BCA GREEN MARK

GM HW: 2018

BCA-HPB GREEN MARK FOR HEALTHIER WORKPLACES

GM HW: 2018 Revision Log

Revision	Description	Date Effective
R0	Pilot version	14/05/2018
R1	Revised version for implementation	01/10/2018

Framework – BCA-HPB Green Mark for Healthier Workplaces (GM HW: 2018)

To achieve Green Mark Award

Pre-requisite Requirement
All relevant pre-requisite requirements for the specific Green Mark Rating are to be complied with

Green-Related Requirements **+** **Health and Other Green-Related Requirements**

Section 1 – SUSTAINABLE DESIGN AND MANAGEMENT

- 1.1 Base Building Performance
- 1.2 Green Lease
- 1.3 Integrative Design Process
- 1.4 Environmental Credentials
- 1.5 Environmental Policy, Targets and Action Plan
- 1.6 Sustainable Procurement
- 1.7 Occupant Engagement

SECTION 2 – ENERGY AND RESOURCE MANAGEMENT

- 2.1 Lighting Efficiency
- 2.2 Lighting Zoning and Controls
- 2.3 Plug Load Efficiency
- 2.4 Plug Load Management and Operation
- 2.5 Air-Conditioning Zoning and Controls
- 2.6 Water Efficient Fittings
- 2.7 Water Usage Monitoring
- 2.8 Sustainable Renovation
- 2.9 Operational Products
- 2.10 Operational Waste Management

SECTION 3 – OFFICE ENVIRONMENT

- 3.1 Occupant Comfort
- 3.2 Indoor Contaminants Management
- 3.3 IAQ Trending, Monitoring and Display
- 3.4 Daylighting
- 3.5 Artificial Lighting
- 3.6 Glare Control
- 3.7 Acoustics
- 3.8 Universally Accessible Office Design

SECTION 4 – WORKPLACE HEALTH AND WELL-BEING

- 4.1 Access to Healthier Food
- 4.2 Supporting Facilities for Healthier Eating Habits
- 4.3 Active Workplace Design
- 4.4 Active Commute
- 4.5 Fitness Programmes and Exercise Facilities
- 4.6 Biophilic Features
- 4.7 Mental Health Management
- 4.8 Supporting Employee Smoking Cessation Efforts
- 4.9 Workplace Health Promoting Policies

SECTION 5 – ADVANCED GREEN AND HEALTH EFFORTS

- 5.1 Energy Efficiency Index (EEI)
- 5.2 Renewable Energy
- 5.3 Energy Monitoring and Demand Control
- 5.4 Energy Disclosure
- 5.5 Fit-Out Waste Management
- 5.6 Advanced IAQ Management
- 5.7 Complimentary Certifications
- 5.8 Green Mark Decal
- 5.9 Other Advanced Green Efforts
- 5.10 Workplace Health Promotion Activities

POINTS ALLOCATION – BCA-HPB GREEN MARK FOR HEALTHIER WORKPLACES 2018 (GM HW: 2018)

GM Criteria		Points Allocation
Section 1 – SUSTAINABLE DESIGN AND MANAGEMENT		
Part A	**Base Building Selection**	**6**
1.1	Base Building Performance	3
1.2	Green Lease	3
Part B	**Project Team**	**3**
1.3	Integrative Design Process	1
1.4	Environmental Credentials	2
Part C	**Management Commitment and User Engagement**	**8**
1.5	Environmental Policy, Targets and Action Plan	3
1.6	Sustainable Procurement	2
1.7	Occupant Engagement	3
	Sub-total for Section 1	**17**
Section 2 – ENERGY AND RESOURCE MANAGEMENT		
Part A	**Lighting**	**11**
2.1	Lighting Efficiency	8
2.2	Lighting Zoning and Controls	3
Part B	**Plug Loads**	**8**
2.3	Plug Load Efficiency	6
2.4	Plug Load Management and Operation	2
Part C	**Air-Conditioning**	**4**
2.5	Air-Conditioning Zoning and Controls	4
Part D	**Water**	**3**
2.6	Water Efficient Fittings	2
2.7	Water Usage Monitoring	1
Part E	**Materials and Products**	**12**
2.8	Sustainable Renovation	9
2.9	Operational Products	3
Part F	**Waste**	**4**
2.10	Operational Waste Management	4
	Sub-total for Section 2	**42**
Section 3 – OFFICE ENVIRONMENT		
Part A	**Indoor Air Quality (IAQ)**	**18**
3.1	Occupant Comfort	9
3.2	Indoor Contaminants Management	6
3.3	IAQ Trending, Monitoring and Display	3
Part B	**Spatial Quality**	**12**
3.4	Daylighting	2
3.5	Artificial Lighting	3
3.6	Glare Control	1
3.7	Acoustics	3
3.8	Universally Accessible Office Design	3
	Sub-total for Section 3	**30**

Section 4 – WORKPLACE HEALTH AND WELL-BEING		
Part A	**Promoting Healthier Eating**	**4**
4.1	Access to Healthier Food	3
4.2	Supporting Facilities for Healthier Eating Habits	1
Part B	**Promoting Physical Activity**	**8**
4.3	Active Workplace Design	4
4.4	Active Commute	1
4.5	Fitness Programmes and Exercise Facilities	3
Part C	**Promoting Mental Well-being**	**5**
4.6	Biophilic Features	2
4.7	Mental Health Management	3
Part D	**Promoting Smoke-Free Workplace**	**2**
4.8	Supporting Employee Smoking Cessation Efforts	2
Part E	**General Workplace Health**	**2**
4.9	Workplace Health Promoting Policies	2
	Sub-total for Section 4	**21**
Section 5 – ADVANCED GREEN AND HEALTH EFFORTS		
Part A	**Advanced Green Efforts**	**25**
5.1	Energy Efficiency Index (EEI)	2
5.2	Renewable Energy	4
5.3	Energy Monitoring and Demand Control	3.5
5.4	Energy Disclosure	1
5.5	Fit-Out Waste Management	1
5.6	Advanced IAQ Management	4.5
5.7	Complementary Certifications	3
5.8	Green Mark Decal	1
5.9	Other Advanced Green Efforts	5
Part B	**Advanced Health Efforts**	**5**
5.10	Workplace Health Promotion Activities	5
	Sub-total for Section 5	**30**
	TOTAL GREEN MARK POINTS AVAILABLE	**140**

GREEN MARK AWARD RATING

BCA GREEN MARK AWARD RATING AND PRE-REQUISITE REQUIREMENTS

Green Mark Rating	Green Mark Score
Green Mark Platinum	70 and above
Green Mark Gold^{PLUS}	60 to < 70
Green Mark Gold	>50 to < 60
Green Mark Certified	Compliance with all pre-requisite requirements

