fire sprinkler lines
- be designed and certified by the Tenant's structural engineer
- include emergency lighting and wet and dry fire safety design by the Tenant's Services Consultant. This will be a Modification at the Tenant's cost.
- allow for rigid mechanical ducting and adjustments to fixed sprinkler rod system where an open ceiling design is proposed. This will be a Modification at the Tenant's cost. Flexi ducting <u>must not</u> be used where open ceiling designs are contemplated
- Consider the junction of the Tenant ceiling/bulkhead to the Landlord-provided shopfront at the front lease line, as junctions must not be visible through the shopfront. Design and detail is subject to Concept and Final Design approval.

The ceilings/bulkheads must not

- cater for general power outlets (GPOs) exposed or suspended directly from ceilings/bulkheads
- cater for power poles between floor and ceiling/bulkhead unless approved in the Final Design submission

The ceilings/bulkheads should

- be integral and reflect the overall design of the interior fitout
- consider scale, warmth and acoustics
- consider treatment of exposed services and structure
- consider materials that are improvement on plasterboard

### **New Fixtures & Equipment**

The fixtures and equipment must

- be energy efficient and meet or exceed rating standards as specified in the ESD Tenancy Requirements (Part One Attachment B)
- be water efficient and meet or exceed rating standards as specified in the ESD Tenancy Requirements (Part One Attachment B)
- be self-supporting and not impede on the structural integrity of the base building

The fixtures and equipment *should* 

- recess drinks refrigerators into walls and design as an integral part of the tenancy
- be new, noting use of second-hand FOH equipment/fridge displays etc. are discouraged

#### **New Services & Equipment**

The services and equipment *must* 

- be supported from the ceiling slab above to approved Engineering design
- all kitchen exhaust hoods must be fabricated in stainless steel

#### **New Lighting**

The lighting <u>must</u>

- be energy efficient
- ensure emergency lighting and exit signs are clearly visible to staff and patrons
- be designed for during trading hours and after trading hours ambience and security
- include a timer programmed to the agreed operating hours
- Include for Landlord's approval of luminaire types/ specifications
- aim towards the tenancy interior and minimise glare to passers-by
- must subscribe to the ESD Tenancy Requirements (Attachment One)

The lighting <u>should</u>

- create ambience and a memorable identity
- be task specific, highlight the entry, product display and provide visual interest
- provide a clear contrast between different areas
- use spotlights to ensure focused and deliberate illumination
- use a colour temperature consistent with the ambient lighting of the building

#### **New Fixed Joinery**

The fixed joinery <u>must</u>

- be durable and fit for purpose
- The fixed joinery <u>should</u>
  - incorporate unique forms, texture and finishes

#### **New Loose Furniture**

The loose furniture <u>should</u>

- be coordinated and incorporate a varied selection
- consider a range of colours, finishes, styles, new or recycled furniture
- be designed to align with the aesthetic of the tenancy and surrounding area

• be durable, fit for purpose and easy to maintain and clean

#### New Product Display/Merchandising

The product display/merchandising *must* 

• be located inside the tenancy

The product display/merchandising *should* 

- be inviting and engaging to attract potential customers
- consider sight lines into the premises
- promote key products, new services and seasonal offerings
- be flexible in configuration
- consider security/locking capability

#### **New Point of Sale**

The point of sale *must* 

• be located inside the tenancy

The point of sale <u>should</u>

- be located to allow ease of pedestrian movement through the tenancy, entry and egress
- be set back a min. 1.5 2m from the front tenancy lease line within the tenancy space
- be carefully designed and positioned to maximise sales
- consider customer queuing
- discourage sightlines to the rear view of the point of sale / counter from the shopfront
- consider security while remaining sympathetic to views from the exterior of the premises
- consider integration of POS equipment, cash registers etc. into the joinery, away from customers' view
- consider design which complies with the Disability Discrimination Act (DDA)

#### New Counter Display/Food Display

The counter display/food display *should* 

• be a coordinated experience from presentation, menu board, to purchase and cutlery etc

#### New Menu Board

The menu board <u>must</u>

• be professionally prepared, mounted and positioned so it is clearly visible to customers

The menu board <u>should</u>

- convey product and logo and promote first impressions to the customer
- clearly describe and show the price of items
- ensure graphics, colour palette and text are in keeping with tenancy branding
- consider 'Specials boards' to communicate brand
- consider the use of digital menus, phone apps and on-line ordering

#### New Café Food Preparation Areas

The café food preparation areas must

- be screened and physically separated from front of house areas
- be designed from Concept design stage to include the necessary requirements to obtain approvals from the Health Department

#### The café food preparation areas should

• only consider open kitchen areas where the activity of cooking and display of equipment provides viewing interest, with all storage and wash-up areas concealed from view

#### New Branding, Signage & Graphics

The shop front glazing <u>must</u>

• comply with the Development Approval Condition that requires glazing remains translucent and not obstructed by tint, signage or other such material

The branding, signage and graphics <u>must</u>

- be relevant, unique, and creative to support the brand
- not obstruct sightlines to emergency exit signs and/or impede emergency lighting
- only use the Tenant's brand
- graphics are to be fully integrated into the overall concept design of the tenancy
- be designed by a professional Graphic Designer and include all graphic elements including logo, signage, uniforms, menus etc. Hand-written signs or stick-on signage <u>must not</u> be used
- consider day and night e.g. illuminated and non-illuminated primary signage. If primary signage is illuminated it should be linked to a timer set to the agreed operating hours

The branding, signage and graphics must not

• permit any flashing neon signs

The branding, signage and graphics should

- promote the retail offering and attract customers into the tenancy
- locate Occupational Health and Safety or Work Practice notices where they are not visible to customers

#### New Promotional Signs & Banners

The promotional signs and banners <u>must</u>

- be approved in the Final Design submission
- be integrated into the overall design concept

#### Security

The design must retain and preserve the functionality of any Landlord security systems or devices installed on and/or servicing the building or public spaces.

The internal security design, supply and installation is the responsibility of the Tenant.

The internal security *must* 

- allow Curtin Campus Security access to all tenancies and internal rooms in case of emergency or fire
- be installed behind the tenancy lease line
- integrate cameras, alarms, security posts etc. with associated concealed cabling feeds
- have no visual impact on shopfronts
- consider type, colour and fixings of security cameras in line with the overall tenancy design

### New Power & Data

The power and data <u>must</u>

• be freely provided in adequate supply to encourage customers to dwell and study in a retail tenancy environment

• be concealed and integrated into the design

#### Wi-Fi

The Tenant <u>must</u>

- ensure they install their own Wi-Fi within their tenancy
- design their system so it does not extend beyond their tenancy boundary, nor adversely affect the Landlord's wider Wi-Fi provision
- if upon deployment the Tenant's Wi-Fi is found to be causing interference with the landlord's Wi-Fi network, the Landlord can request tenants to:
  - a. reconfigure the Wi-Fi network to alternative Wi-Fi channel and reduced power settings
  - b. or relocate the tenants' Wireless Access Point(s) (WAP) to an alternate location within the tenancy space

### New Exposed Services

Exposed services <u>must</u>

- be considered and coordinated in terms of material selection and finish
- refer to New Ceilings & Bulkheads section above for more detail on open ceiling design

### **Restaurants & Bars**

Restaurants and Bars <u>must</u>

- be designed from Concept design stage to include all requirements and obtain necessary approvals or licenses from the Health Department or the Department of Racing and Gaming
- install refrigeration motors in remote locations
- conceal extraction or ventilation grilles from public view
- allow for exhaust and extra ventilation where required to be ducted through the roof/pathway but this will be subject to the Modification process
- incorporate the obligations of the ESD Tenancy Requirements (Attachment B) including specifying equipment and fixtures to meet or exceed rating standards as specified

Restaurants and Bars should

• ensure wash-down hoses have a trigger nozzle attached

### Hair & Beauty

Hair and Beauty retail <u>must</u>

- be designed from Concept design stage to include all requirements and obtain necessary approvals or licenses from the Health Department
- consider extra ventilation and exhaust of noxious fumes where required, and ensure this is detailed in the tenancy services design drawings
- incorporate the obligations of the ESD Tenancy Requirements (Attachment B) including specifying equipment and fixtures to meet or exceed rating standards as specified (eg washing machines, driers)
- be designed for accessible use in association with the Disability Discrimination Act (DDA)

### External

### **External Doors & Windows**

External doors and windows are integrated as part of the base build and cannot be modified.

Doors and windows *must not* 

• permit any tint, signage or other visual material/obstruction to the translucent glazing to external-facing shopfronts besides the safety decals to meet compliance

Doors and windows <u>should</u>

- maintain a clear vision to the retail interior
- compliment the precinct architectural palette
- be high quality products
- consider ease of use

#### **External Signage**

External signage is integrated as part of the base build. This is in the form of a "sign box" which will be supplied with an electrical power feed as shown on the Tenancy Plans. Modification to the integrated external signage is not permitted.

The external signage <u>must</u>

- only use the sign box/es provided as part of the base build
- only use the trading name as it appears in the Leasing Agreement in all advertising mediums
- be certified for structural and electrical engineering for both fabrication and installation as required by the fitout scope and subsequent design approval
- be capable of being illuminated. The Tenant must provide a timer to be set to the agreed operating hours

The external signage *must not* 

- include third party branding or advertising
- indicate the sign fabricator or manufacturer's name, stamps or decals
- use Curtin University Logo unless prior approval in writing has been provided by the Landlord
- be audible or noise making
- use strobe or pulsating lighting

The external signage *should* 

- allow ease of lighting replacements and maintenance without requiring lift machinery
- be three-dimensional and incorporate lighting
- identify and improve exposure of the tenancy whilst complimenting the precinct

#### **External Umbrellas**

In non-licensed areas, external umbrellas are integrated as part of the base build and cannot be modified.

#### **External Heaters in Licensed Areas**

External heaters are not provided as part of the base build. The opportunity for the Tenant to install external heaters as part of their fitout must be discussed and agreed at the Concept Design submission.

