SUSTAINABLE DESIGN SCORECARD

Version 7.0

Project Details

Project Name	**Project Name**
Applicant Name	**Your Name**
Application No.	
Site Address	
City / Suburb	
State	
Postcode	
Site Area (m2)	**1000**
Internal (Gross) Floor Area (m2)	**1000**
Intended Design Life (optional)	**50**
Occupancy (Assumed to be 66 people)	**66**

Type of Building	BCA Class 5 - Commercial / Office
Other Sustainability Rating(s) undertaken (mandatory for building with a floor area greater than 5000m^2)	**No Rating**

Local Government Authority	**Yarra City Council**
Date of Assessment	
Assessment Completed By	
Company / Organisation	
Phone Number (Business Hours)	
Email address (optional)	

Results of Assessment

Press here to continue ▶

Overall result of your Sustainable Design Scorecard assessment:

Compliant Score = Excellent

Environmental Category	Required Points	Your Score	Compliance
Energy Efficiency	Achieve a minimum of 35 Points	106	Yes
Transport	Achieve a minimum of 10 Points	25	Yes
Water	Achieve a minimum of 25 Points	38	Yes
Waste	Achieve a minimum of 12 Points	20	Yes
Materials	Achieve a minimum of 12 Points	26	Yes
Indoor Environment Quality	Achieve a minimum of 10 Points	29	Yes
ESD Excellence	Achieve a minimum of 10 Points	44	Yes
Overall Score	Compliance in all categories	288	Yes

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Proposed Sustainable Design Features

Project Name - Your Name

Environmental Issue	Sustainable Design Commitments	Score	Specifications / Conditions	Further Information
1.0 Energy Efficiency	**Achieve a minimum of 35 Points**	**106**		
1.01 Building Thermal and Energy Efficiency Simulation (Optional)	◉ ≥4 Star NABERS Energy rating (Commitment) ○ 10% improvement on BCA Section J in energy model ○ Defer energy rating	30	NABERS Energy (formerly ABGR) rating commitment agreement or equivalent energy modelling undertaken by a Accredited Professional	NABERS website
1.02 Efficiency of hot water system	[illegible]	6.5	Energy Star Ratings for domestic systems, with special measures applying for commercial boilers.	www.standards.org.au
1.03 Passive Solar Design analysis - Minimise peak summer cooling loads and winter heating requirements	☑ Passive Solar Site and Building Design Analysis	5	Provide analysis showing how building meets passive solar planning policy requirements	www.yourbuilding.org
1.04 Window glazing & frames - principal type used in conditioned areas	timber or uPVC, double glazed	3.8	Submit details as part of the Sustainable Design Statement.	www.wers.net www.awa.org.au
1.05 Effective shading provided (passive or active)	Advanced façade design to reduce energy use	4	Submit details as part of the Sustainable Design Statement.	www.yourbuilding.org
1.06 Efficient Cooling System (Refer to BCA energy efficiency requirements for Commercial HVAC systems)	[illegible]	14.6	Commercial HVAC Systems must comply with BCA energy efficiency regulations for class 5-9 buildings section J5	BCA energy efficiency regulations Section J5
1.07 Efficient Heating System (Refer to BCA energy efficiency requirements for Commercial HVAC systems)	[illegible]	7.0	Commercial HVAC Systems must comply with BCA energy efficiency regulations for class 5-9 buildings section J5	BCA energy efficiency regulations Section J5
1.08 Heating Ventilation and Cooling (HVAC) Zoning	Individual room or workstation Heating & Cooling	2	Commercial HVAC Systems must comply with BCA energy efficiency regulations for class 5-9 buildings	BCA energy efficiency regulations
1.09 Energy saving building lighting and controls	Calculated at <6 watts/m2 with daylighting strategy	6	Complies with Part J6 of BCA energy efficiency regulations for class 5-9 buildings	Australian Standard AS 1680.1-1990 BCA energy efficiency regulations Section J6
1.10 Improved Daylighting - aiming to reduce the need for artificial lighting	☑ Daylighting Strategy	2	Architectural devices and openings located to maximise natural light.	BDP Environment Design Guide
1.11 Car Park Ventilation for under cover multi vehicle car park	[illegible]	4	Energy efficient ventilation	Australian Standard AS/NZS 1668.2 - 2002
1.12 Electrical Sub-Metering for buildings with multiple occupants	☑ Building Energy Sub-Metering	1	Sub metering for power for each floor and/or building tenant. Separate metering for major building energy uses like lighting and HVAC.	BDP Environment Design Guide
1.13 Automatic controls for lighting	☑ Motion sensor controls in all communal areas ☑ Ambient light sensor controls in all applicable areas	2	To improve safety and reduce dependency on occupants to switch off unnecessary lighting	BDP Environment Design Guide
1.14 Use Variable Speed Drives on large fans and pumps	☑ Variable Speed Drives	2	HVAC System to use variable speed fans and pumps to improve overall efficiency	BDP Environment Design Guide
1.15 Energy efficient Vertical Transport (Lifts, or escalators) / prominent staircase to reduce lift usage (excludes fire escape stairs)	☑ Efficient Lifts or Escalators Specified ☐ Not Applicable	2.0	Suppliers Specifications	BDP Environment Design Guide
1.16 On-site co-generation or Combined Heat and Power (CHP) system	☑ On-site cogeneration or CHP system	4	High efficiency co-generation on site to reduce carbon emissions and peak power demand	Sustainability Victoria
1.17 Install site specific Renewable Electricity Generation (Enter percentage of electrical power requirements supplied by renewable energy system)	[illegible] 100%	10	More than 20% (20 kWh/m2/yr) of building electricity sourced from Photovoltaics or other local renewable source.	Sustainability Victoria