Pre-requisite Requirements for GM HW: 2018	
FOR ALL RATINGS	
1. ENERGY EFFICIENCY INDEX (EEI) To compute and monitor the Energy Efficiency Index (EEI).	All Ratings
2. LIGHTING POWER DENSITY (LPD) To ensure that the overall installed lighting power density (LPD) does not exceed 12 W/m².	
3. INDOOR TEMPERATURE To maintain indoor dry bulb temperature at 23 °C and above to prevent overcooling. The average relative humidity should not exceed 65% for new office premises and 70% for existing office premises.	
4. LOW-VOC PAINTS To use low-VOC paints by an approved local certification body.	
5. ENERGY IMPROVEMENT TARGETS AND ACTION PLAN To set site-specific environmental performance targets and action plans for energy.	
6. GREEN AND HEALTH AMBASSADOR To appoint a management representative from the corporate real estate team or a green and health ambassador within the office to lead the implementation of the sustainability and also health promotional activities in the office.	
7. EMPLOYEE ENGAGEMENT To conduct at least <u>one green</u> and <u>one health-related</u> activity in a year for the office occupants. Company may tap on external resources to run these activities.	
8. RECYCLING FACILITIES To provide appropriate recycling facilities for collection and storage of common recyclables such as paper, glass, metal and plastic in commingled or sorted form.	
9. POLICY STATEMENT To set in place a policy statement (e.g. included in organisation's mission statement, core values, HR policies) that supports workplace health promotion.	
10. DEDICATED FUNDS To set aside dedicated funds to run workplace health promotion and green-related activities.	

Additional Pre-Requisite Requirements:
FOR GOLD, GOLD^{PLUS} AND PLATINUM RATINGS

11. MINIMUM POINTS SCORE

To ensure that the office meets both green and health objectives, minimum points score shall be achieved according to the table below.

Sectional Focus	Section	Combined minimum points score
Green-Related requirements	Sections 1 & 2	≥ 25 points
Health and Other Green-Related requirements	Sections 3, 4 & 5	≥ 25 points

Gold, Gold^{PLUS} and Platinum Ratings

12. OFFICE ENERGY CONSUMPTION

Green Mark Rating	Energy Efficiency Index (EEI)	
	For offices with occupant density > 12 m²/pax	For offices with occupant density ≤ 12 m²/pax
Gold	≤ 80 kWh/m²/yr	≤ 90 kWh/m²/yr
Gold^{PLUS}	≤ 70 kWh/m²/yr	≤ 80 kWh/m²/yr
Platinum	≤ 60 kWh/m²/yr	≤ 70 kWh/m²/yr

Note: EEI is calculated based on actual utility bills (kWh) or power meter reading for a minimum 3 months after office renovation and staff move-in. It shall exclude the power consumption of data centre/ server room and air-conditioning which is normally provided by the landlord.

EEI = [(TBEC - DCEC)/ (NLA - DCA)]*(55/OH)

Where:

a) TBEC : Total office energy consumption (kWh/yr)

b) DCEC : Data centre/ server room/ communications room energy consumption (kWh/yr)

c) NLA : Nett lettable area (m²)

d) DCA : Area of data centre/ server room (m²)

e) 55 : Normalising factor based on 55 hours working week.

f) OH : Weekly operating hours based on official working hours (hrs/week). For offices whose business nature calls for long operating hours (e.g. due to global operations), the OH shall be based on the landlord's air-conditioning schedule.

Gold, Gold^{PLUS} and Platinum Ratings

13. LIGHTING POWER DENSITY (LPD) To achieve more stringent LPD standards as set out in the following table. 	Gold, Gold^{PLUS} and Platinum Ratings

Green Mark Rating	Lighting Power Density (LPD)
Gold	≤ 11 W/m²
Gold^{PLUS}	≤ 10 W/m²
Platinum	≤ 9 W/m²

14. AIR-CONDITIONING SYSTEM EFFICIENCY If unitary air-conditioning systems are used, all systems should have a minimum rating of 4 ticks or equivalent COP (Coefficient of Performance) under the Singapore Energy Labelling Scheme.	Gold^{PLUS} and Platinum Ratings
15. ENVIRONMENTAL PERFORMANCE TARGETS AND ACTION PLAN To set site-specific environmental performance targets and action plans water and waste.	Gold^{PLUS} and Platinum Ratings
16. INDOOR AIR QUALITY (IAQ) SURVEILLANCE AUDIT To conduct an IAQ surveillance audit once every three years and ensure that the recommended IAQ parameters are met. The audit shall be conducted by an accredited laboratory under the Singapore Accreditation Council with respect to the recommended IAQ parameters and acceptable limits stated in Table 1 of SS 554:2016 Code of Practice for `Indoor Air quality for Air-Conditioned Buildings'.	Gold^{PLUS} and Platinum Ratings
17. POST OCCUPANCY EVALUATION (POE) To conduct a POE survey annually and take corrective actions accordingly.	Gold^{PLUS} and Platinum Ratings
18. GREEN PROCUREMENT POLICY Setting of sustainable and environmentally friendly procurement and purchasing policy and use and purchase of sustainable and environmentally friendly products for office stationery and cleaning products.	Gold^{PLUS} and Platinum Ratings
19. WORKPLACE HEALTH PROMOTING POLICIES To set at least three health-promoting policies covering at least three of the following topics: i) Active living – promoting employees to be more physically active ii) Mental well-being – supporting good mental health for employees iii) Healthy eating – supporting healthier eating amongst employees iv) Smoke-free – creating a smoke-free environment v) Chronic disease management – screening employees for chronic diseases and equipping them with knowledge and skills to manage any known conditions	Gold, Gold^{PLUS} and Platinum Ratings
20. WORKPLACE HEALTH PROMOTION PROGRAMME To run a suite of programmes for workplace health promotion based on the identified health needs, for example through surveys such as the Post Occupancy Evaluation (POE). The suite of programmes should target certain goals and objectives, and cover at least the top 3 identified needs in the following topics: i) Active living ii) Mental well-being iii) Healthy eating iv) Smoke-free v) Chronic disease management	Gold, Gold^{PLUS} and Platinum Ratings

Section 1 – SUSTAINABLE DESIGN AND MANAGEMENT	Green Mark Points (17 Points)
Part A: Base Building Selection	**6 points**

1.1 Base Building Performance

To encourage the selection and leasing of office space within a green building.

a) Green Mark Award for Base Building

Building is awarded with Green Mark Gold Award or higher; or
Building demonstrates 30% energy savings over last three years

Points based on GM Award of base building
(Up to 2 points)

