



Blue Green Sri Lanka

Green Building Guidelines for Sri Lanka

Green Building Rating System for Government Constructions

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EE - Energy Efficiency

EE1 - Zoning of Lighting Sources / Equipment

02 Marks

Objective

Energy Management in the subjected using areas of lights by providing a flexible light control. The cost of the electricity is expected to be reduced by flexible control mechanism only in the utilized areas in a building.

Methodology

- Light fittings of every separated and closed space shall be controlled by individual switches. The percentage of individual switches controlled zones of the building shall be 90% of the total building area. Individual switch control area shall not exceed than 100m² **01 Mark**
- Installation of self-sensitive control systems for electrical lighting control in the time of building receiving the sunlight and spaces are not utilized. **01 Mark**

Switches shall be clearly numbered and, building users shall be able to reach the switches easily. (Above marking scheme will be subjected to change according to the final assessment levels released Sustainable Energy Authority).

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Plans of lighting zones controlled by Individual switches and area covered		
02. A detailed electrical layout. Location map of the Sensors and switches area covered by the automatic control		
03. A report on Percentage achieving full spatial requirements of areas where single switch are fixed		

Documents/presentations for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As-built drawings of all single switch lighting areas and zones		
2. As-built drawing of location of the switches and sensors including the controlled areas		
3. A report confirmed that the total plot coverage of the building fulfill the required percentage		
4. Additions and alterations were done to submitted information for evaluation		

Objective

To encourage sub-metering to monitor the energy consumption of the main building, all other areas, and energy intense equipment

Methodology

- Electricity Submeters for parking areas, air conditioning elevators, public places and areas where energy consumption of ≥ 100 KVA.
 - For renter buildings, separate sub-meters shall be installed for each renter space. Each renter space shall be separated as in one floor or space that can be easily separated for electrical use **01 Mark**
- Buildings with Energy Management System, every sub-meters shall be connected to the EMS system. **01 Mark**

(Above marking scheme will be subjected to change according to the final assessment levels released Sustainable Energy Authority)

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Specifications for installation of electricity sub meters		
02. Systematic plan and notes on locations of proposed sub-meters and meter service stations		

Documents/presentations for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As-built drawings of locations of sub-meters and areas covering by the sub-meters		
2 Additions and alterations were done to submitted information for evaluation		

Objective

To encourage the Reduction of the environmental pollution caused by Carbon dioxide (CO₂) emission from fuel consumption by using renewable energy. This will encourage the use of green energy and reduce the demand for new fuel power plants.

Methodology

Total energy requirement of the building shall be used the following percentages of renewable energy (This value will be considered for scoring).

- Total Solar panels cover shall be 20% of the building plot coverage or 40% of the Electricity contract demand shall be met by solar panels **02 Marks**
- Total Solar panels cover shall be 40% of the building plot coverage or 60% of the Electricity contract demand shall be met by solar panels **04 Marks**
- Total Solar panels cover shall be 60% of the building plot coverage or 80% of the Electricity contract demand shall be met by solar panels **06 Marks**
- Total Solar panels cover shall be 80% of the building plot coverage or 100% of the Electricity contract demand shall be met by solar panels **08 Marks**

(Above marking scheme will be subjected to change according to the final assessment levels released Sustainable Energy Authority)

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Plan and side Elevations of the places allocated for renewable energy equipment		
02. Technical report on technology installation methodology and expected energy output (kWp) generated by renewable energy shall be defined		
03. A report on expected renewable energy generation as a percentage overall energy consumption of the building		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As built drawings (plans and Elevations) of locations of renewable energy equipment		
2. Manufacturer's technical specification for Renewable Energy Equipment		
3. Report on amount of energy generated by renewable energy generation systems (kWp)		
4. Additions and alterations were done to submitted information for evaluation		

Objective

Reduction of energy consumption of a building and thereby minimizing CO₂ emissions.