2.0	Transport	Achieve a minimum of 10 Points	25		
2.01	Provide minimum bicycle spaces (Mandatory)	Office other than specified in this table	5	Where applicable provide safe on-site pedestrian / cycle routes	Bicycle Victoria
	Employee / Resident Bicycle Parking compliance	☑ 1 per 300 sq m of net floor area if >1000 sq m		Secure undercover bicycle parking provided complying with AS2890.3	Australian Standard AS 2890.3
	Visitor / Student / Shopper Bicycle Parking compliance	☑ 1 per 1000 sq m of net floor area if >1000 sq m		Bicycle rails within 50m of main building entrance	Municipal Association of Victoria
2.02	Additional bicycle parking	☐ ≥30% additional bicycle parking provided ☑ ≥60% additional bicycle parking provided	2	Additional bicycle parking must be in addition to Section 2.1	DSE - Planning
2.03	After Bicycle Trip Change Facilities (Mandatory)	☑ Showers and change rooms as per planning scheme	5	Complies with Clause 52.34 of the Planning Scheme	DSE - Planning
2.04	Additional change facilities	☑ ≥30% additional Trip Change facilities provided	2	Additional Trip Change facilities must be in addition to Section 2.3	Bicycle Victoria
2.05	Separation of facilities	☑ Change facilities separated from main staff toilets	1	To ensure greater privacy in such areas to encourage greater use	Bicycle Victoria
2.06	Reduction in Car parking (Optional)	☐ ≥30% Dispensation sought for car parking ☑ Car-Free development ☐ ≥60% Dispensation sought for car parking	10	Aimed at reducing dependency on automobiles, whilst assisting in the development of a more sustainable transport mix	DSE - Planning

3.0	Water	Achieve a minimum of 25 Points	38		
3.01	Water efficient fixtures, fittings, features, etc (Minimum 10 points)	68%	22	Achieve at least a 25% reduction in drinking water demand	Our Water Our Future
3.02	Stormwater runoff quality (Minimum 10 points) (Requires internet connection)	168	12.0	Achieve a STORM rating of 100 on Melbourne Water's web based STORM tool. For more complex solutions, use Melbourne Water's MUSIC model.	STORM Tool Melbourne Water Clearwater
3.03	Metering of site to effectively monitor water use to ensure immediate detection of leaks	☑ Water Sub-metering	2	Include Tenancy Sub Metering for let buildings	Green Plumbers
3.04	Stormwater retention and reuse (mandatory where applicable)	☑ Stormwater Retention to Council Requirements	2	Industry Best Practice stormwater retention (normally Maintain discharges for the 2 year ARI at pre development levels)	CSIRO Guidelines Melbourne Water