Achieved GM Award for base building	Point
Gold	0.5 point
Gold^{PLUS}	1 point
Platinum	2 points

b) Green Mark Pearl Award

Building is awarded the Green Mark Pearl Award in the last 3 years

Points based on GM Pearl Award rating accorded
(Up to 1 points)

GM Pearl Award accorded	Point
Pearl Award	0.5 point
Pearl Prestige Award	1 point

1.2 Green Lease

To encourage tenants to go the extra mile towards sustainability and establish agreed levels of environmental performance between landlord and tenant through the signing of green lease or green clauses as part of the tenancy agreement. These green clauses shall provide details recommending minimum environmental standards to assist tenants in making their fit-out and downstream operation decisions.

a) Maximum lighting power density (LPD) of tenanted spaces beyond the SS 530: 2014 requirement

1 point

b) Usage of sustainable fit-out materials as stipulated in the green fit-out guidelines

Points for (b) to (d) to be scored based on the extent of the green clauses incorporated
(Up to 2 points)

c) Sustainable operations e.g. tapping on landlord's recycling facilities etc.

d) Any other commitments to enhance sustainability or the well-being of building occupants (e.g. fitness programmes)

Part B: Project Team	3 points
1.3 <u>Integrative Design Process</u> To recognise and encourage an integrated design process such that the renovated office space is an environmentally sustainable, resource efficient and healthy environment for the occupants. Addressing and negotiating between the various needs of all stakeholders involved in the design, fit-out/ renovation and operation stages to achieve common targets that can result in a balanced and optimised sustainable design outcome. The project team shall include and not be limited to the following representatives: • Client • ID consultant • M&E consultant • Fit-out contractor • Facility manager • Green Mark/ Environmental Sustainability Design consultant	1 point
1.4 <u>Environmental Credentials of Project Team</u> To recognise key consultants and firms with specialist green credentials who contribute to the sustainable design, fit-out/ renovation and operation stages. Applicable to key project members in the in-house facility management team or external consultants with the following credentials. **a) Green Individuals** • Certified Green Mark Manager (GMM) • Certified Green Mark Facility Manager (GMFM) • Certified Green Mark Professional (GMP) • Certified Green Mark Facility Professional (GMFP) • Singapore Certified Energy Manager (SCEM) **b) Green Firm** • ISO 14001 or ISO 50001 certified • SGBC's Green Services Certified firm • NEA Clean Mark Silver/ Gold Award Accredited	0.5 point each for Certified GMM or GMFM 1 point each for Certified GMP, GMFP or SCEM (Up to 1 point) 0.5 point each (Up to 1 point)

Part C: Management Commitment and User Engagement	8 points

1.5 <u>Environmental Policy, Targets and Action Plan</u>
 	
To recognise Senior Management's commitment and leadership towards a sustainable office.
 	
To establish the following policies and documents which contain sustainable targets, implementation strategies and improvement plans to achieve the target set over the next five years with endorsement by Senior Management.
 	
a) Environmental Policy for the organisation
 	
b) Organisation or site-specific environmental performance targets and action plans
 	
    i) Energy Management Policy and Improvement Plan
    ii) Water Management Policy and Improvement Plan
    iii) Waste Management Policy and Recycling Plan
    iv) ISO 14001 or ISO 50001 certifications
 	
c) Key appointment holders for the office operation including the persons responsible for review, implementation and roll-out of these action plans with organisation chart made known to the office occupants
	0.5 point for each item
	(Up to 3 points)

1.6 <u>Sustainable Procurement</u> This refers to the implementation of various policies and measures to promote sustainable operation within the office. **a) Green Procurement Policy** Adoption of environmental preferable procurement policy in the operation and maintenance of the building. The objective of this policy is to reduce the adverse environmental impact of building owners' purchasing decisions by buying goods and products from environmentally responsible product/ service providers	1 point
b) Performance Based Procurement for Retrofitting Adoption of Energy Performance Contract (EPC) by EPC firms accredited by Singapore Green Building Council (SGBC) for the EE retrofit of lightings (with guaranteed LPD at ≤ 10 W/m^2)	1 point

1.7 <u>Occupant Engagement</u> This refers to the provision of relevant information and guidance to the occupants by the green and health ambassador/ committee as to how they can contribute positively to the office's environmental performance and overall occupant well-being.	
a) Green and Health Education To create awareness among the office occupants on the green features of the base building and office provision, the health and wellness policies and programmes, and how they can contribute towards sustainability as end-users. • Green and health newsletters/ user guide • Green and health corner (notice board, intranet, etc.) • On-boarding programme for new staff • Others	0.5 point each (Up to 1 point)
b) Green and Health-Related Activities To encourage occupant engagement through green and health-related activities. Points can be scored based on the number and scale of green and health-related activities held in a year. Examples of green and health-related activities include organisation-wide events such as: • Car-free day • Beach clean-ups • Upcycling workshops • Mass walks • Sports try-outs • Others	0.5 point for each green and health activity (up to 2 points)

Section 2 – ENERGY AND RESOURCE MANAGEMENT	Green Mark Points (42 Points)
Part A: Lighting	**11 points**
2.1 Lighting Efficiency Encourage the use of energy efficient lighting to minimise energy consumption from lighting usage while maintaining proper lighting level based on the maximum lighting power density (LPD) stipulated in SS 530: 2014 *Note: Design should include task lighting required to achieve intended lux level for workspace. Please refer to* **Annex A** *for the baseline of lighting power density.*	Points scored = 0.2 x (% improvement) (Up to 8 points)
2.2 Lighting Zoning and Controls Encourage the use of lighting control circuits to minimize energy usage, such as provision of the following control strategies a) Zoning of lighting for different usage/ locations b) Scheduling control to switch on and/or off the lightings with some localized override control where lighting is needed beyond the scheduled period • Lighting on timer control/ connected to occupancy sensors • Toggle switch for light extension for different zones beyond pre-set period	 1 point 2 points
Part B: Plug Loads	**8 points**
2.3 Plug Load Efficiency Encourage the selection and use of energy efficient labelled office equipment to reduce the overall energy consumption. Use of energy efficient labelled office equipment (such as under Energy Star, Singapore Energy Labelling Scheme or equivalent) to support general office function shall include but not limited to the following: • Computers, laptops, monitors • Multi-function devices (including printers, photocopiers and fax machines) • TVs	Points awarded based on the total power consumption and energy efficiency rating of the equipment used (Up to 6 points) *Note: If technical specifications for all models of the office equipment are not available, points can be scored if more than 80% of the applicable equipment type based on key models are shown. Points shall be capped at 4 points.*

2.4 Plug Load Management and Operation

Encourage the use of active plug load control strategies to minimise energy usage during operation.