Methodology

The points will be awarded for the buildings which exceed the compulsory level of energy efficiency to reduce energy consumption. 200 working days with 08-hour work per a day will be considered per year

Energy consumption of a year One Square meter of the building between (BEI) 150kWh / m² / Year - 130kWh / m² / Year

01 Mark

Energy consumption of a year one Square meter of the building (BEI) ≤ 130kWh/m² /Year - - 110kWh/m² /Year

03 Marks

Energy consumption of a year one Square meter of the building (BEI) ≤ 110kWh/m² /Year - - 90kWh/m² /Year

05 Marks

(Above marking scheme will be subject to change according to the final assessment levels released by Sustainable Energy Authority)

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Copies of each document to reach the level of mandatory energy efficiency (for review)		
02. Calculation sheet for proposed energy consumption for Square meter of the building per year (BEI)		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Documents to confirm the level achieved by building completed		
2. Copies of data sheet on BEI from Energy Management System		
3. Additions and alterations were done to submitted information for evaluation		

Objective

To maximize the efficient use of energy in internal and external illumination.

Methodology

Lighting power density of $\geq 80\%$ from light fittings used for internal space illumination (Lighting Power Density) shall not exceed $10\text{W} / \text{m}^2$. **01 Mark**

When external light fittings exceeding the power of 70W are used, the minimum efficiency of $80 \text{ lm} / \text{W}$ should be maintained. **01 Mark**

(Above marking scheme will be subjected to change according to the final assessment levels released by Sustainable Energy Authority)

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Detailed plans, specifications and methodology for the installation of indoor and outdoor lighting		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
01. As built drawing and detailed report on indoor and outdoor lighting installation		
02. Additions and alterations were done to submitted information for evaluation		

Objective

Avoid increment of maximum Energy Demand.

Methodology

Controller device with power factor correction accuracy within .98-1 shall be installed for three phase power supply over 60A

(Above marking scheme will be subjected to change according to the final assessment levels released Sustainable Energy Authority)

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Specifications of power factor correction devices proposed to be installed		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
01. Specifications of power factor correction device installed		
02. Additions and alterations were done to submitted information for evaluation		

Objective

Establishment methods of energy systems to achieve its fullest ability to minimize the errors caused in installation and operation procedures

Methodology

- Appointment of an independent expert consultant on energy systems in the initial stage of the project to take advice on system installation and operations
- Review of the energy system in the planning stage of the building at least one time. Monitoring the system installation procedure up to the preparation of tender documents.
- Providing a mechanism for the implementation of the planned buildings energy systems.
- Ensuring the compatibility of contractor's energy system installation methodology with the procedures of proposed energy systems.
- Development of procedures through a system manual in order to achieve efficiency systems and enable future operators' to maintain energy system with its maximum performance and efficiency.

(Above marking scheme will be subjected to change according to the final assessment levels released by Sustainable Energy Authority)

Plans/Documents required for evaluation (DA)

	Applicant	Green unit
01. Confirmation certificate from a qualified person in energy systems, assuring the consultancy was obtained during the initial planning stage		
02. Submitting the report and related documents for the proposed improvement of the energy system and its performance		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. The final report with recommendations on open building Energy Systems task		
2. A copy of Systems manual		
3. written evidence of management staff training in management structures		
4. Additions and alterations were done to submitted information for evaluation		

Objective

Increasing of energy efficiency by proper maintenance of building energy systems.

Methodology

- Minimum of 50% of the Building maintenance crew shall be mobilized in the site 03 months prior to the completion of construction they shall participate in testing the building energy consuming equipment/devices. **01 Mark**
- Allocation of a separate office building for maintenance work and necessary maintenance equipment shall be provided. **01 Mark**

(Above marking scheme will be subject to change according to the final assessment levels released Sustainable Energy Authority)

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Submission of the plan to identify room for maintenance		
02. Mobilizing a minimum of 50% maintenance crew before the practical completion of the building and identifying team members as necessary		
03. Commitment to documenting estimated maintenance cost for minimum 3 years including unnecessary maintenance costs that can be prevented		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Mobilizing 50% of the maintenance crew 1 to 3 months before practical completion of the site and mobilizing Full maintenance crew for energy and system testing following practical completion of the building		
2. Maintaining a list of tools and equipment, and a list and details of stocks of goods		
3. Additions and alterations were done to submitted information for evaluation		

SM - Sustainable Land Management and Planning

Compulsory Procedures to be followed

Prevailing building regulations of Sri Lanka shall be adapted to the construction of any building. Relevant approval shall be obtained from relevant local authorities where the site is located.

