Annexure 7

SUSTAINABILITY REQUIREMENTS

Sustainability Requirements

Sustainability Reference

Credit 8a – Operational Waste

- Recycling streams should be considered in the back of house design to incorporate adequate spacing and facilities for the collection and separation of paper and cardboard, glass, plastic and organics.

Credit 9.1 – Ventilation System Attributes

- All building ventilation systems must be designed to comply with ASHRAE Standard 62.1:2013 in regards to minimum separation distances between pollution sources and outdoor air intakes.
- Any mechanical system must be designed to provide adequate access for maintenance to both sides of all moisture and debris-catching components, within the air distribution system.
- All new and existing ductwork must be cleaned in accordance with the recognised standards per the following.

  Credit 9.1 Ventilation System Attributes
  - AIRAH HVAC 2010 Hygiene Best Practice Guideline.
  - ASHRAE Standard 62.1:2013, Section 5
  - ACR 2006 Assessment, Cleaning and Restoration of HVAC Systems
  - SMACNA IAQ Guidelines for Occupied Buildings Under Construction

Credit 9.3B Exhausting the Pollutants Directly to the Outside

- All kitchens must be ventilated in accordance with AS 1668.2:2012.
- A separate exhaust system must be provided for the kitchen exhaust.
- The kitchen must be physically separated from the adjacent spaces or have an opening no larger than an area of 2.5m2
- Kitchenettes, tea points or cooking equipment employed for the preparation of good which has a power input less than 0.5kW/m2 is excluded.

Credit 11.0 – Minimum Lighting Comfort

- All lighting must meet these requirements:
  - Luminaires that have either
    - A minimum Class A1 and 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 (eg low voltage downlights) and High Intensity Discharge (eg metal halide, low/high pressure sodium)
  - All light sources to have a minimum Colour Rendering Index (CRI) of 80.

Credit 11.1 - General Illuminance and Glare reduction

- Lighting levels are to be designed to comply with best practice guidelines and glare to be eliminated in accordance with the following requirements:
    - Best practice lighting levels for each task within each space type is designed a lighting with a maintained illuminance that meets the levels recommended in the relevant standard.

Type of Task/Activity	Guidance
Industrial tasks and processes	Table E1 of AS/NZS 1680.2.4
Circulation and other general areas	Table D1 of AS/NZS 1680.2.1
Healthcare spaces	Table F1 of AS/NZS 1680.2.5
Office spaces	Table E.1 of AS/NZS 1680.2.2
Workspaces and other activities	Table 3.1 of AS/NZS 1680.1

- Bare light sources must be fitted with baffles, louvers, translucent diffusers, ceiling design or other means that obscure the direct light source from all viewing angles of occupants including occupants looking directly upwards.

Credit 11.3 – Localised Lighting Control

Where Tenants are to install their own lighting, the lighting control design shall provide the ability for occupants (staff) to control the lighting in their immediate environment. This includes turning the lights on and off adjusting their lighting levels.

Credit 13.1.1 - Paints, Adhesives and Sealants

Product Category	Max TVOC content in grams per Litre (g/L) of ready to use product
General purpose adhesives and sealants	50
Interior wall and ceiling paint, all sheen levels	16 with at least 50% of paints (by volume) achieving a maximum TVOC content of 5g
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

- All carpets must meet the TVOC Emissions Limits as set out in the table below or be certified under a recognised Product Certification Scheme, with the product certificate being current at the time of purchase.

Table 13.1.2B Carpet Test Standards and TVOC Emissions Limits		
Compliance Option	Test Protocol	Limit
ASTM D5116	ASTM D5116 – Total VOC Limit*	0.5mg/m2 per hour
	ASTM D5116 – 4-PC (4 -Phenylcycolohexene)*	0.5mg/m2 per hour
ISO 16000/EN 13419	ISO 16000 / EN 13419 – TVOC at three days	0.5mg/m2 per hour
ISO 10580 / ISO/TC 219 (Document N238)	ISO 10580 / ISO / TC 219 (Document N238)- TVOC at 24 hours	0.5mg/m2 per hour
Both limits should be met when testing against ASTM D5116		