a) Active plug load management based on operation schedule (automatic cut-off switches with user override)

b) Overnight equipment management system

c) Other strategies/ systems

1 point each
(Up to 2 points)

Part C: Air-Conditioning	**4 points**

2.5 Air-Conditioning Zoning and Controls

Encourage the use of air-conditioning design practices that offer greater flexibility and makes it easier to serve area with different usage efficiently, such as the following

a) Zoning of air-conditioning system to serve areas with different usage/ occupancy needs

1 point

b) Scheduling control to switch on and/or off the air-conditioning with some localized override control where air-conditioning is needed beyond the scheduled period

2 points

- Air-conditioning on timer control
- Alternative cooling modes for after office hours (e.g. auxiliary air-con for selected areas only, localised cooling through fans, etc.)

c) Meeting rooms, pantry, etc. with specialty occupancies having controls capable of sensing space use and responding to space demand

1 point

Part D: Water	**3 points**

2.6 Water Efficient Fittings

Encourage the use of water efficient fittings under Water Efficiency Labelling Scheme (WELS) or adopt equivalent water efficient flow-rate/ flush volume for water fittings:

- Basin taps and mixers
- Showers
- Sink/Bib taps and mixers
- Urinals and Urinal Flush Valves
- Dual flushing cistern for WC

Points scored based on the number and water efficiency rating of the fitting type used
(Up to 2 points)

Rating based on Water Efficiency Labelling Scheme (WELS)	Weightage	
	For fittings in landlord and tenant areas	For fittings in tenant area only
✓✓	1.5	0.5
✓✓✓	2	1

<u>Or</u>

Achieve PUB Water-Efficient Building Certificate

<u>Or</u>

1 point for Basic certification
2 points for Silver/ Gold certification

2.7 Water Usage Monitoring Facilitate continual monitoring of water use within the development through the provision of water meters for major water uses. • Provision of local private meters for all major water uses in the office • Provision of leak detection system with alert features • Provision of smart meters for remote monitoring • Provision of water usage portal, dashboard or other equivalent forms that display metered data, trending of water consumption and relevant parameters which facilitate better management of water consumption during building operation	0.5 point each (Up to 1 point)
Part E: Materials and Products	**12 points**

2.8 Sustainable Renovation

a) Existing Provisions

Encourage the retention of existing provisions and minimise wastage from renovation from office fit-out.

i) Office renovation conserves at least 25% (by area) of existing finishing for walls, flooring and ceilings

Points based on extent of retention of base building provisions
(Up to 2 points)

Extent of conservation	Point
≥ 25%	1 point
≥ 50%	2 points

Note: Excludes painting or touching up to paint work arising from office renovation.

ii) Retain and reuse of at least 25% (by number/ volume) of the existing furniture or use of furniture with end-of-life take back services

Points based on extent of office furniture that is retained and/ or reused
(Up to 2 points)

Extent of retention and reuse	Point
≥ 25%	1 point
≥ 50%	2 points

b) Flexible Layout

To encourage design of open, flexible and reconfigurable layouts for maximum space usage.
• Provision of open and flexible layout with minimum enclosed space for ≥ 50% of office area
• Provision of space savers, compactors, mobile stations, etc.
• Agile working facilities (e.g. hot desking, touchdown areas, lockers for staff with no assigned desks, etc.)
• Multi-functional spaces e.g. pantry areas for townhall sessions, small meetings, health promoting activities (e.g. physical activity, health workshops, health screening and coaching), etc.
• Others

0.25 points each
(Up to 1 point)

c) Renovation Products/ Materials

Usage of green certified renovation products/ materials by an approved local certification body. Examples of green products include the base layer and finishes layer under the following categories:

- Internal walls
- Floors
- Ceilings
- Doors

Points scored = Weightage x Impact
(Up to 4 points)

Impact	Point
High impact item (≥80% of applicable use)	1 point
Low impact item (<80% of applicable use)	0.5 point

Note: If the certified green product does not indicate a rating, the product shall be assumed to be equivalent to a "Good" rating. Points are capped at 1.5 points per category to encourage the selection and usage of green products across all categories.

2.9 Operational Products

Encourage the selection and usage of renovation products and materials that are environmentally-friendly and sustainable within the office.

- Cleaning products recognised by approved local certification body or equivalent
- Environmental-friendly janitorial paper products
- Office stationery

3 points

Part F: Waste	4 points

2.10 Operational Waste Management

Promote and encourage waste reduction and recycling among occupants, tenants and visitors.

a) Reduce

- Follow-me printing or secure printing, with printing options set to default greyscale and duplex printing
- Digitalising internal processes e.g. HR/ administrative processes, approval, claims, payments to suppliers, etc.
- Dissemination of information and circulars through emails, intranet, sharepoint, staff notice board, etc.
- Encouraging staff to bring their own electronic devices to meetings instead of printing
- Others

0.5 point each
(Up to 2 points)

b) Reuse

- Use of non-disposable cups for meetings and by staff
- Use of non-disposable cutlery and crockery
- Use of erroneous single sided print outs
- Ordering of office supplies in bulk to cut down on packaging waste

0.5 point each
(Up to 1 point)

c) Recycle

- Provision of facilities for the collection and storage of common recyclables in commingled (e.g. recyclables and non-recyclables) or sorted form (such as paper, glass, metal and plastic)
- Provision of facilities for the recycling of specialised waste stream such as E-waste, printer toners/ cartridges, light bulb/ fluorescent tubes, and food waste

Points based on extent of recycling efforts
(Up to 1 point)

Location of recycling bins	Point
At central location	0.5 point
At strategic locations	1 point

Section 3 – OFFICE ENVIRONMENT	Green Mark Points (30 Points)
Part A: Indoor Air Quality (IAQ)	**18 points**

3.1 Occupant Comfort

Ensure office space and policies are optimised and inclusive for enhanced satisfaction and well-being of the majority of occupants.

a) Thermal Comfort

Indoor dry-bulb temperature within 23°C to 25 °C and relative humidity <65% for consistent indoor conditions and comfort air-conditioning	0.5 point

b) Temperature Control

i) Occupants are able to control the indoor temperature by zones according to their preference and thermostat set-point does not go below 23⁰C	0.5 point
ii) Occupants have access to devices to enhance individual thermal comfort (e.g. fans)	0.5 point

c) Post Occupancy Evaluation (POE)

i) Conduct yearly post occupancy evaluation to assess occupant's satisfaction with the indoor environment	2 points
ii) Communicate aggregate results with occupants	0.5 point
iii) List of corrective actions taken following the post occupancy evaluation	1 point
iv) Verify effectiveness of corrective actions and close the loop	1 point