# External Street Furniture in Non-Licensed Areas (Loose & Fixed)

External street furniture is provided. Changes to external street furniture by the tenant will not be permitted.

#### External Street Furniture in Licensed Areas (Tenancy 3, 14, 7)

Licensed Area street furniture is limited to seating and wind breaks or other appropriate outdoor furniture that creates place, space and amenity to be approved in the Design process. The Tenant is responsible for obtaining, and providing evidence to the Landlord, of any associated regulatory authority approvals necessary in respect of licenced street furniture.

Licensed areas street furniture *must* 

- be removed and stored within the tenancy after trading hours
- maintain a clear pedestrian footpath of 2.0 metres and adequate access to each tenancy
- be self-supporting with appropriate anchoring

Licensed areas street furniture *should* 

- be individually selected to respond to functional requirements and add diversity
- be innovative whilst being complimentary to the streetscape
- consider the use of mobile planter boxes

# External Café Wind Breaks & Balustrading in Licensed Areas

Limited external café wind breaks are provided in R7 and R14. Requests for Modification or additional café wind breaks must be included in design submissions for R3, R7 and R14.

#### Maintenance & Safety

Design consideration of maintenance and safety *must* 

- reduce use of ladders / safe access height
- <u>not</u> stack stock/items on high-level shelving in close proximity ceilings which may inhibit functionality of fire sprinklers
- provide adequate storage to ensure all escape routes/ passages are kept clear of tenant stock/items at all times

#### Waste/Recycling

The waste/recycling design must

- ensure adequate space within the tenancy for temporary storage of waste containers for recyclable, organic (compostable) and waste to landfill, prior to moving to the tenants dedicated back of house bin store for later collection by nominated waste contractor
- coordinate access to bin stores

#### Acoustics

The acoustic design <u>must</u>

• integrate appropriate acoustic treatments to contain noise transfer to an adjacent tenancy and provide a desirable ambience for customers The acoustic design <u>should</u>

- integrate acoustic wall, ceiling, floor and suspended ceiling features
- use acoustic treatments in innovative ways

#### Audio & Noise

The Audio system <u>must</u>

• ensure that the noise/music emanating from their tenancy complies with the Landlord's restrictions

The Audio system *should* 

- be considered at concept design stage to recess speakers and conceal wiring
- be considered to add ambience

#### **Disability Discrimination Act (DDA)**

The Tenant <u>should</u>

- consider door widths
- consider circulation, access and egress paths of travel
- consider accessible counters
- consider designing their tenancy for everyone

### **ATTACHMENT A**

### **ESD Tenancy Requirements**

Please refer to full document commencing on the following page - Curtin University B418, B420 & B431 Tenant Green Star Requirements

# Curtin University B418, B420 & B431

# Tenant Green Star Requirements

Prepared for: Curtin University

Date: July 2020

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Stantec Australia Pty Ltd Ground Floor, 226 Adelaide Terrace, Perth WA 6000 Tel: +61 8 6222 7000 Email: perth@wge.com.au www.stantec.com P137869-PROBUILDIPROJECT DOCUMENTATIONSUSTAINABILITY/GREEN STARTENANT FITOUT GUIDE ALL LOTS/JPDATED TFG FOR CURTIMISU-GE\_ESD TENANT GREEN STAR REQUIREMENTS\_LOTS B418\_B420 AND B431 - RE



# Revision

Revision	Date	Comment	Approved By
001	07/07/2020	Preliminary Issue	PDS
002	09/07/2020	Updated Issue	PDS
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Design with community in mind

# 1. Introduction

### 1.1 Overview

This Tenant Green Star Requirements document has been prepared to allow the incoming tenants to the cold shell spaces of projects B418, B420 & B431 Curtin University, to understand the environmental performance envisaged by the design team for the base build project, and give instructions on the ESD initiatives that the Tenants are to incorporate into their fitout works. It outlines the initiatives the basebuild developments have undertaken and explains their benefits. The tenants are to implement the actions contained within this guide (Section 4 and Appendices) in order to successfully utilise the building's environmental, social and economic benefits available. It is also expected this will improve the occupant experience and connection to the built environment.

### 1.2 Use of this Guide

This Tenant Green Star Requirements document is applicable only to the spaces delivered as cold shell spaces under the basebuild scope of works for B418, B420 & B431. The incoming tenants to these cold shell spaces are to undertake their fitout works in line with the requirements detailed below in Section 4 and the Appendices.

It can be equally applied to all elements of each tenancy when works are upgraded, refitted or changed.

### 1.3 Environmental Objectives

The projects have been designed to meet the following ESD objectives:

- 5 Star Green Star under Design & As Built v1.2 Rating (B420 & B431);
- 6 Star Green Star under Design & As Built v1.2 Rating (B418);
- Target a >40% reduction in energy consumption when compared against a benchmark building through energy efficient lighting, building fabric and use of renewable energy;
- Incorporate a renewable energy system to offset GHG emissions;
- Achieve a >25% reduction in the water targets through use of efficient fittings and water efficient landscaping;
- Targeting a minimum 90% diversion from landfill for Construction waste through recycling;



# 2. Definitions

**Australian Standards (AS)** – Documents, produced by Standards Australia, that set out specifications, procedures, and guidelines that ensure the safety, quality, and performance of a large number of products, or methods.

**Basebuild** – scope of works undertaken by Project Co under the main contract to provide the services and finishes to the majority of the project. Excludes provision of services and finishes to cold shell tenancy areas.

**Commissioning –** The process of putting building services systems into active service. This includes testing and adjusting HVAC, electrical, plumbing and other systems to assure proper functioning and adherence to design criteria, and instructing building representatives in their use.

**Cold Shell -** Finishes and services are not installed. A tenancy with an unfinished interior, with no HVAC services beyond the riser (or core or rigid duct), and without lighting, plumbing, ceilings, floor finishes (or with a setdown to allow for future provision of floor finishes), interior partitions or walls.

**Design Team –** The design team comprises all the professionals normally engaged in the design and contract administration of a building project.

**Green Star Accredited Professional (GSAP) –** A building professional who has attended a one day Green Star Accredited Professional training course, has passed the associated Online GSAP Exam, and is certified by the Green Building Council of Australia as an Accredited Professional.

**Green Building Council Australia (GBCA) -** a not-for-profit industry association that promotes sustainability in the built environment. The GBCA developed and manage the Green Star rating system for buildings and communities.

Fit out - The extent of the Tenant scope of works to fit out the tenant spaces with the required finishes and services.

**Mechanical Ventilation –** Ventilation systems that use fans or other electrically operated air movement devices to provide ventilation or condition the temperature of air in a building.

**Recycled Content –** Materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer) or after consumer use (post consumer).

**Recycling** – A process by which materials that would otherwise become waste are collected, separated or processed and returned to the economic mainstream to be re-used in the form of raw materials or finished goods.

**Thermal Comfort –** A means of describing occupant comfort that takes into account air temperature, radiant temperature, humidity, draught, clothing value and activity rates.

**Water Efficiency Labelling Standards (WELS) scheme** – Australia's water efficiency labelling Scheme that requires certain products to be registered and labelled with their water efficiency in accordance with the standard set under the national Water Efficiency Labelling and Standards Act 2005.



# 3. Building Energy & Environmental Strategy

A number of sustainability features have been incorporated into the base building design of the developments.

### 3.1 Electrical

- Metering and Monitoring System provided;
- All areas are provided with LED lighting;
- All luminaires have high frequency, high power factor electronic drivers;
- Lighting Levels meet recommended standards and Glare Control strategies have been included in the lighting design;
- Lighting controls have been provided for the development to minimise energy consumption;
- Common area lights are on timers or sensors to manage energy use;
- All non-utility meters to all tenancies follow the rules outlined in the Validating non-utility meters for NABERS rating protocol;
- PV Generation system has been provided.

### 3.2 Mechanical (Heating, Cooling, Ventilation)

- Energy efficient plant selections throughout to exceed BCA J5 (i.e. Cooling, pumps, fans, etc.);
- Control of plant via an Energy Management System or Monitoring System;
- Provision of sufficient outdoor air to ensure that levels of indoor air pollutants are maintained below acceptable levels;
- Sources of pollutants, such as printing or photocopy equipment, kitchen stoves or vehicles, are compliant with minimum emissions standards or not be present within spaces;
- High Degree of thermal comfort to be achieved equivalent to 80 % of the occupants being satisfied in the space.



### 3.3 Hydraulics

- Control and monitoring by Energy Management System or Monitoring system connected to each gas and water meter, linked to all tenancies;
- Installation of high efficiency fixtures and fittings which meet the following specifications:
  - Taps WELS 6 Star (max 4.5L/min);
  - Toilets WELS 4 Star (3.5 L/flush);
  - Urinals WELS 6 Star 0.8L/flush or Waterless;
  - Showers 3 Stars (<= 5.9 L/min)
- Installation of high efficiency White Goods (where included in Base Build)
  - Dishwashers 5 Star
  - Clothes Washing Machines 4 Star
- Water efficient irrigation systems, using rainwater and bore water only;
- Fire system to include temporary storage for 80% of the routine fire protection system test water and maintenance drain-downs for reuse on-site. If sprinkler systems are installed, each floor to be fitted with isolation valves or shut-off points for floor-by-floor testing;
- Shared 700k L rainwater tank for toilet flushing, laundry and landscape irrigation;
- Stormwater to be infiltrated/managed on site.

### 3.4 Metering

- Sub-metering of major house electrical loads;
- Sub-metering of power for each tenancy;
- Metering of water, gas and hot water (were relevant) use to each tenant.



# 4. Tenant Action Table

The following initiatives either 'must' or should'\* be incorporated into the tenancy Fitouts by the Fitout design team in order to take advantage of the environmental, economic and indoor environment benefits associated with these strategies:

\*'Must' indicates that an initiative is required to be incorporated. 'Should' indicates that an initiative is strongly recommended but is not required.