Credit 13.2 – Engineered Wood Products

- Engineered wood products included as part of the fitout must meet the below formaldehyde emission limits as set out in the table below or be certified under a recognised Product Certification Scheme, with the product certificate being current at the time of purchase.
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Table 13.28 : 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	≤1mg/L
AS/NZS 1859.1:2004 – Particle Board, with use of testing procedure AS/NZS 4266.16:2004 Method 16	≤1mg/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 – Practicle Board and Plywood, with use of testing procedure JIS A 1460	≤1mg/L
JIS A5905: 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)	≤1mg/m2hr*
ASTM D5116 (applicable to high pressure laminates and compact laminates)	≤1mg/m2hr
ISO 16000 part 9, 10 and 11 (also known as EN 13419) applicable to high pressure laminates and compact laminates	≤1mg/m2hr (at 3 days)
ASTM D6007	≤0.12mg/m3**
ASTM E1333	≤0.12mg/m3***
EN717-1 (also known as DIN EN 717-1)	≤0.12mg/m3
EN717-2 (also known as DIN EN 717-2)	≤3.5mg/m2hr
*mg/m2hr may also be represented as mg/m2/hr ** The test report must confirm that the conditions of Table 3 comply for the particular wood product type, the final results must be presented in EN 717-1 equivalent (as presented in the table) using the correlation ratio 0.98. *** The final results must be represented in EN 717 -1 equivalent (as presented in the table) using the correlation ration of 0.98.	

Credit 18 – Potable Water

- Sanitary fixtures and equipment to be installed that meets the below WELS ratings for each fixture/equipment type.

Table 18B.1 Nominated Fixture WELS Rating	
Fixture / Equipment Type	Wels Rating
Taps	6 Star
Urinals	6 Star
Toilet	5 Star
Showers	3 Start (> 4.5 But < = 6.0)**
Clothes Washing Machines	5 Star
Dishwasher	6 Star
** The 3 star (> 4.5 but <= 6.0) requirement relates to Range F which is specified for both High Pressure and Low Pressure Showers as per Table 3.1 and Table 3.2 respectively of the AS NZS 6400-2016 Water Efficient Products Standard. For Showers, within one start of this Category F WELS rating means showers number either 3 star (6.0 but < = 7.5) 3 star (4.5 but <= 6.0) 4 star (>6.0 but <= 7.5) or 4 star (>4.5 but <= 6.0)	

Credit 20.2 – Timber

- Timber used on the project must meet either of the below requirements:
    - Certification by a forest certification scheme, such as FSC International or PEFC-accredited.
    - Be from a reused source.
- Certified timber and timber products must be soruced from certified forests and be accompanied by a relecant Chain of Custody (CoC) in order to be recognised as certified timber.
- Timber that is reused includes timber that is pre-existing in a building and timber that is procured from a second-hand source. If the timber is produced from 100% post-consumer recycled timber without the incorporation of any virgin timber this can be included as 'reused timber'.
- Bamboo and cork are not covered under any forest management standards and are therefore excluded from this requirement.

Credit 20.3 – Permanent Formwork, Pipes, Flooring, Blinds and Cables

- Permanent formwork, pipes, flooring, blinds and cables installed as part of the fitout should meet the following requirements, either:
    - Do not contain PVC, examples include HDPE for pipes and cabling
    - Meet the GBCA's Best Practice Guidelines for PVC including a valid audit verification certificate for each of the PVC products used.
- The Vinyl Council of Australia has developed a registry of products that meet these requirements which is available here.

Credit 21 – Sustainable Products

- It is recommended that the fit out incorporates materials that meet the following:
    - Reused products: Products that have been previously used and are incorporated in the project without significant changes to the structure or function of the item
    - Recycled Content Products: Recycled content items are items produced with recovered materials.
    - Environmental Product Declarations (EPD): Products that have a product specific or industry wide, third party published EPD.
    - Third Party Certification: Products certified through a product certification scheme such as GECA, Global Green Tag and Declare.

Credit 22 – Construction and Demolition Waste

- It is recommended that the fit out meets construction and demolition waste to landfill requirements of total waste generation of <10kg/m2.
- It is recommended the design incorporates elements of prefabrication or modular installations which reduce the tenancy fitout waste generated.