*Note: Please see **Annex B** for a sample of the POE survey. The POE sample size should be at least 10% of the regular occupant population. When total regular occupants < 50 staff, minimum of 30% of these occupants should be surveyed. The overall POE survey should have >80% of the regular occupants expressing no dissatisfaction which can infer that the occupants find the indoor air quality to be in the acceptable range.*

d) Indoor Air Quality (IAQ) Surveillance Audit

Conduct periodic IAQ surveillance audit and ensure that the recommended IAQ parameters are met. The audit shall be conducted by an accredited laboratory under the Singapore Accreditation Council with respect to the recommended IAQ parameters and acceptable limits stated in Table 1 of SS 554:2016 Code of Practice for `Indoor Air quality for Air-Conditioned Buildings' (For the SAC accredited laboratories, please refer to https://www.sac-accreditation.gov.sg/cab/acab/Pages/ACTL-Overview.aspx?f=LAF&a=LAF002)

Frequency of IAQ audits	Point
At least once every 3 years	1 point
At least once every 2 years	1.5 points
At least once a year	2 points

e) IAQ Management Plan Develop an active IAQ management programme to ensure the quality of the indoor environment throughout the course of the office operation	1 point

3.2 Indoor Contaminants Management

Encourage the adoption of indoor contaminant pollution control measures and air treatment strategies that can safeguard the heath of occupants.

a) VOC Limits for Interior Fittings and Finishes

Encourage use of green products certified under the Singapore Green Building Product certification with Very Good or above rating, of which the VOC emission rate standards meet more stringent VOC emission limits. Examples include:

i) Adhesives and sealants (including tile grouting)
ii) Floor coverings such as carpets, laminates and vinyl flooring (excluding tiles)
iii) Ceiling coverings such as ceiling boards
iv) Wall coverings (excluding tiles)
v) Varnish, stains lacquers or other trims (including doors and furniture)

Points scored based on % of applicable areas with such provision by category:
(Up to 3 points)

Category (for >80% of applicable area)	Point
Internal walls	1 point
Floors	1 point
Ceilings	1 point
Doors	0.5 point
Fixed furniture or system furniture	1 point

Note: Points are capped per category to encourage the selection and usage of low-VOC products across all categories.

b) Air Purging

i) Conduct pre-occupancy flush out after the completion of construction and all fitting-out of interior finishes (including fixed furniture and furnishings) for all occupied spaces to remove the contaminants

1 point

ii) Local isolation and exhaust systems to remove pollutants at source e.g. utility areas (for printing and photocopying), toilets, cleaning and chemical storage

Note: To reduce indoor contaminants, separate storage for chemicals and cleaning agents (e.g. bleach and ammonia-based agents) should be considered.

1 point

c) Pesticides and Repellent Products

Encourage the selection and usage of registered public health pesticides and repellent products as approved by NEA. These vector control products should be suitable for indoor use and does not cause pollution to the air or water quality.

1 point

3.3 IAQ Trending, Monitoring and Display	
a) IAQ Trending and Monitoring	
Provide permanent trend logging and monitoring of the following parameters, with at least 1 measuring point per floor centralised at any regular occupied space and linked to a centralised system to ensure that health and safety standards are continuously met during operational times.	
i) Temperature and relative humidity	0.5 point
ii) At least one common indoor air pollutant such as CO_2, formaldehyde, total volatile organic compound (TVOC) or particulate matters (e.g. PM 2.5/ PM 10)	0.5 point for each parameter (up to 1.5 points)
b) IAQ Display	
To provide display panels at each floor or tenancy indicating the following information to raise awareness among the tenants, building occupants and visitors on the office's indoor air conditions. • Temperature and relative humidity • CO_2 concentration • Others (e.g. formaldehyde, TVOC, particulate matters)	0.5 point for each parameter (Up to 1 point)
Part B: Spatial Quality	**12 points**
3.4 Daylighting To encourage effective daylighting to enter occupied spaces whilst minimising heat gain and visual discomfort arising from potential glare. • Enclosed rooms located away from windows • Low workstation partition heights ≤ 1.2m from finished floor level or ≤ 0.5m from the desk plane • Perimeter lighting along windows to be interlocked with photocell sensors • Light shelf to draw daylighting deeper into the open office area • Others	0.5 point each (Up to 2 points)
3.5 Artificial Lighting To encourage the following which contribute towards ensuring well-lit and comfortable spaces and minimising physiological discomfort for the users. Extent of coverage: At least 90% of occupied areas.	

a) **Lighting Level** The measured indoor lighting levels should comply with the recommended illuminance (average lux level) stated in SS 531: 2013.	1 point
b) **Colour Rendering Index (CRI)** Lightings should meet the minimum colour rendering index (R_a or CRI) stated in SS 531: 2013	0.5 point
c) **Flicker-Free Luminaires** Provision of fluorescent luminaires and LED lighting that avoid flicker and stroboscopic effects • High frequency ballasts (frequency >20kHz) for fluorescent luminaires • LED lighting with driver output frequency <200Hz and <30% flicker	0.5 point
d) **Circadian Lighting Design** To adopt lighting design that aligns indoor lighting parameters with the human circadian rhythm (internal body clock) to provide appropriate visual stimulus that enhances comfort and productivity**.** • Provision of luminaires with dynamic control of Colour Temperature and illumination level • Luminaire programmed for higher or lower Colour Temperatures depending on time of the day and season of the year	 0.5 point 0.5 point
3.6 **Glare Control** **a)** **Potential Glare Mitigation** Provision of any of the following strategies to reduce glare from windows and artificial lighting • Diffused overhead lighting • Use of light colour and matte finishes • Operable window blinds and screens • Glazing treatments/ Solar films • Workstation design to avoid glare (e.g. reduced reflective surfaces, adjustable height for monitor screens, anti-glare filters etc.)	0.5 point each (Up to 1 point)
3.7 **Acoustics** To ensure a basic level of acoustic comfort for occupant health and well-being. **a)** **Design and Layout** • Design and layout of office to avoid noise generated in immediate proximity/ facing the noise sources e.g. utility rooms, AHU rooms, server rooms, etc. Where such layouts are unavoidable,	0.5 point

proper insulation should be done such that noise is attenuated and noise reverberation is minimised. • Provision of phone booths for private phone calls to avoid disturbance to others	0.5 point
b) **Sound Attenuation** • Sound-absorbing dividers, wall panels • Sound dampening furniture and finishing (e.g. acoustic pods, wall hangings, fabrics) • Other noise cancellation techniques (e.g. sound masking)	0.5 point each (Up to 1 point)
c) **Measured Sound Levels** The measured indoor sound levels should comply with the recommended ambient sound levels in SS 553: 2016.	1 point