### The Tenant must incorporate the below ESD initiatives:

ESD Initiative	Provided by Basebuild for Tenancies	Tenant Action Required	Tenan
Building Commissioning	Commissioning of basebuild services will be undertaken to approved standards and guidelines. The basebuild 'Services and Maintainability Report' included a review of the assumed tenant fitouts. This review concluded that there are no negative impacts on basebuild systems expected based on current assumptions of tenant fit outs for B418, B420 & B431 (Appendix B – Row 4).	<ul> <li>Tenant commissioning must avoid negative impact* on basebuild systems.</li> <li>Curtin will review Tenant fitout design and Tenant commissioning plan with reference to basebuild systems and Tenant must redesign (if required) based on Curtin feedback to ensure there is no negative impact on basebuild systems.</li> <li>*Negative impact means to cause the basebuild system to perform inefficiently or in an unintended way such that performance is not as per the design intent.</li> <li>Tenant must provide completed commissioning method statement for each system provided by them, including:</li> <li>Heating, cooling, ventilation, supplemental units, lighting, metering, hot water, cold water, fire and controls.</li> <li>Appendix C contains template commissioning method statement, to be used by the tenant for each applicable system.</li> </ul>	Comm will ave Hando inform negati Compl provide
Waste In Operations	<ul> <li>An Operation Waste Management Plan (OWMP) is in place that covers the basebuild and the tenancy requirements.</li> <li>The following waste streams are allowed for in the base build waste area:</li> <li>General waste - to landfill;</li> <li>Paper and cardboard - to commingled recycling;</li> <li>Glass - to commingled recycling;</li> <li>Plastic - to commingled recycling</li> <li>Organics (not provided for B418)</li> </ul>	Tenant <b>must</b> utilise waste and recycling facilities provided. Tenant <b>must</b> provide internal separate waste facilities to match the waste streams provided in column 2 of this table.	No do
Provision of Outside Air	The basebuilding is mechanically ventilated. Outside air louvres have been provided at the tenancy façades.	Tenant <b>must</b> confirm design occupancy, and ensure that their installed ventilation system provides outdoor air at least 100% above the minimum requirements of AS 1668.2:2012	Calcul minim
Exhaust or Elimination of Pollutants	Basebuild has provided provisions for exhausting pollutants to the outside through louvres and/or ducting.	<ul> <li>Tenant must exhaust kitchen pollutants directly to the outside. Tenant must use basebuild ducts and/or louvres where provided.</li> <li>If applicable, all printing and photocopying equipment provided by tenant must be certified in accordance with one of the following test standards:</li> <li>ECMA-328;</li> <li>RAL-UZ 171; or</li> <li>GGPS.003.</li> </ul>	Mecha directly If appli manuf
Minimum Lighting Comfort	Minimum Lighting Comfort items have been provided in the basebuild of the common areas and must be continued through the tenancy.	Tenant <b>must</b> provide internal lighting with a minimum Colour Rendering Index (CRI) of 80. Tenant <b>must</b> provide flicker free internal lighting that meets the requirements detailed in Appendix D. See Appendix D for the sustainability benefits of good lighting comfort and the type of lighting fixtures required.	Interna with A



### ant Documentation Required

nmissioning plan demonstrating that Tenant commissioning avoid impact on basebuild systems.

ndover documentation (commissioning results and O&M rmation) demonstrating Tenant commissioning avoided ative impact on basebuild systems.

npleted commissioning method statements for each system vided.

documentation required.

culations demonstrating outdoor air at least 100% above imum requirements of AS 1668.2:2012

chanical drawing detailing kitchen pollutants exhausted ectly to the outside.

oplicable, printing and photocopying equipment nufactures literature detailing certified standard.

rnal lighting schedule confirming CRI of 80 and compliance Appendix D.

ESD Initiative	Provided by Basebuild for Tenancies	Tenant Action Required	Tenar				
General Illuminance and Glare Reduction	General Illuminance and Glare Reduction items have been provided in the basebuild of the common areas and must be continued through the tenancy.	Tenant <b>must</b> provide best practice lighting levels for each area/task in line with relevant tables in AS 1680.1,1680.2, 1680.2.1, 1680.2.4 & 1680.2.5 and limit glare from lighting either through baffles (or other means which obscure direct light sources) or through luminaire selection system detailed in clause 8.3.4 of AS 1680.					
		See Appendix E for:					
		• The sustainability benefits of best practice lighting levels and the lighting levels required.					
		• The sustainability benefits of reduced lighting glare and the glare reduction methodologies required.					
Localised Lighting Control	Localised lighting control has been provided in the basebuild of the common areas and must be continued through the tenancy.	Tenant <b>must</b> provide lighting control that allows staff to turn the lights on and off and adjust their light levels (minimum requirement is a light switch with dimming capability).	Lightir detaili				
		Where offices are installed as part of fitout, a separate light switch (with dimming capability) <b>must</b> be provided for this area.					
Lighting Power Density	The basebuild of the common areas has been designed to reduce lighting power density and this must be continued through the tenancy.	Tenant <b>must</b> provide energy efficient lighting with a reduced lighting power density that is 50% less than the maximum illumination power densities defined in National Construction Code (NCC) 2016 Table J6.2a.	J6 cal				
		See Appendix F for the sustainability benefits of reduced lighting power density.					
Paints, Adhesives, Sealants and	Low Volatile Organic Compounds (VOCs)* paints, adhesives, sealant, carpets and flooring have been used in all building areas	Tenant <b>must</b> provide low VOC paints, adhesives, sealant, carpets and flooring.	Interna showir				
Carpets	and this must be continued in the tenancy.	The VOC levels are to meet the maximum VOC limits detailed in Appendix G.					
	No paints, adhesives, sealant, carpets or flooring provided for the Tenancies	See Appendix G for the sustainability benefits of reduced VOCs and the maximum VOC limits allowed.					
	*Volatile Organic Compounds (VOCs) – organic chemicals that easily evaporate (at room temperature) from solid form and enter the surrounding air; they are often dangerous to human health when inhaled.						
Engineered Wood Products	No engineered wood* provided for the Tenancies.	Where engineered wood is used within the fitout, Tenant <b>must</b> provide engineered wood with low formaldehyde levels.	Interna				
	*Formaldehyde – a highly toxic poisonous strong smelling gas. Resins used in making pressed wood products contain	The formaldehyde levels are to meet the maximum formaldehyde limits detailed in Appendix G.					
	formaldehydes. It is a VOC and evaporates quickly at room temperature, which people can then inhale.	See Appendix G for the sustainability benefits of reduced formaldehyde engineered wood and the maximum limits allowed.					
Light Pollution to Night Sky	No tenant specific external lighting / signage provided for the Tenancies.	All tenant provided external lighting / signage <b>must</b> have reduced light pollution levels so that no external luminaire on the project has an upward light output ratio (ULOR) that exceeds 5%, relative to its actual mounted orientation. (lighting inside glazed atria is included within this requirement)	Exterr				
		The light pollution levels are to meet the maximum limits detailed in Appendix H.					
		See Appendix H for the sustainability benefits of reduced light pollution and the details of the maximum limits allowed.					



nant Documentation Required
ernal lighting schedule detailing compliant:
Lighting levels for each area/task
Glare reduction methodology
hting layout and/or specification/functional descriptions ailing compliant control system.
calculations table demonstrating compliance.
ernal Materials Schedule and supporting data sheets owing compliance.
ernal Materials Schedule and supporting data sheets owing compliance.

ernal Lighting schedule confirming compliance.

### The Tenant should consider the below ESD initiatives:

ESD Initiative	Provided by Basebuild for Tenancies	Tenant Action Required	Tenant
Services and Maintainability Review	The basebuild 'Services and Maintainability Report' included a review of key maintainability outcomes for basebuild as a result of assumed tenant fitout. This review concluded that there is only 1 maintainability concern – meter validation (Appendix B – Row 3)	<ul> <li>Tenant <b>should</b> be aware of the key maintainability outcomes for the basebuild (that require basebuild access) as a result of their tenant fitouts i.e.</li> <li>Tenancy meters require periodic validation by basebuild which requires easy physical access.</li> </ul>	No doci
Metering	Water meter and Gas meter provided to each Tenancy by basebuild. Electrical - Billing meter on incoming supply provided by basebuild. Individual sub-metering of power, lighting and mechanical services provided by basebuild.	No action required.	No doc
Monitoring Systems	There is a campus wide Energy Management System to capture and energy and water consumption. This system is the Revata platform by iBMS. The basebuild is connecting the above basebuild provided meters to Revata IBMS. The Tenant will be provided with periodic billing statements for their tenancies consumption.	Tenant <b>should</b> design their fitout in anticipation of the Curtin lease requirements to monitor and manage their utilities for maximised efficiency.	No doci
Internal Noise Levels	The basebuild has been designed with acoustic attenuation to achieve internal ambient noise levels no more than 5dB(A) above the lower figure in the range recommended in Table 1 of AS 2107:2016.	Tenant <b>should</b> consider providing acoustic attenuation to their fitout services and fabric to achieve the equivalent internal ambient noise levels in the fitout spaces.	No doc
Thermal Comfort & Greenhouse Gas Emissions	The basebuild has achieved a 40% reduction in greenhouse gas emissions and a high level of thermal comfort through a high performing façade design and efficient basebuild services.	Tenant <b>should</b> consider appropriate energy efficiency and thermal comfort measures in all aspects of their design. See Appendix I for the sustainability benefits of high levels of thermal comfort and reduced greenhouse gas emissions.	No doci
Potable Water	The basebuild has provided low flow sanitary fixtures and fittings for the basebuild's amenities and recycled water is used for irrigation, WCs and laundries to reduce usage of potable water.	<ul> <li>Tenant should consider providing low flow sanitary fixtures and fittings with the below recommended flow/flush rates:</li> <li>Taps – WELS 6 Star (max 4.5L/min);</li> <li>Toilets – WELS 4 Star (3.5 L/flush);</li> <li>Urinals – WELS 6 Star 0.8L/flush or Waterless;</li> <li>Showers – no additional showers should be provided.</li> <li>Dishwashers – 5 Star</li> <li>Clothes Washing Machines - 4 Star</li> </ul>	No doci