4.0	Waste	Achieve a minimum of 12 Points	20		
4.01	Design for effective waste/recycling streaming from the building during operation (Mandatory)	☑ Operational recycling	3	Design to facilitate reducing waste from business	Sustainability Victoria
4.02	Commitment to develop 'Waste Minimisation Plan' (Mandatory)	☑ Commitment to prepare a Waste Management Plan	5	Displays how the greatest possible portion of waste by weight is reused or recycled	Master Builders Association of Victoria
4.03	Commitment to recycle and/or re-use materials on-site	☐ ≥20% of existing structure and materials retained ☑ ≥50% of existing structure and materials retained	4	Preserve Heritage and reduce new materials consumption	Sustainability Victoria
4.04	Design for disassembly, deconstruction and high value re-use of materials	☑ Design for disassembly	2	Consider future opportunities for disassembly and material re-use	BDP Environment Design Guide
4.05	Adaptable Design for future re-use and / or renovation	☑ Adaptable Design	2	Consideration given to facilitating future uses outside that originally intended for the building	BDP Environment Design Guide
4.06	Pre-fabrication and Pre-manufactured sizes	☑ Pre Manufacturing	1	Reduce material offcuts and on-site waste production	BDP Environment Design Guide
4.07	Design to minimise waste from fitout upgrades in tenanted buildings	☑ Design allows for efficient fitout upgrade	1	Ability to replace fitout with min waste e.g. open plan; distribution of services etc	BDP Environment Design Guide
4.08	On-Site construction and demolition waste grinding for reuse	☑ Waste grinding for onsite reuse	2	Grinding: bricks and concrete to aggregate; wood to mulch; and plasterboard to gypsum soil conditioner.	EnviroGrind

Water Calculator

5.0	Materials	Achieve a minimu	6		
5.01	Commitment to excluding unsustainable imported timber (Mandatory)	☑ Unsustainable timber imports excluded	4	Oregon, Western Red Cedar, Meranti, Luan, Teak, Merbau etc not used on project unless FSC certified (or equivalent)	www.fsc.org Ecospecifier Technical Guides

Stormwater Calculator (external site)

5.02	All timber used on site either recycled or from plantations	☑ Recycled or plantation timber		plantation timber used throughout	www.ecospecifier.org Moreland Greenlist
5.03	In-situ Concrete: Supplementary Extender Content or Geopolymer Concrete Used	> 50% of total concrete >30% supplementary extender	4	SCMs (or cement extenders) are materials that partially replace cement	www.concrete.net.au
5.04	Precast Concrete: Supplementary Extender Content	☑ Precast panels >20% Supplementary extender	4	SCMs (or cement extenders) are materials that partially replace cement	www.concrete.net.au
5.05	Recycled Steel Specified	☑ Recycled reinforcing Steel	2	All reinforcing steel to be 100% recycled steel	BDP Environment Design Guide
5.06	Specify Non-Toxic and Durable External Materials	☑ Non-Toxic Materials	2	Use rot-resistant woods, concrete and construction techniques designed to eliminate the need for preservatives	Moreland Greenlist Greenpeace Eco-tips: Building and Renovating
5.07	Specify Durable External Materials	☑ Durable Materials	2	External cladding to be designed to extend the life of the building	Your Building www.ecospecifier.org
5.08	Specify environmentally preferable floors and footings	☑ Sustainable floors and footings materials specified	1	Use floors and footings materials included on the Moreland Greenlist or equivalent	Your Home Technical Manual
5.09	Specify environmentally preferable wall and roof framing	☑ Sustainable wall and roof framing materials specified	1	Use wall and roof framing materials included on the Moreland Greenlist or equivalent	Moreland Greenlist
5.10	Specify environmentally preferable wall cladding	☑ Sustainable wall cladding materials specified	1	Use wall cladding materials included on the Moreland Greenlist or equivalent	Moreland Greenlist
5.11	Specify environmentally preferable roof cladding	☑ Sustainable roof cladding materials specified	1	Use roof cladding materials included on the Moreland Greenlist or equivalent	Moreland Greenlist

6.0	**Indoor Environment Quality**	**Achieve a minimum of 10 Points**	**29**		
6.01	Natural (outside air) Ventilation enhanced while maintaining energy efficiency	Mechanical HVAC using 100% Outside Air Usually combined with technologies such as chilled beams	5	Points are awarded for systems that use natural ventilation or other emerging technologies to improve indoor air quality and save energy	BCA energy efficiency regulations Section J4 Australian Standard AS/NZS 1668.2 - 2002
6.02	Commitment to use low Volatile Organic Compound (VOC) emitting MDF, Plywood and Particleboard	Super E0 or equivalent	5	100% of particleboard and MDF to be EO or Japanese 'Four Star' standard	Moreland Greenlist BDP Environment Design Guide
6.03	Commitment to use low Volatile Organic Compound (VOC) sealants and adhesives	☑ Low VOC sealant/adhesive specification	3	Interior applications: sealants and adhesives to tiles, floor surfaces to be maximum 5% VOC content by weight	Moreland Greenlist
6.04	Commitment to use low Volatile Organic Compound (VOC) paints	☑ Low VOC paint specification	3	Interior paints <30g/L VOC and Exterior paints <90g/L VOC	Good Environmental Choice
6.05	Commitment to use low Volatile Organic Compound (VOC) emitting applied floor coating / sealants	☑ Low VOC emitting floor coating	3	100% of floor coating to be low VOC emitting products	Ecospecifier
6.06	Commitment to use low Volatile Organic Compound (VOC) emitting floor covering (carpet) or resilient flooring (Linoleum, rubber etc)	☑ Low VOC emitting floor covering	3	100% of floor covering to be low VOC emitting products	Ecospecifier
6.07	Adhesive-free carpet tiles	☑ Adhesive-free carpet tiles specified	2	Reduction in the use of adhesives, glues, bonding agents, etc.	Ecospecifier
6.08	Access to external views	☑ External views maximised	2	Provide a greater connection with the natural environment	BDP Environment Design Guide
6.09	Daylighting utilised for the maximum number of building occupants	☑ Daylight Maximised	3	Windows 30% of floor area, or daylight Modelling report submitted, measured at the working plane	BDP Environment Design Guide
6.10	Improved passive cooling for non-conditioned building areas	☑ Design to reduce peak summer temperatures	3	Provide analysis showing how building meets thermal comfort requirements to avoid occupant heat stress.	www.worksafe.vic.gov.au