Low dBA	Average dBA	High dBA
40	45	50

3.8 Universally Accessible Office Design

Office design to cater to the needs of general users as well as special user groups who could visit or work there (e.g. Expectant Mothers, Mature workers, Physically challenged employees).

a) Tenanted premise is within a BCA Universal Design (UD) Mark certified building

Achieved Universal Design (UD) Mark for base building	Point
Certified or Gold	0.5 point
Gold^(PLUS) or Platinum	1 point

b) Incorporating universal design concepts within office space such as:
- At least one automated door at accessible entrance for ease of access to office space
- Stable, firm and slip-resistant walking surfaces at areas with high usage (e.g. walkways, toilets, pantries, staircases)
- Main circulation routes and corridors with minimum width of 1800mm to allow one wheelchair and one person to pass each other comfortably
- Provision of wheelchair-friendly toilets equipped with grab bars and emergency call bells
- Provision of Nursing Rooms equipped with seating, power socket, countertop with wash basin and refrigerator
- Access to assistive technology (mobility, visual, hearing)

0.5 point each
(Up to 2 points)

Section 4 – WORKPLACE HEALTH AND WELL-BEING	Green Mark Points (21 points)
Part A: Promoting Healthier Eating	**4 points**

4.1 Access to Healthier Food Options To improve the nutritional value of food made available to employees on day to day basis. a) On-site workplace eateries on board HPB's Healthier Dining Programme within the premise (Refer to https://www.hpb.gov.sg/healthy-living/food-beverage/healthier-dining-programme)	1 point if any of the workplace eateries are on board the programme
b) Offer healthier options for catering i.e. • Include whole-grains in all staple options • Offer plain water as default beverage option • Fresh fruits as an option for desserts • Coffee and tea offered must have syrup/sugar served on the side, not pre-added • Limit deep fried items (less than 10% of catered food items) (For the list of caterers who offer healthier options, please refer to: https://www.hpb.gov.sg/healthy-living/food-beverage/wog-healthier-catering-policy/about-the-healthier-catering-policy)	1 point if all 5 criteria are met for at least one event in the last 3 months
c) Pantries and vending machines offer healthier snacks and drinks • Healthier Choice Symbol products • Unsweetened drinks	Points based on extent of provision (Up to 1 point) | Extent of coverage	Point
≥ 50% of snacks and drinks	0.5 point
≥ 80% of snacks and drinks	1 point	

4.2 Supporting Facilities for Healthier Eating Habits a) Provision of water coolers/ dispensers at convenient points within office premises for staff access. A minimum of one point should be provided for each floor.	0.5 point
b) Provision of dedicated communal eating spaces furnished to support self-preparation of food and discourage eating at desks • Fridge or other cold storage options • Reheating facilities • Commonly used utensils and cutlery • Others	0.5 point for provision of at least 2 examples of furnishings with the dedicated communal eating space (Up to 0.5 point)

Part B: Promoting Physical Activity	**8 points**

4.3 Active Workplace Design To encourage physical activity at the workplace through active design of the office space for a healthy and productive workplace.	

a) Internal Staircases Visually appealing internal staircases in a visible, accessible and prominent location in the building (within 7.5 metres of an entrance and before any elevators)	0.5 point
b) Workstation Encourage physical activity whilst working. Examples include: • Availability of active workstations in common work areas (e.g. sit-stand desks, treadmill desks, bicycle desks, portable desk pedal, stepper machine) for any employee to reserve/ use • Alternative meeting strategies (e.g. standing meetings)	1 point for every example stated (up to 2 points)
c) Office Ergonomics To optimise workplace and workstation design to meet the physical capabilities and characteristics of the employee to prevent injury, illness and improve quality of work life. • Provision of ergonomic office environment in accordance to SS 514: 2016 Code of Office Ergonomics (e.g. height-adjustable workstations and chairs, standard desk with desk-top height adjustment stand, docking stations for laptops with external monitor screens, etc.) • Training and education of employees on basic ergonomics knowledge (e.g. induction programmes)	 1 point 0.5 point
4.4 Active Commute To encourage physical activity during the commute to work. a) Allocation of spaces to encourage sustainable commuting such as bicycle lots and shower/ changing facilities. b) Encourage staff to use public transport, bicycle or other human powered transportation devices through awareness and incentive programmes (monetary and non-monetary incentives, e.g. additional staff benefits such as free healthy snacks for eligible staff)	 0.5 point 0.5 point
4.5 Fitness Programmes and Exercise Facilities To encourage leisure time physical activity through fitness programmes and exercise facilities. a) Host structured, regular (at least 12 sessions per year) fitness programmes open to all staff to engage in physical activity. Examples of fitness programmes may include:	 0.5 point for every example stated (Up to 1 point)

• Group Fitness Sessions
• Sports Interest Groups
• Others (e.g. ongoing friendly competitions)
 	
b) Engagement and use of external facilities/ resources
   • Subsidised gym memberships
   • Subsidised health and fitness assessments/ analysis
 	
c) In-house exercise facilities (e.g. table tennis, exercise equipment, etc.) with shower/ changing facilities
	1 point
	
	1 point

Part C: Promoting Mental Well-being	**5 points**
4.6 Biophilic Features To encourage the provision of greenery and biophilic features that improves the physical and mental well-being of occupants. These features include: **a) Direct experience of nature** E.g. Provision of greenery (planters, potted plants, vertical greenery) or water features (e.g. aquarium) within the office **b) Indirect experience of nature** E.g. Images, natural materials, texture, colours, naturalistic shapes and forms, geometry, etc.	Points based on extent of coverage (Up to 1 point) | **Extent of coverage**	**Point**
≥ 1% of the office area	0.5 point
≥ 2% of the office area	1 point | 1 point
4.7 Mental Health Management To encourage organisational work culture to consider for well-being of employees. **a) Supporting Employee Mental Resilience** To support employee mental well-being through policies and programmes such as: • Employee assistance programme (e.g. counselling) • Mental well-being talks and workshops • Capability building workshops for supervisors • Fatigue management policies and programmes (e.g. limiting the number of overtime hours, workshops on managing work fatigue) • Others (e.g. addiction management) *Note: Employee assistance programmes should be offered on an ongoing basis, while workshops should be conducted at least once a year*	1 point each for every programme stated (Up to 3 points)