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ESD Initiative	Provided by Basebuild for Tenancies	Tenant Action Required	Tenant
Sustainable Materials	<ul> <li>Basebuild materials included:</li> <li>Paints, adhesives, sealants and carpets with reduced VOCs.</li> <li>Engineered wood products with reduced formaldehyde.</li> <li>Responsibly sourced reinforcing steel.</li> <li>PVC products that are 3rd party certified.</li> </ul>	<ul> <li>Tenant should consider installing sustainable materials that meet the below requirements:</li> <li>Select materials that do not contain chemicals which are prone to off-gassing (causing potential health problems)</li> <li>Select timber that is 3rd party Forest Stewardship Council (FSC) or Programme for the Endorsement of Forest Certification (PEFC) certified.</li> <li>Select materials that are 3rd party Good Environmental Choice Australia (GECA) certified (i.e. Australian independent, not-for-profit, multi-sector ecolabel provider).</li> <li>Avoid using polyvinyl chloride (PVC) products or use PVC products that are 3rd party certified to meet Green Building Council Australia's (GBCA) Best Practice Guidelines for PVC.</li> <li>Select materials that are locally sourced.</li> <li>Select materials that have low embodied energy and have 3<sup>rd</sup> part Environmental Product Declarations to prove it.</li> </ul>	No doc



### nt Documentation Required

ocumentation required.

# Appendix A Expansion / Re-fit Considerations

In the event of expansion or refurbishment of B418, B420 and B431 Tenancies, the following **should** be considered:

### Management

- Engagement of an accredited professional to advise on potential environmentally sustainable practices, produces and procedures;
- Commissioning should occur after any refurbishment works in order to ensure the tenancy is operating at its maximum efficiency within refurbished areas;
- The Building Users Guide should be updated to account for any changes in the building due to expansion / refurbishment;

### Indoor Environment Quality

- Fresh air supply should be maximized to provide high quality indoor environments;
- Engage an acoustic consultant to design refurbished areas to meet acoustic requirements for the tenancy;
- Low-VOC paints, carpets, flooring, adhesives and sealants should be provided to minimize health impacts caused by VOCs;
- Engineered wood products with low formaldehyde emissions to minimize formaldehyde levels should be provided;

### Energy

- Any refurbishment should consider impacts on energy efficiency;
- All services should be fitted with separate sub meters and linked to the EMS;
- Lighting should be designed to meet existing lighting levels and high efficiency luminaires are to be used;
- Renewable energy options should be considered.

### Water

- Water Rating (WELS) should be considered when selecting fixture and fittings;
- Water meters should be installed on any significant water uses;

### Materials

- Recycling and general waste storage areas should be updated to account for potential increases in tenancy population;
- Reuse of existing materials, structure and façade elements should be considered during the design of the refurbishment in order to reduce greenhouse gas emissions associated with product manufacture;
- Materials with a high recycled content and /or environmental certification should be specified ahead of other alternatives;
- A Waste Management Plan should be implemented to ensure a minimum of 80% of construction and demolition waste is reused or recycled;

### Emissions

• Stormwater leaving the site should meet the stormwater pollution reduction targets for the building even after refurbishment works.



# Appendix B Services and Maintainability Summary



## B418:

	Heating / Cooling	Ventilation	Lighting	Metering	Gas	Cold Water	Hot Water	Fire Sprinkler	Fire Hydrant	Fire Extinguisher	Controls
Expected system for Tenancy ( <i>Design Intent</i> )	Retail - Future tenants to install their own DX split/VRF type air condition to suit.	West tenancies - louvres at facade for outside air connection East tenancy - louvre at facade size for separate 1,500l/s kitchen exhaust and makeup air	Electrical - LED lighting – general area lighting with supplementary lighting (e.g. spot lights) for display and/or feature highlighting	Hydraulics - Water meter and Gas meter provided to each Tenancy for connection by Tenant. Electrical – As per basebuild.	Hydraulics - Gas provision for connection by Tenant.	Hydraulics - Cold water provision for connection by Tenant.	Hydraulics - Anticipated to be electric storage or instantaneous hot water unit.	Ceiling sprinkler protection to Ordinary Hazard 3 (OH3)	Additional fire hydrants required to achieve AS2419.1 coverage based on fitout plan	Fire extinguisher in accordance with BCA DTS provisions	Electrical – Possibly digital lighting control system. Mechanical - By tenant. No interface to Base Building except combined tenancies (T8-13)
Extent provided by basebuild	Spatial provisions for future tenants equipment and pipework reticulation routes Tenant condensers to be located in basement carpark. Basebuild spatial provision only.	West tenancies - louvres at facade for outside air connection East tenancy - louvre at facade size for separate 1,500l/s kitchen exhaust and makeup air No provision for toilets for Tenancies.	Electrical - NCC minimum for safe movement (20lux) and emergency egress (exit and emergency lighting)	Hydraulics - Water meter and Gas meter to each Tenancy. Electrical - Billing meter on incoming supply. Individual sub-metering of power, lighting and mechanical services.	Hydraulics - Gas provision (for connection by Tenant).	Hydraulics - Cold water provision (for connection by Tenant).	Hydraulics - No base-build hot water provision. All hot water provision to be supplied by Tenant as part of Tenant works.	Concealed space sprinkler protection (Light Hazard LH) capped off for future ceiling by Tenant	Fire hydrant coverage in accordance with AS2419.1 based on open plan	Nil	Electrical – basic switching. Mechanical - Kitchen exhaust controls provided to combined tenancies (T8-13) as part of basebuild.
Maintainability issues for basebuild	Tenant requires access to carpark condensing units for maintainability. Appears tenant condensers will not impact basebuild systems as located separately, and they are separate independent systems.	n/a	Electrical - Nil.	Hydraulics - No issues for basebuild anticipated. Electrical – Minimal. Meters require periodic validation.	Hydraulics - No issues for basebuild anticipated.	Hydraulics - No issues for basebuild anticipated.	Hydraulics - No issues for basebuild anticipated. Tenant to be responsible for Hot Water system maintenance. Located in Tenancy.	No ongoing issues. Isolation of the fire system during fitout installation	No ongoing issues. Isolation of the fire system during fitout installation	Nil	Nil



	Heating / Cooling	Ventilation	Lighting	Metering	Gas	Cold Water	Hot Water	Fire Sprinkler	Fire Hydrant	Fire Extinguisher	Controls
Commissionability issues for base build	Appears tenant condensers will not impact basebuild systems as located separately, and they are separate independent systems.	n/a	expected. Very basic fitout.	issues for basebuild anticipated. (All commissioning for Hydraulic meters will be part of base- build works.)	Hydraulics - No issues for basebuild anticipated Capped gas provision will be commissioned as part of base-build. Should the tenant connect to the existing base-build gas supply the tenant will be responsible for the commissioning of the tenant's gas pipework.	tenant will be responsible for the	Hydraulics - No issues for basebuild anticipated Tenant to be responsible for Hot Water system commissioning. Located in Tenancy.	None expected. Design system within the base build system capacity	Nil	Nil	Nil



## B420:

	Heating / Cooling	Ventilation	Lighting	Metering	Gas	Cold water	Hot Water	Fire Sprinkler	Fire Hydrant	Fire extinguisher	Controls
Expected system for Tenancy ( <i>Design Intent</i> )	Mechanical - Future tenants to install their own DX split/VRF type air condition to suit.	Mechanical - Louvre at facade size for 3,000l/s makeup air except for Hawkers Hall and the Cafe tenancy which will have capped makeup air from roof mounted indirect evap makeup units on the Building A roof.	area lighting with supplementary lighting (e.g. spot lights) for display and/or feature highlighting	Hydraulics - Water meter and Gas meter provided to each Tenancy for connection by Tenant. Electrical – As per basebuild.	Hydraulics - Gas provision for connection by Tenant.	Hydraulics - Cold water provision for connection by Tenant.	Hydraulics - Anticipated to be electric storage or instantaneous hot water unit.	Ceiling sprinkler protection to Ordinary Hazard 3 (OH3)	Additional fire hydrants required to achieve AS2419.1 coverage based on fitout plan	Fire extinguisher in accordance with BCA DTS provisions	Mech - By tenant. No interface to Base Building except combined tenancies (T8-13) Electrical – Possibly digital lighting control system.
Extent provided by basebuild	Mechanical - Spatial provisions for future tenants equipment, reticulation routes and electrical connection points will be provided. Tenant condenser to be located in mechanical compound on level 2. Basebuild spatial provision only.	Mechanical - Louvre at facade size for 3,000l/s makeup air except for Hawkers Hall and the Cafe tenancy which will have capped makeup air from roof mounted indirect evap makeup units on the Building A roof. Capped kitchen exhaust ductwork at tenancy an space at roof level for tenant kitchen exhaust fan. Retail Tenancies 8, 9, 10, 11, 12 & 13 will have a common kitchen exhaust duct with fans installed under base building at the Building B roof. No provision for toilets for Tenancies.	minimum for safe movement (20lux) and emergency egress (exit and emergency lighting)	Hydraulics - Water meter and Gas meter to each Tenancy. Electrical - Billing meter on incoming supply. Individual sub-metering of power, lighting and mechanical services.	Hydraulics - Gas provision (for connection by Tenant).	Hydraulics - Cold water provision (for connection by Tenant).	Hydraulics - No base-build hot water provision. All hot water provision to be supplied by Tenant as part of Tenant works.	Hazard LH) capped off for future ceiling by	Fire hydrant coverage in accordance with AS2419.1 based on open plan	Nil	Mech - Kitchen exhaust controls provided to combined tenancies (T8- 13) as part of basebuild. Electrical – Basic switching.
Maintainability issues for basebuild	Tenant requires access to Level 2 compound for maintainability.	Mechanical - No issues for basebuild anticipated. 2 dedicated indirect Evap Coolers. Not common system, will not impact other systems.		Hydraulics - No issues for basebuild anticipated. Electrical – Minimal. Meters require periodic validation.		Hydraulics - No issues for basebuild anticipated.	Hydraulics - No issues for basebuild anticipated. Tenant to be responsible for Hot Water system maintenance. Located in Tenancy.	No ongoing issues. Isolation of the fire system during fitout installation	No ongoing issues. Isolation of the fire system during fitout installation	Nil	Nil