7.0	**ESD Excellence**	**Achieve a minimum of 10 Points**	**44**		
7.01	Building User Guide	☑ Commitment to produce a Building User Guide	4	Plain English guide in addition to technical specification for unique equipment/processes	BDP Environment Design Guide

7.02 Post occupancy ESD evaluation and building tuning	☑ Post occupancy ESD evaluation	4	Commitment to undertake post-occupancy building performance evaluation and tuning to ensure optimum operational efficiency	www.nabers.com.au
7.03 Active solar for space heating	☑ Active Solar Thermal Technology	3	Use of solar energy for space heating on cold sunny days	Sustainability Victoria
7.04 Vertical or Rooftop Gardens	☑ Vertical and/or Rooftop Garden	4	Green roof systems generally include water proofing, drainage layers, filter cloth, growing media and plants	www.greenroofs.org/ BDP Environment Design Guide
7.05 Local ecology enhanced with new indigenous plantings or habitat creation	☑ Flora (plant) habitat creation	3	Wetland creation, habitat creation or significant revegetation	Greening Australia
7.06 Retention of existing on site flora or habitat	☑ Net Gain to the natural environment	3	Protection of established trees, indigenous grasses, etc	DSE Native Vegetation
7.07 Fauna habitat enhancement (Landscape design to create micro habitat for indigenous animals, insects (e.g. butterflies), and aquatic life (e.g. frogs)	☑ Fauna (animal) habitat creation	2	Provision of urban habitat opportunities (such as nesting boxes, ponds, bird friendly plantings etc). Decide planting lists and actions in conjunction with parks Victoria or other local conservation groups	Parks Victoria
7.08 Thermal mass heat storage or heat sink, reducing energy consumption	☑ Thermal mass used for temperature moderation	4	Cooling or heating system that utilises diurnal temperature variations and/or thermal mass as the heat source, heat store/sink	BDP Environment Design Guide
7.09 Innovative Heating, Cooling and Ventilation (HVAC) system	☑ Innovative heating/cooling system	2	Such technologies could include: as night sky radiant cooling or adsorption chillers	BDP Environment Design Guide
7.10 Black Water or Storm Water Harvesting and Reuse (Excludes roof runoff)	☑ Black Water or Storm Water Harvesting and reuse	4	Onsite treatment and reuse of black water, storm water or water mining from local sewers	Melbourne Water
7.11 Recycling water from Fire Systems testing	☑ Fire System Testing Collection and Re-Use tank	3	Collection and piping water from regular pressure testing into an adequately sized storage for reuse	
7.12 Universal Access	☑ Full compliance with AS1428.2	3	Enhanced requirements to promote universal access	
7.13 Food Production	☑ ≥30% of garden area allocated for food production	5	Greater use of landscaped areas and reduced food miles	
7.14 New Innovation	Up to 10 points can be awarded at Council's discretion		Discuss with Council ESD officer.	

STORM Rating Report

TransactionID:	31917	
Municipality:	YARRA	
Rainfall Station:	YARRA	
Address:	Case Study A	
	Yarra	
	VIC	3121
Assessor:	Johanna Trickett	
Development Type:	Commercial/Retail	
Allotment Site (m2):	1,000.00	
STORM Rating %:	168	

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Roof	333.00	Rainwater Tank	10,000.00	70	170.00	82.00
Paving	67.00	Wetland 400mm	600.00	0	158.00	0.00

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