PART D: Promoting a Smoke-Free Workplace	2 points
4.8 <u>**Supporting Employee Smoking Cessation Efforts**</u> To encourage employees in their efforts to quit smoking, through creating a smoke-free environment, and through programmes and resources such as: • Smoke-free policies over and above legislative requirements (e.g. no smoking in uniform, no smoking within company premises) • In-house smoking cessation counsellors • Support groups • Others (e.g. subsidies for nicotine replacement therapy) *Note: Counselling services and support groups should be offered on an ongoing basis*	0.5 points each for every example stated (up to 2 points)
PART E: General Workplace Health	2 points
4.9 <u>**Workplace Health Policies**</u> To create an environment that supports workplace health promotion **a) Holistic Workplace Health Policies** • Flexi-benefit schemes that support healthy lifestyle programmes • Protected time for participation in health promotion activities • Work-Life policies (e.g. flexible work arrangements) • Policies that support screen time management (e.g. regular breaks away from screens) • Policies that support health screening • Policies that support breastfeeding • Others	0.5 points for every example stated (Up to 2 points)

Section 5 – ADVANCED GREEN AND HEALTH EFFORTS	Green Mark Points (30 Points)
Part A: Advanced Green Efforts	**25 points**

5.1 Energy Efficiency Index (EEI) To improve the overall energy consumption in the office through benchmarking using EEI	Points scored based on EEI improvement over stated baseline for GM Gold, Gold^{PLUS} or Platinum rating: (Up to 2 points)

Points scored based on EEI improvement over stated baseline for GM Gold, Gold^{PLUS} or Platinum rating: (Up to 2 points)

Improvement over benchmark	Point
>25%	0.5 point
>40%	1 point
>50%	2 points

5.2 Renewable Energy To encourage greater adoption and use of renewable energy. **a) On-site generation** On-site generation of renewable energy to reduce office's power consumption from the grid and carbon emissions	Points scored = 0.5 x (% replacement of electricity by renewable energy) (Up to 2 points)
b) Purchase of renewable energy Offsite power purchase agreement from licenced electricity retailers to replace or offset required power consumption from the grid. Renewal energy certificates (REC) from internally-recognised companies can also be considered.	Points based on power offset from the grid (Up to 2 points)

Extent of power offset from grid	Point
50%	1 point
100%	2 points

5.3 Energy Monitoring and Demand Control **a) Energy Monitoring** To encourage tracking of the office's energy use with data presented in a relevant manner to make occupants aware of what they are consuming and engage them to be involved in managing end-use energy consumption. **i) Electrical Sub-Metering** Provide private sub-meters to monitor the major energy use system in the office: • Air-conditioning / FCUs • Lighting • Plug loads *Note: Energy consumption of data centres/ server rooms/ hub rooms should be separately metered for the purpose monitoring and EEI calculation. Hence, no further point will be given for sub-metering of these rooms.*	0.5 point each per system (Up to 1.5 points)

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ii) Energy Portal and Dashboard

- Linking the private sub-meters to the office's energy management system (either web-based or mobile application) or equivalent for purpose of trend logging and readouts
- The provision of an energy portal or dashboard in the form of digital displays in the office or on the company's intranet

b) Demand Control

Using occupancy based controls to vary indoor conditions and reduce energy consumption while maintaining good indoor environmental quality.

- Dynamic localised control allowing staff to control their own microclimate at their workplaces to suit their personal needs and preferences (e.g. lighting level, demand control ventilation, etc.)

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0.5 point

0.5 point

1 point

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5.4 Energy Disclosure

To submit annualised energy consumption data (in kWh) for the office on an annual basis for the entire period of the certification

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1 point

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5.5 Fit-Out Waste Management

Encourage holistic environmental management plan to monitor, benchmark and continually improve the environmental performance of construction process and waste minimisation on the following arising from the fit-out/ renovation works:
- Energy
- Water
- Waste materials

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1 point

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5.6 Advanced IAQ Management

a) IAQ Surveillance Audit

IAQ surveillance audit is conducted once every three years by an accredited laboratory under the Singapore Accreditation Council with respect to the recommended IAQ parameters and acceptable limits stated in Table 1 of SS 554: 2016 based on the reference methods

b) Airborne Disinfection Technologies

Provision of a green-certified airborne disinfection technology in office to help eliminate airborne infectious micro-organisms and biological pollutants e.g. Ultraviolet Germicidal Irradiation System (UVGI)

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2 points

Points based extent of office coverage
(Up to 1 point)

Type of measurement	Point
30% to 50%	0.5 point
>50%	1 point

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c) Enhanced Filtration Media Provision of air cleaning devices with stipulated air filtration performance to regulate particulate levels for >90% of the occupied space e.g. electronic air cleaner, media filters	0.5 point
d) IAQ Management Adoption of IAQ management practices stated in Workplace Safety and Health Guidelines – Management of Indoor Air Quality in Air-Conditioned Workplaces. The appointed IAQ in-house IAQ manager should attend IAQ courses and educate the facility management staff accordingly. The IAQ management framework flowchart in the Guidelines should also be used. (Refer to https://www.wshc.sg)	1 point
5.7 Complementary Certifications Encourage tenants to take up and maintain high sustainability and corporate standards on well-being through certification. **a) Green Mark for Office Interiors scheme** • Achieved a Green Mark Award under Green Mark for Office Interiors scheme **b) Singapore Health Award** • Accorded HPB's Singapore Health Award Merit rating or above in the past 2 years **c) Other complementary certifications** Achieving other complementary certifications such as: • Sustainability disclosure according to Global Reporting Initiative (GRI) Sustainability Reporting guidelines • Certifications awarded by other bodies	 1 point if certificate is still valid 1 point 0.5 point each (Up to 1 point)
5.8 Green Mark Decal To display the Green Mark decal at a prominent location such as main entrance, foyer or main lobby to the office.	1 point

5.9 **Other Advanced Green Efforts**	Points based extent of application (Up to 5 points)		
Offices which demonstrate substantial and exemplary performance to a specific sustainability indicator or outcome addressed within Green Mark beyond what is specified in the criteria, assessed on a case by case basis.	**Coverage**	**Impact**	**Credit Points**
	≥10% to <30% of the project	Low	0.5 point per item
	≥10% to <30% of the project	Medium	1 point per item
	≥10% to <30% of the project	High	2 points per item

PART B: Advanced Health Efforts	**5 points**
5.10 Workplace Health Promotion Activities Efforts to make workplace health promotion activities known, accessible and easy to participate for employees. **a) Promotion of health-related activities** Examples: • Installation of point-of-decision prompts/ signage (e.g. at lift lobbies to encourage stair-taking) • Publicity materials to promote healthy lifestyles (e.g. tips to eat healthily, available programmes and policies that promote workplace health) • Incentives for healthier behaviours (e.g. pricing incentives for healthy food selection, choice architecture practices, rewards for regular participation of fitness programmes)	0.5 point for every example stated (up to 2 points)
b) Inclusivity Examples: • Programmes designed to reach out to off-site and shift workers (e.g. fitness classes at multiple sites, timing of activities to meet shift times, e-platforms etc.) • Catering to different demographic and preferences (e.g. differing language proficiencies)	0.5 point for every example stated (up to 2 points)
c) Others Examples: • Tenancy/ lease contract with on-site workplace eateries on board HPB's Healthier Dining programme stipulating the provision of healthier meals (at least 1 <500kcal dish or use healthier oils or serve wholegrains)	0.5 point for every example stated (up to 1 point)