	Heating / Cooling	Ventilation	Lighting	Metering	Gas	Cold water	Hot Water	Fire Sprinkler	Fire Hydrant	Fire extinguisher	Controls
Commissionability issues for base build	Mechanical – Minimal. Appears tenant condensers will not impact basebuild systems as located separately, and they are separate independent systems.	Mechanical - No issues for basebuild anticipated. 2 dedicated indirect Evap Coolers. Not common system, will not impact other systems.	basic fitout.	issues for basebuild anticipated. All commissioning for Hydraulic meters will be part	gas supply the tenant will be	Hydraulics - No issues for basebuild anticipated Capped water provision will be commissioned as part of base-build. Should the tenant connect to the existing base-build water supply the tenant will be responsible for the commissioning of the tenant's water pipework.	Hydraulics - No issues for basebuild anticipated Tenant to be responsible for Hot Water system commissioning. Located in Tenancy.	None expected. Design system within the based build system capacity	Nil	Nil	Nil



# B431:

	Heating / Cooling	Ventilation	Lighting	Metering	Gas	Cold water	Hot Water	Fire Sprinkler	Fire Hydrant	Fire extinguisher	Controls
Expected system for Tenancy ( <i>Design Intent</i> )	Mechanical - Split DX Unit with remote condensers located in basement car park areas.		Electrical - LED lighting – general area lighting with supplementary lighting (e.g. spot lights) for display and/or feature highlighting	Hydraulics - Water meter and Gas meter provided to each Tenancy for connection by Tenant. Electrical – As per basebuild.	Hydraulics - Gas provision for connection by Tenant.	Hydraulics - Cold water provision for connection by Tenant.	Hydraulics - Anticipated to be electric storage or instantaneous hot water unit.	Ceiling sprinkler protection to Ordinary Hazard 3 (OH3)	Additional fire hydrants required to achieve AS2419.1 coverage based on fitout plan	Fire extinguisher in accordance with BCA DTS provisions	Electrical – Possibly digital lighting control system. Mechanical - By tenant. No interface to Base Building.
Extent provided by basebuild	Mechanical - Spatial provisions for future tenants equipment and electrical connection points will be provided. Tenant condenser to be located in the basement car park.	louvre.	Electrical - NCC minimum for safe movement (20lux) and emergency egress (exit and emergency lighting)	Hydraulics - Water meter and Gas meter to each Tenancy. Electrical - Billing meter on incoming supply. Individual sub-metering of power, lighting and mechanical services.	Hydraulics - Gas provision (for connection by Tenant).	Hydraulics - Cold water provision (for connection by Tenant).	Hydraulics - No base-build hot water provision. All hot water provision to be supplied by Tenant as part of Tenant works.	Concealed space sprinkler protection (Light Hazard LH) capped off for future ceiling by Tenant	Fire hydrant coverage in accordance with AS2419.1 based on open plan	Nil	Electrical – basic switching.
Maintainability issues for basebuild	Mechanical – Minimal. Appears tenant condensers will not impact basebuild systems as located separately, and they are separate independent systems.	Mechanical - Nil	Electrical - Nil	Hydraulics - No issues for basebuild anticipated. Electrical – Minimal. Meters require periodic validation.	Hydraulics - No issues for basebuild anticipated.	Hydraulics - No issues for basebuild anticipated.	Hydraulics - No issues for basebuild anticipated. Tenant to be responsible for Hot Water system maintenance. Located in Tenancy.	No ongoing issues. Isolation of the fire system during fitout installation	No ongoing issues. solation of the fire system during fitout installation	Nil	Nil
Commissionability issues for base build	Mechanical – Minimal. Appears tenant condensers will not impact basebuild systems as located separately, and they are separate independent systems.		Electrical - None expected. Very basic fitout.	Hydraulics - No issues for basebuild anticipated. (All commissioning for Hydraulic meters will be part of base-build works.)	Hydraulics - No issues for basebuild anticipated Capped gas provision will be commissioned as part of base-build. Should the tenant connect to the existing base-build gas supply the tenant will be responsible for the commissioning of the tenant's gas pipework.	Hydraulics - No issues for basebuild anticipated Capped water provision will be commissioned as part of base-build. Should the tenant connect to the existing base-build water supply the tenant will be responsible for the commissioning of the tenant's water pipework.	Hydraulics - No issues for basebuild anticipated Tenant to be responsible for Hot Water system commissioning. Located in Tenancy.	None expected. Design system within the base build system capacity	Nil	Nil	Nil

# Appendix C Commissioning Method Statement Template

The Commissioning Method Statements are to include the below as a minimum:

- A clear description of system being commissioned, and the responsible party undertaking the commissioning
- The measuring equipment to be used
- The detailed steps to be used in implementing the procedure(s)
- Requirements for any point-by-point verification of correct operation
- Requirements for evaluation of control loop performance/loop tuning
- Requirements for the controls system to be used to assist in the commissioning of the plant
- Arrangements for management of delays
- Phase completion requirements
- Any OH&S actions that should be adopted
- The detailed steps to be used to record the procedure



# Appendix D Minimum Lighting Comfort

### D.1. Sustainability Benefits

The Colour Rendering Index (CRI) is a measure of a light source's ability to show object colours 'realistically' or 'naturally' compared to daylight, and an increased CRI can lead to higher levels of comfort for the human eye.

Light flicker can have a negative impact on health, wellness and productivity as flicker contributes to headaches, eye strain and fatigue.

Flicker free lighting with a high CRI can provide health and wellness benefits over conventional lighting.

### D.2. Type of Light Fittings Required

Flicker-free lighting refers to luminaires that have either:

- A minimum Class A1 & A2 ballast for all fluorescent lighting;
- Electronic ballasts for all High Intensity Discharge (HID) lighting;
- Electronic drivers that feature 12-bit or greater resolution for all Light-emitting Diode (LED) lighting; or
- High frequency ballasts for all other lighting types, including incandescent (incl Halogen, dichroic (e.g. low-voltage downlights), and High-Intensity Discharge (e.g. metal halide, low/high pressure sodium).



# Appendix E Best Practice Lighting Levels & Reduced Lighting Glare

### E.1. Sustainability Benefits

Dimly lit work environments can negatively affect mental and emotional well-being, while too much light can produce glare headaches and stress if not designed correctly. However bright, diffused light can increase focus and reduce stress levels.

### E.2. Lighting Levels Required

Best practice lighting levels for each task within each space type is defined as lighting with a maintained illuminance that meets the below levels for the different space types and activity types:

Type of Task/Activity	Guidance
Circulation (intermittent use)	80 lux
Office spaces (screen based task)	320 lux
Workshop rough bench or machine work	240 lux
General use	160 lux
Food preparation areas	240 lux
Sales areas	240 lux

### E.3. Glare reduction methodologies

Glare from lamps must be limited within the main activity spaces. Two prescriptive methods options are provided for demonstrating compliance with this requirement. A combination of methods can be used to demonstrate compliance.

Prescriptive Method 1	Bare light sources must be fitted with baffles, louvers, translucent diffusers, ceiling design, or other means that obscures the direct light source from all viewing angles of occupants, including occupants looking directly upwards.
Prescriptive Method 2	The lighting system must comply with the Luminaire selection system as detailed in Clause 8.3.4 of AS/NZS 1680.1-2006.



# Appendix F Lighting Power Density

### F.1. Sustainability Benefits

Lighting Power Density (LPD) is the lighting energy usage i.e. the watts per m2, and a reduced LPD means that less electricity is used. A reduced LPD could result in lower capital and construction costs (i.e. fewer fittings), reduced operating costs and fewer Greenhouse Gas Emissions being emitted.



# Appendix G VOCs & Formaldehyde

### G.1. Sustainability Benefits

The health effects associated with internal air pollutants (Volatile Organic Compounds & Formaldehyde) may include eye, nose a throat irritation, headaches, loss of coordination, nausea and even damage to the central nervous system

Reductions in indoor pollutants can help to improve the internal air quality which benefits the occupants health and wellbeing, as well as the levels of air pollution externally. Products with lower VOCs also have a less strong odour, and reduce the chances of the fumes causing headaches.

### G.2. Maximum TVOC Limits for Paints, Adhesives and Sealants

Product Category	Max TVOC content (g/L of ready-to-use product)
General purpose adhesives	50
Interior wall and ceiling paint, all sheen levels	16
Trim, varnishes and wood stains	75
Primers, sealers and prep coats	65
One and two pack performance coatings for floors	140
Acoustic sealants, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives	250
Structural glazing adhesive, wood flooring and laminate adhesives and sealants	100

### G.3. Carpet Test Standards and TVOC Emissions Limits

Test protocol	Limit
ASTM D5116 - Total VOC limit	0.5mg/m <sup>2</sup> per hour
ASTM D5116 - 4-PC (4-Phenylcyclohexene)	0.05mg/m <sup>2</sup> per hour
ISO 16000 / EN 13419 - TVOC at three days	0.5mg/m <sup>2</sup> per hour
ISO 10580 / ISO/TC 219 (Document N238) - TVOC at 24 hours	0.5mg/m <sup>2</sup> per hour



### G.4. Formaldehyde Emission Limit Values for Engineered Wood Products

Test Protocol	Emission limit/ Unit of Measurement
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11:2005 method 10 for Plywood	≤1mg/L
AS/NZS 1859.1:2004 - Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1.5 mg/L
AS/NZS 1859.2:2004 - MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1mg/L
AS/NZS 4357.4 - Laminated Veneer Lumber (LVL)	≤1mg/L
Japanese Agricultural Standard MAFF Notification No.701 Appendix Clause 3 (11) - LVL	≤1mg/L
JIS A 5908:2003- Particle Board and Plywood, with use of testing procedure JIS A 1460	≤1mg/L
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	≤1mg/L
JIS A1901 (not applicable to Plywood, applicable to high pressure laminates and compact laminates)	≤0.1mg/m²hr
ASTM D5116	≤0.1mg/m²hr
(applicable to high pressure laminates and compact laminates)	
ISO 16000 part 9, 10 and 11 (also known as EN 13419), applicable to high pressure laminates and compact laminates	≤0.1mg/m²hr (at 3 days)
ASTM D6007	≤0.12mg/m³
ASTM E1333	≤0.12mg/m³
EN 717-1 (also known as DIN EN 717-1)	≤0.12mg/m³
EN 717-2 (also known as DIN EN 717-2)	≤3.5mg/m²hr



# Appendix H Light Pollution

### H.1. Sustainability Benefits

Night-time light pollution can disrupt food chains and weaken local ecosystems. For human beings night-time light pollution is associated with reduced sleep times, poor sleep quality, impaired daytime functioning and even obesity. Reducing light pollution is therefore beneficial to the planet, the ecosystems and human health and wellbeing.

### H.2. External Lighting Requirements

### Light Pollution To Neighbouring Bodies

Outdoor lighting is to comply with AS 4282:1997 Control of the obtrusive effects of outdoor lighting.

### Light Pollution To Night Sky

No external luminaire on the project has an Upward Light Output Ratio (ULOR) that exceeds 5%, relative to its actual mounted orientation.

#### Awnings

Awnings can be used as a means of achieving compliance with the 5% ULOR requirement where a section drawing showing the light output of the luminaire can be provided, and where the awning has the effect of blocking 95% of the output of the lamp above the horizontal.


# Appendix I Thermal Comfort & Greenhouse Gas Emissions

### I.1. Sustainability Benefits

Thermal Comfort - The components of comfort include air temperature, mean radiant temperature, humidity, and air velocity within the space, along with the personal factors of clothing insulation and activity level. Thermal comfort is important for health and well-being as well as productivity. A lack of thermal comfort can cause stress among building occupants. When they are too warm, people can feel tired; when too cold, they can be restless and distracted.

Greenhouse Gas Emissions - Carbon dioxide, which accounts for the majority of all airborne pollution, is a greenhouse gas. When carbon dioxide is released into the air, it absorbs the sun's warmth and keeps heat in our atmosphere. As power plants burn more fuel to create more energy, the extra carbon waste traps too much heat. Effects of greenhouse gas emissions can include:

- Rising temperatures, heat waves and drought
- Higher sea levels
- Abnormal weather patterns
- Increased intensity of natural disasters
- Smog and acid rain

A reduction in greenhouse gas emissions results in increased air quality, and reduces the above effects e.g. reduces rising temperatures, heat waves, drought, higher sea levels etc.



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## Part Two: Process Requirements

The process is divided into four phases: Phase One: Design Phase Two: Pre-handover of Premises to Tenant Phase Three: Fitout Phase Four: Approval to Trade

The process requires that the Tenant <u>must</u>

- complete and comply with all requirements specified in the process below
- submit all documentation accurately and completely, including drawings, forms, approval and checklists
- also comply with the Builder's Site Access Requirements and Logistics Protocol which predominantly applies to Phase Three
- request clarification from the Retail Tenant Coordinator (RTC) if the process document is not clear or contradicts another document

PHASE ONE: DESIGN	MEET (M)
1.1 RTC provides Tenancy Information Set	
<ul> <li>Site Plan/Location Plan, showing relevant common areas</li> <li>Tenancy Plans showing: <ul> <li>Lease area, services locations</li> <li>Shopfront and internal elevations</li> <li>Ceiling plan Internal Sections</li> <li>Tenancy Services Provision</li> </ul> </li> </ul>	
Tenancy Plans will be issued in Autocad (DWG) and PDF format	
1.2 Inception Meeting	М
<ul> <li>Tenant, Architect/Designer, Project Manager, Shopfitter, RTC</li> <li>Review the Retail Design and Fitout Requirements document</li> <li>Confirm receipt of Tenancy Information Set</li> <li>Establish communication protocol</li> </ul>	
1.3 Concept Design Submissions	
<ul> <li>Issued by the Tenant's Designer to the RTC</li> <li>It must include and comply with the requirements specified in:</li> <li>Attachment C: Design Submission Requirements and</li> <li>Attachment D: Services Checklist</li> </ul>	
1.4 Concept Design Report	М
<ul> <li>The RTC will review the submission and issue a Concept Design Report that assesses Concept Design compliance with Part One Design Requirements</li> <li>The Report will either: <ul> <li>Accept a Tenancy Concept Design Submission if it meets the Design Requirements</li> <li>Reject a Tenancy Concept Design Submission if it is incomplete or does not meet the Design Requirements and/or</li> <li>Identify potential base build Modifications, highlight any special conditions, or revision to fitout design</li> <li>Identify design elements that must be established at concept design that have the potential to increase base build Modifications</li> <li>Provide comment on the Draft Services Checklist</li> </ul> </li> <li>The report will include comments on the internal Fitout, impact to adjacent tenancies, and impact to the areas outside the tenancy as required</li> <li>The RTC may require a meeting to discuss the Concept Design or the Concept Design Report</li> </ul>	
The Tenant is responsible for any costs associated with design re/submissions.	
1.5 Final Design Submission	
<ul> <li>Issued by the Tenant's Designer to the RTC</li> <li>It must include and comply with the requirements specified in:</li> <li>Attachment C: Design Submission Requirements and</li> <li>Attachment D: Services Checklist and</li> </ul>	

<ul> <li>Attachment E: Approvals and Certification Checklist</li> <li>Prior to making the Final Design Submission and at the Tenant's cost, the Tenant must have obtained approval from a Private Building Certifier and the relevant Consultants that the design is compliant.</li> <li>The Private Building Certifier will be stipulated by the Landlord because of the development's compliance obligations.</li> </ul>	
1.6 Base Build Modifications	
Works that affect the base build (including services) are called base build Modifications, and the tenant cannot use its contractors to complete these. They will be completed by the Landlord's nominated Builder.	
<ul> <li>The RTC and the Builder will identify base Build Modifications during review of the Final Design Submission</li> <li>The RTC will issue a cost breakdown of the base build Modifications that are required. The cost breakdown will include costs associated with changes to services, Design Review coordination fees if applicable and any additional consultant fees</li> <li>The Tenant must accept in writing and pay the full costs of the base build Modification to the Landlord before the Tenant receives approval for their Final Design Submission. Payment may be a net off against fitout incentive and/or a payment of invoice issued by the Landlord to the Tenant. Payment must be made 10 days after receiving an invoice.</li> </ul>	
1.7 Final Design Report	М
<ul> <li>The RTC will issue a Final Design Report that assesses Final Design compliance with Part One Design Requirements, the Concept Design Report and any other submitted drawings, documents, schedules or checklists</li> <li>The Report will either: <ul> <li>Accept a Tenancy Final Design Submission if it meets the Design Requirements and will include: <ul> <li>stamped approved drawings</li> <li>the Landlord's Final Design Approval Letter, or</li> </ul> </li> <li>Accept a Tenancy Final Design Submission as outlined above subject to special conditions, and Tenant payment of base build Modifications or</li> <li><i>Reject</i> a Tenancy Final Design Submission if it is incomplete or does not meet the Design Requirements</li> </ul> </li> <li>The Report will include comments on the internal fitout, impact to adjacent tenancies, and impact to the areas outside the tenancy as required</li> <li>The RTC may require a meeting/s to discuss the Final Design prior to issuing the Final Design Report</li> </ul>	
PHASE TWO: PRE-HANDOVER OF PREMISES TO TENANT	
2.1 Appoint a Qualified Shopfitter	
<ul> <li>The Tenant must appoint a Shopfitter experienced and qualified in the construction of Retail fitouts in accordance with the Agreement for/Lease</li> <li>All work must be completed by the qualified Shopfitter. If the Tenant's shopfitter/s are not already pre-qualified to work at Curtin then the Tenant must liaise with the RTC to gain their approval of the potential shopfitter/s. After the RTC has approved the suitability of the shopfitter/s, they can proceed to register and obtain the pre-qualification necessary for all their employees to complete their individual induction. Contractors or consultants who have not completed an induction are not permitted to work at Curtin.</li> <li>The Tenant is not permitted to take on any part of the tenancy fitout works or project manage any works</li> <li>The Tenant must confirm in writing to the RTC that the Shopfitter: <ul> <li>is the primary shopfitter responsible for completing the whole fitout and for controlling all subcontractors</li> <li>must remain on site at all time to supervise their subcontractors</li> </ul> </li> <li>The Tenant must submit a detailed program that demonstrates the Shopfitter can complete the works in accordance with the Retail Tenancy Coordinator's stamped approved drawings and any obligations contained in the Agreement for Lease/Lease</li> </ul>	
2.2 Tenant Building Permit	
<ul> <li>The Tenant can proceed with their obtaining their Building Permit after receiving approval for the Final Design Submission</li> <li>A copy of the building permit must be issued to the RTC before Handover Notice will be issued</li> </ul>	
2.3 Pre-Handover Document Requirements	
<ul> <li>Handover of the tenancy will occur only after the following requirements have been provided or are completed</li> <li>The provision and completion of the documents is required 5 working days before the Handover Inspection, or the Handover Inspection will be rescheduled</li> <li>Executed Agreement for Lease or Lease</li> </ul>	