Annex A: Maximum lighting power density (including ballast loss)

Type of usage	For compliance	For reference
	Maximum lighting power density (LPD) (W/m^2) stated in SS 530: 2014	Recommended illuminance (average lux level) stated in SS 531: 2013
Offices, meeting rooms, copy/ print rooms, reading areas	12	300 – 500
Entrance halls, atriums, concourses, lobbies, auditoriums	10	300
Multi-purpose halls	16	300
Canteen, cafeteria, pantries (including dining area and food preparation)	10	300 – 500
Circulation areas, corridors	7	300
Stairs	6	150
Storage areas	10	200
Toilets, changing rooms	10	200

Note:
The recommended illuminance (average lux level) for offices stated in SS 531: 2013 is 500 lux. For workspaces which are designed to 300 lux, task lighting may be provided to meet the recommended lux level requirement of 500 lux and shall be included in the LPD calculation under Part 2.1 Lighting Efficiency.

Annex B: QUESTIONAIRE FOR INDOOR ENVIRONMENT SURVEY
A. General Information and Environmental Conditions

1. Company: _____   Unit No: #_____

2. What is your gender?

    ( ) Male ( ) Female

3. What is your age group?

    ( ) Under 21 Years ( ) 21-30 Years ( ) 31-40 Years ( ) 41-50 Years ( ) 51-60 Years ( ) 61 and above

4. What is your job category?

    ( ) Managerial ( ) Professional ( ) Admin ( ) Others

    (if others, please specify: _____)

5. On average, what is the total number of hours per week you spend at your workplace?

    ( ) Less Than 10 Hours ( ) 11-15 Hours ( ) 16-20 Hours ( ) 21-25 Hours

    ( ) 26-30 Hours ( ) Over 30 Hours

6. What is the type of your workspace?

    ( ) Enclosed room ( ) Open/shared space

7. Do you work near one of the following?

    ( ) Photocopier/Printer ( ) Server rack/room ( ) Pantry ( ) Entrance

    ( ) Not applicable ( ) Others (if others, please specify: _____)

8. Which of the following do you often use to attain thermal comfort?

    ( ) Fans ( ) Extra clothes ( ) Less clothes ( ) Not applicable ( ) Others

    (if others, please specify: _____)

9. Do you experience an unpleasant odour?

    ( ) Regularly ( ) Sometimes ( ) Never

10. Do you have any of the following medical conditions?

- Asthma: ( ) Yes, on medication ( ) Yes, not on medication ( ) No
- Allergy: ( ) Yes, on medication ( ) Yes, not on medication ( ) No
- Sinus: ( ) Yes, on medication ( ) Yes, not on medication ( ) No
- Migraine: ( ) Yes, on medication ( ) Yes, not on medication ( ) No

B. Satisfaction towards Indoor Environment

Please circle your satisfaction levels towards the following parameters

Symptoms	**Level of satisfaction**
1. Thermal comfort	Excellent / Good / Average / Poor / Very poor
2. Air quality	Excellent / Good / Average / Poor / Very poor
3. Lighting level	Excellent / Good / Average / Poor / Very poor

4. Daylight level	Excellent / Good / Average / Poor / Very poor
5. Window view to outside	Excellent / Good / Average / Poor / Very poor
6. Noise level	Excellent / Good / Average / Poor / Very poor
7. Overall cleanliness	Excellent / Good / Average / Poor / Very poor
8. Overall indoor environment	Excellent / Good / Average / Poor / Very poor

C. Health Symptoms

Please circle your experience on the following health symptoms at work accordingly.

<u>Symptoms</u>	<u>Frequency</u>	<u>Feel better or relief after leaving the building?</u> **(Not applicable for 'No' frequency)**
1. Stuffy nose	Daily / 2-3 times weekly / No	Yes / No
2. Dry throat	Daily / 2-3 times weekly / No	Yes / No
3. Cough	Daily / 2-3 times weekly / No	Yes / No
4. Skin rash/itchiness	Daily / 2-3 times weekly / No	Yes / No
5. Eye irritation	Daily / 2-3 times weekly / No	Yes / No
6. Headache	Daily / 2-3 times weekly / No	Yes / No
7. Lethargy	Daily / 2-3 times weekly / No	Yes / No
8. Drowsiness	Daily / 2-3 times weekly / No	Yes / No
9. Dizziness	Daily / 2-3 times weekly / No	Yes / No
10. Nausea/vomiting	Daily / 2-3 times weekly / No	Yes / No
11. Shortness of breath	Daily / 2-3 times weekly / No	Yes / No

Have you engaged in the following behaviours at your workplace in the past 2 weeks?

<u>Symptoms</u>	<u>Frequency</u>
1. Consume healthier meals (e.g choose healthier options when dining out, or when catering in)	>3 times a week/ 1-3 times a week/ Less than once a week/ Never
2. Consume sweetened drinks (e.g. soft drinks, fruit drinks, coffee, tea, Milo etc.)	>3 times a week/ 1-3 times a week/ Less than once a week/ Never
3. Take the stairs instead of the lift	>3 times a week/ 1-3 times a week/ Less than once a week/ Never
4. Engage in regular physical activity (any form of sports/exercise for at least 20 minutes per session)	>3 times a week/ 1-3 times a week/ Less than once a week/ Never

5. Smoke	At least once a day/At least once a week/Never
6. Manage your stress levels	Able to cope: Very Well/ Quite Well/ Not Well/ Cannot Cope
7. How satisfied are you with the health activities organised at your workplace?	Very satisfied/ Satisfied/ Neutral/ Not Satisfied/ Extremely Not Satisfied/ I am not aware of the health initiatives

D. Work Engagement Score

The following 9 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the "0" (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

	Almost never	Rarely	Sometimes	Often	Very Often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

1. _____ At my work, I feel bursting with energy

2. _____ At my job, I feel strong and vigorous

3. _____ I am enthusiastic about my job

4. _____ My job inspires me

5. _____ When I get up in the morning, I feel like going to work

6. _____ I feel happy when I am working intensely

7. _____ I am proud of the work that I do

8. _____ I am immersed in my work

9. _____ I get carried away when I'm working

E. Comments and/or Suggestions

_____

_____

_____

_____

_____

Thank you for your participation.