<ul><li>Insurance Certificates of Currency submission</li><li>Bank Guarantee lodgement</li></ul>	
Final Design approval	
<ul> <li>Tenant Program approved</li> <li>Tenant appointed Shopfitter approved and inducted</li> </ul>	
Copy of Building Permit	
2.4 Handover Inspection	М
The RTC will schedule a Handover Inspection Date.	
<ul> <li>Handover Inspection meeting will require a group walk through of the tenancy.</li> <li>The following attendees are required:</li> </ul>	
The following attendees are required.     Tenant	
Tenant's Architect/Designer	
<ul><li>Tenant's Shopfitter</li><li>Landlord's Retail Tenancy Coordinator</li></ul>	
Landlord's Retain Ternancy Coordinator     Landlord's Builder	
Landlord's Manager Retail Development	
<ul> <li>If the Tenant or nominee is not available on handover date, the RTC will inspect and issue a Handover</li> </ul>	
Inspection Approval form to the Tenant <ul> <li>If the tenancy can be handed over to the Tenant, the Tenant must sign the Handover Inspection Acceptance</li> </ul>	
form	
• If the tenancy cannot be handed over to the Tenant as there are material defects, the Tenant and the RTC must	
sign the Handover Inspection Acceptance form which will specify the defects and the remedy <ul> <li>The RTC will co-ordinate and confirm the remediation of defects</li> </ul>	
• On the date the tenant can commence fitout works, the Modifications will either be completed, or the Tenant's	
Shopfitter must work with the RTC to adjust their programme to allow for concurrent works by the Landlord's Builder	
builder	
PHASE 3: FITOUT	
3.1 Safety Obligations	
• It is the responsibility of the Tenant and Shop Fitter to understand and comply with all Occupational Health and	
Safety (OHS) obligations and requirements contained in the Agreement for/Lease.	
<ul> <li>This includes:</li> <li>providing a supervisor with first aid training on site during all tenancy fitout works</li> </ul>	
<ul> <li>ensuring the tenancy fitout works are attended by the Shopfitter Supervisor at all times</li> </ul>	
• ensuring that all electrical items are tested and tagged in accordance with work safe legislation	
<ul> <li>The RTC will inspect the Tenancy during the fitout period</li> <li>The Builder or the RTC will stop all works if an OSH issue or risk is identified</li> </ul>	
The RTC will issue written approval to recommence works when all issues are satisfactorily resolved	
• Comply with the Permit process as specified by the Landlord and/or the Builder. Required permits may include	
<ul><li>but are not limited to:</li><li>access permits</li></ul>	
road closure (or related traffic management)	
• isolations (services e.g. HV electrical, LV electrical, gas, hydraulics, fire systems, mechanical systems)	
<ul><li>asbestos removal</li><li>confined space</li></ul>	
dig/excavation	
hot works	
<ul> <li>working at heights</li> <li>crane</li> </ul>	
3.2 Safety Obligations	
Comply with all of the Builder requirements which are summarised in the Site Access Requirements and	
Logistics Protocol	
• These requirements will be the subject of the initial Pre-Start meeting which will be organised by the Builder.	
3.3 Tenancy Fitout Inspections	
<ul> <li>The RTC will inspect works to ensure:</li> <li>the fitout works are in accordance with the Final Design Approval</li> </ul>	
<ul> <li>a copy of the Building Permit / Construction Certificate is displayed in the tenancy</li> </ul>	
• a hard copy of 'Approved Final Design Drawings / Issued For Construction drawings showing RTC comments	
<ul><li>and mark-ups is available</li><li>The RTC will stop all works if non-compliance with the above is identified</li></ul>	
<ul> <li>The RTC will issue written approval to recommence works when all issues are satisfactorily resolved</li> </ul>	

PHASE 4: APPROVAL TO TRADE	
4.1 Landlord Approval to Trade	М
<ul> <li>The final inspection scheduled by the RTC will identify all defects or design departure from the Final Design Approval and the RTC will issue written confirmation of practical completion as appropriate.</li> <li>The final inspection must be attended by the Tenant, the Tenant's Shopfitter, and the RTC and other Landlord representatives.</li> <li>The defects or design departures must be rectified by the Tenant before the RTC will issue the Tenant with written approval to commence trading dependent on the RTC having received and being satisfied with documents specified in Attachment Three Approvals and Certification Checklist</li> </ul>	
4.2 Other Tenant Requirements Post Commencement of Trading	
<ul> <li>Submission of complete and accurate of the 'As Built' Drawings set supplied as DWG and PDF format complying with the Curtin CAD Standards</li> <li>Submission of the Operations and Maintenance Manuals where there is an interface with the base build.</li> </ul>	

## **ATTACHMENT B**

## **Retail Tenancy Fitout: Design Submission Requirements**

SUBMISSION	CONCEPT DESIGN	FINAL DESIGN
All drawings must state: • Tenancy Number • Issued for Concept Design Submission • Date of Issue • Revision Issue	$\checkmark$	✓
3D rendered shopfront and/or internal presentation drawings showing: signage, finishes, display zones, notes etc.	$\checkmark$	$\checkmark$
Branding, display, signage and graphics proposal	$\checkmark$	$\checkmark$
Indicative material finishes/mood board	$\checkmark$	$\checkmark$
Construction waste management plan	$\checkmark$	$\checkmark$
Operational waste management strategy/plan	$\checkmark$	$\checkmark$
Completed Services Checklist (to ensure base build services are suitable for your proposed tenancy use) and/or identify if any modifications are required	$\checkmark$	$\checkmark$
ARCHITECTURAL		
1:50 scale Floor Plan: showing all usages, fixtures, fittings, finishes, dimensions, new interior walls / partitions, notes etc	$\checkmark$	$\checkmark$
1:50 scale Reflected Ceiling Plan: showing all proposed lighting, ceiling finishes, ceiling heights, air condition bulkheads and images of light fittings	$\checkmark$	$\checkmark$
1:50 scale Reflected Ceiling Plan as above, with schedule of lighting references, exit signs and emergency lighting and access hatches	$\checkmark$	$\checkmark$
1:50 scale Internal Elevations and Sections: detailing all interior fittings and fixtures, including all notes, dimensions etc	$\checkmark$	$\checkmark$
If not provided by the Landlord previously, then provide 1:50 scale Shopfront Elevation and sectional details: showing all signage details, dimensions, closures, openings, display fixtures, structures etc	$\checkmark$	$\checkmark$
Finishes sample board including finishes schedule with references/specification	$\checkmark$	$\checkmark$
1:20 scale signage details and finalised graphic design artwork		$\checkmark$
1:20 display and fixture details including sectional details, junction details, fixture specifications etc	$\checkmark$	$\checkmark$
1:50 scale structural plan dimensioned with locations of all floor penetrations, floor chases and abnormal floor loadings i.e. safes or other heavy objects		$\checkmark$
SERVICES		
1:50 scale coordinated services layouts and details, covering mechanical, fire, electrical (including security and communications), hydraulics (including water, sewer and gas.) Include all dimensions and set out points from grid lines or structural columns for floor chasing, penetrations etc		$\checkmark$

## ATTACHMENT C

## **Retail Tenancy Fitout: Services Checklist**

To be completed and submitted with Concept Design as a draft document. To be fully completed and finalised and to be submitted with Final Design.

The purpose of this document is to assess:

- the Tenant services load forecast to ensure the base building infrastructure has the capacity to meet Tenant requirements;
- ESD Tenancy Requirement compliance.

The tenant is to circle the options provided and insert specifics that quantify requirements.

#### IMPORTANT:

Ensure you refer to your Tenancy Agreement for Lease (AFL), Services Provisions Schedule and Tenancy Plans <u>specific to your</u> <u>tenancy</u> to identify what base build provisions/services are being provided by the Landlord for your Tenancy, prior to completing this form.

This completed Services Checklist must:

- Clearly indicate the required services (and other important information) in respect of your specific fit out design
- Be completed fully, duly signed and dated
- Be submitted as a draft version together with your Concept Design
- Be submitted as a final version together with your Final Design
- Be submitted to the Retail Tenancy Coordinator (RTC)

DOCUMENT VERSION - Tick the most appropriate below	
Draft	Final

TENANCY DETAILS - Complete a	ll sections below	
Tenancy Name		
Tenancy Number		
Tenancy Area		
Tenant Name		
Tenant Contact Details	Tel/Mob:	Email:
Designer/Architect Name		
Designer/Architect Contact Details	Tel/Mob:	Email:
Shopfitter Name		
Shopfitter Contact Details	Tel/Mob:	Email:

ELECTRICAL SUPPLY - Tick and complete appropriate section below
I accept the standard power supply of Three Phase / 80 amp (both non-food and food tenancies)
OR
I require additional power supply at: amps (Three Phase)*
OR
I accept the location of the EDB (Electrical Distribution Board) as per the Tenancy Plan
OR
I require the EDB relocated to a new location as shown on the fit out design drawings*
*Any variations/revisions to the standard supply/location to suit the fitout design will incur a Modification Cost to the Tenant, and the works will be actioned by the Landlord's Project Contractor

LIGHTING & SIGNAGE – Tick to confirm compliance and add comments (if any)
The total tenancy lighting (incl. signage) power input supply is compliant with the latest NCC Section J requirements and the Watts calculations are indicated on the fit out design drawings and this checklist
Additional Comments (if any):
Electronic ballasts are used for all fluorescent lamps for lighting and signage
Additional Comments (if any):
Shopfront ceiling/display lighting and illuminated signage is separately switched, and linked to a timer which is programmed to Curtin-approved operating hours
Additional Comments (if any):
Display cabinet lighting (where this occurs) is separately switched
Additional Comments (if any):
Motion sensors (where these occur) are installed
Additional Comments (if any):
Emergency and exit lighting is on a separate circuit and has an associated test switch installed
Additional Comments (if any):

ELECTRICA	L REQUIREMENTS - Complete sections below			
LIGHTING S	PECIFICATION TYPE (e.g. LED)	Quantity	Wattage	Sub-total Watts
А	TOTAL LIGHTING HEAT IN	PUT IN WATTS PEI	R SQUARE METRE	

ELECTRICAL APPLIANCES SPECIFICATION TYPE	Quantity	Wattage	Sub-total Watts
PLUG-IN APPLIANCES e.g. refrigerator, kettle, toaster			
HARD-WIRED APPLIANCES e.g. cool room, remote condenser,	deep fryer, bain mo	arie, oven, extractio	on hood etc.
B TOTAL EQUIPMENT POWER IN	PUT IN WAT IS PER	R SQUARE METRE	

#### OTAL TENANCY POWER INPUT (SECTION A + B) IN WATTS PER SQUARE METRE

#### COMMUNICATIONS & DATA - Tick and complete the appropriate actions below

For Tenancies which are located within the Exchange Stage 1 Development (buildings B420, B431, B418), the following applies:

- NBN capability is envisaged for the development
- The Landlord's Project Contractor will provide a 'pathway' between the Tenancy and the NBN Equipment Room in the building to facilitate an internet connection
- The Tenant is required to preorder their internet connection directly with their own selected retail Internet Service Provider (ISP)
- This may potentially be a long lead time process, and the Tenant is recommended to establish contact with their ISP Provider as early as possible to avert potential delays to their connectivity
- A list of ISP providers is available on the NBN website
- Further information can be obtained from the Curtin 'Working with Us' portal under https://properties.curtin.edu.au/local/docs/guidelines/Tenancy-ISP-Connectivity.pdf

For Tenancies located **elsewhere on Campus**, the following applies:

• Further information can be obtained from the Curtin "Working with Us" portal under https://properties.curtin.edu.au/local/docs/guidelines/Tenancy-ISP-Connectivity.pdf

I acknowledge the above and will establish direct and early contact with an ISP of my choice

#### **MECHANICAL: AIR CONDITIONING** - Complete sections below

Note: Ensure you clarify all Landlord-approved services pathway routes and locations of plant and equipment early on in your tenancy fit out design

AIR CONDITIONING TYPE e.g. split-unit, ducted, FCU	Quantity	Condenser Size	Condenser Location
CEILING REGISTER TYPES e.g. circular, linear, square	Quantity	Colour	Size & Location
CEILING REGISTER TYPES e.g. circular, linear, square	Quantity	Colour	Size & Location
CEILING REGISTER TYPES e.g. circular, linear, square	Quantity	Colour	Size & Location
CEILING REGISTER TYPES e.g. circular, linear, square	Quantity	Colour	Size & Location

#### MECHANICAL: EXHAUST - Complete sections below

Note: Ensure you clarify all Landlord-approved services pathway routes and locations of plant and equipment early on in your tenancy fit out design

AGREED EXHAUST CAPACITY IN LITRES/SEC			
EQUIPMENT LIST e.g. heat extraction hood, odour extraction	Quantity	Litres/sec	Size & Location

#### **REFRIGERATION & COLD/COOL ROOMS** - Complete sections below

Note: Ensure you clarify all Landlord-approved services pathway routes and locations of plant and equipment early on in your tenancy fit out design

EQUIPMENT LIST e.g. cold room, refrigerators	Condenser Size	Condenser Location

GAS - Complete sections below			
REQUIRED GAS PROVISION IN MJ/HR			
LIST OF GAS FITTINGS e.g. hot water system, 4 burner cooker	Quantity	Litres/sec	Size & Location

# FIRE - Complete sections below Note: Any variations/revisions to the existing base build fire services to suit the fit out design will incur a Modification Cost to the Tenant, and the works will be actioned by the Landlord's Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting CEILINGS/BULKHEADS Yes Does the fit out design have an open ceiling design (i.e. exposed slab soffit)? Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency lighting Image: Project Contractor e.g. sprinklers, smoke detection, EWIS, emergency exit signage, emergency exit signage, emergency exit signage, emergency exit sign

Does the fit out design have any dropped ceilings (plasterboard/ceiling grid) or bulkheads?		
INTERNAL WALLS	Yes	No
Are all internal walls within the tenancy full-height?		
Are any internal walls within the tenancy below ceiling height?		

HYDRAULICS - Complete sections below			
<b>FITTINGS/FIXTURES</b> e.g. dishwasher, washing machine, kitchen hand wash tap, kitchen sink tap, high pressure wash tap, toilets	Quantity	Туре	Core Diameter

COLD WATER SUPPLY POINT - Tick and	complete appropriate section below
------------------------------------	------------------------------------

YES I accept the cold water supply point in the existing location

OR

OR

OR

NO I require the cold water supply point relocated to a new location as shown on the fit out Design drawings\*

\*Any variations/revisions to the standard supply/location to suit the fitout design will incur a Modification Cost to the Tenant, and the works will be actioned by the Landlord's Project Contractor

#### **WATER WASTE POINT** - Tick and complete appropriate section below

YES I accept the waste water point in the existing location

**NO** I require the waste water point relocated to a new location as shown on the fit out Design drawings\*

\*Any variations/revisions to the standard supply/location to suit the fitout design will incur a Modification Cost to the Tenant, and the works will be actioned by the Landlord's Project Contractor

TRADE WASTE (GREASE ARRESTORS) - Tick and complete appropriate section below

Note: The Tenant must ensure they make their own direct applications to, and receive the necessary approvals from the relevant Regulatory Authorities (eg: Health Department) and Watercorp for any connections related to trade waste

**YES** I will require a connection to the base build/Landlord's Grease Arrestor and;

I accept the capped trade waste point within the Tenancy in its existing location

I require the capped trade waste point relocated to a new location as shown on the fitout Design drawings\*

\*Any variations/revisions to the standard supply/location to suit the fitout design will incur a Modification Cost to the Tenant, and the works will be actioned by the Landlord's Project Contractor

NO I will not require a connection to the base build/Landlord's Grease Arrestor

#### ENVIRONMENTAL SUSTAINABILITY DESIGN (ESD) - Complete section below

Note: Refer to the separate ESD Tenancy Requirements Table in respect of mandatory Tenant obligations

I confirm the fit out design and tenancy operations comply with the Landlord's mandatory ESD Requirements as set out in the ESD Tenancy Requirements Table

#### HEAVY EQUIPMENT/FIXTURES & STRUCTURAL LOADING - Complete sections below

Note: Ensure you highlight any heavy equipment/fixtures on your fit out design drawings in addition to completing this section of the checklist

EQUIPMENT LIST e.g. storage units, compactus, safes, bi-fold doors	Quantity	Size	Loading - Total weight / kg per m2

OCCUPANCY LEVELS - Complete sections below	
Number of staff (full-time) in the tenancy during trading hours	
What is your anticipated customer occupancy?	

#### ACKNOWLEDGED, COMPLETED AND UNDERSTOOD BY THE TENANT

Note: This form r	Note: This form needs to be completed, signed and dated by the Tenant or their Nominated Representative		
Company			
Name			
Signature			
Date			

## **ATTACHMENT D**

## **Retail Tenancy Fitout: Approvals & Certification Checklist**

To be completed and submitted at the various process stages as identified in the process document. Other approvals or certification may be identified during the fitout process, and these will be submitted at the appropriate time.

TENANCY DETAILS - Complete all sections below		
Tenancy Name		
Tenancy Number		
Tenancy Area		
Tenant Name		
Completed by:		
Name of architect / designer / shopfitter		
Company Name		
Contact Details		
Signature		
Date Completed		

#### All required certificates must meet regulatory requirements and codes as required under law

<b>APPROVAL &amp; CERTIFICATES REQUIRED</b> (As applicable to the Tenant's fitout)	Pre-Start	Tenancy Handover	Practical Completion
Private Building Certifier Approval which will include submitting documents from relevant consultants.	Final Design		$\checkmark$
Building Permit Approval	$\checkmark$		
Structural Engineers Certificate			$\checkmark$
Mechanical/Ventilation Installation Certificate			$\checkmark$
Mechanical Exhaust System Installation Certificate			$\checkmark$
Plumbing Gas Services Installation Certificate of Compliance			$\checkmark$
Electrical Installation Certificate of Compliance			$\checkmark$
Glazing Certificate			$\checkmark$
Fire Systems Certificate of Compliance			$\checkmark$
Slip Resistance and Pendulum Testing Certification for Flooring			$\checkmark$
Waterproof Membrane Installation Certification			$\checkmark$
Planning Permit (Development Application Approval)	Discuss with RTC. If required, obtain during design development		design development
Health Department Approvals and Certificates			$\checkmark$
Council Approval for Food Operator Licences			$\checkmark$
Liquor Licence Approval			$\checkmark$
Services Commissioning and Testing Results - Air balancing and testing			✓
Occupancy Permit			Pre-Trade

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# Part Three Definitions

These terms are referenced in the Retail Tenancy Design & Fitout Requirements and the Site Access Requirements & Logistics Protocol.

These definitions are included to assist understanding of this Retail Tenancy Design & Fitout Requirements document and improve communication between different parties.

Base Building	Existing building structure weathertight including external facades.
Base Build Services	Including but not limited to electrical, fire, hydraulic and mechanical services.
Modifications	Adjustments to or works impacting existing base build including Services required to suit the tenancy design completed by the Builder at the Tenant's cost in accordance with the Lease Agreement.
Cold Shell	The premises condition handed over by the Main Contractor defined in the Landlord Works Schedule annexed to the Agreement for Lease or Lease.
Handover	Tenant accepts Premises from Landlord.
Tenancy Plans	Scaled architectural and service drawings including general arrangement floor plans, sections and elevations provided in Autocad DWG and PDF formats.
Practicial Completion	Works are substantially complete and reasonably fit for use.
Builder	B420 (Probuild), B431 (Probuild) or other Builders as contracted by the Landlord.
Fitout Works	The works to be carried out by the Tenant as approved in the Final Design Plans.
Retail Tenancy Coordinator	Landlord representative responsible for managing Tenancy coordination with Tenants and Exchange Contractors on behalf of Curtin.
Tenant Shopfitter	Company appointed by the Tenant that is responsible for all Fitout Works.
ESD Tenancy Requirements (Attachment B)	The document that specifies tenant Environmental Sustainability Design obligations for their fitout and during the operating term.