SM1 – Site Selection

04 Marks

Objective

Minimizing environmental impact of construction of a building in unsuitable sites

Selection of a land with less valuable environmental/ecological system. If it is an environmentally valuable site to minimize the environmental impact by reducing the footprint.

Methodology

To avoid construction of new buildings, filling, hard landscape, and construction of roads or parking at sites with following factors

- If the Construction site is providing and important as environmental services, economic services such as agricultural land or Forest under Department Forest
- Within the declared wildlife areas and buffer zones
- In a wetland area 30 meters away from a wetland if it is a declared wetland with respect to the terms and conditions of the declaration.
- Special places with threatened species of flora and fauna. (Reference should be made to the final edition of the Red Data list of threatening species or another acceptable document to obtained data).
- Characteristic species or a species spread over a very small area and places with endemic species
- Very rare and rare ecosystems

02 Marks

- Use of lands not within a at natural disaster risk areas/zones. If constructing in a risk area clearance shall be obtained by the relevant agencies for appropriate construction and installation

02 Marks

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Location plan of the site		
02. Approved survey plan		
03. Footprint of the proposed building, building location, distances to the border, natural lakes, rivers, water streams, and the sea closed proximity to the site, etc. Shall be clearly marked on the site plan.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
01. As-built drawings with a footprint of the constructed building, distances to the borders, natural lakes, rivers, water streams, and sea proximity to the site, etc. Shall be clearly marked on the site plan.		
02. Design changes or additions to the design after reviewing the original documents		
04. Additions and alterations were done to submitted information for evaluation		

Objective

Use of abundant buildings and land for construction in order to reduce the usage of clear land for construction. Examples: Old factory complexes, Garbage dumping sites, and Mining sites

Methodology

To re-development of the land that had been damaged due to the prior construction. Remedies can be applied to prepare the ground. This can be done by testing soil samples taken from the site.

Offered points

- 10% -50% of the total land area has been re- developed
- 51% -69% of the total land area has been re – developed
- 70% or above of the total land area has been re – developed

01 Mark**02 Marks****03 Marks****Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
1. Short report on the prior use of the land and certified test report done measure the level of soil pollution		
2. Removal of contaminated soil and other proposed measures, including environmental impact assessment report.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. A report on the decontamination process		
2. Additions and alterations were done to submitted information for evaluation		

Objective

Protecting green lands and lands with threatened environmental systems by giving priority for construction of buildings at areas with developed/ improved existing infrastructure. Reducing the private vehicle usage by increasing the development density and reconstruction.

Methodology

- Development Density

Upgrading/ refurbishing of an existing building in a develop land or construct a new building. Selecting a site which has developed at least 40% of the land extend.

Or

- Community connectivity

When upgrading/ refurbishing of an existing building in a develop land or constructing a new building from either relative density per acre Unit 10 collective zone or the building located 01 km from a residential zone and if at least 10 community facilities are available 1km from the building. Pedestrian/public accesses shall be provided.

Examples for above mentioned public amenities

Banks
Parks
Offices
Pharmacies
Restaurants
Police Stations
Fire stations
Hardware
Libraries
Information centers

Schools
Workshops
Stores
Day Care
Post Offices

Supermarkets
Laundries
Medical centers

01 Mark

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Calculate total land area and density		
2. Detailed layout of the site shall be provided with the location of the building, basic amenities, pedestrian pathways, roads, underground services, bridges and etc.		
3. Above mentioned public amenities shall be marked in a 1 km radius circle drawn around the main building		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Final calculation of the density		
2. Construction layout shall be provided with location of public amenities, paved pathways, public accesses, connectors and underground services and connections		
3. The color index shall be devised for a different type of amenities.		
4. Additions and alterations were done to submitted information for evaluation		

SM4 – Preparation of Environmental Management and Environmental Safeguard Plan	01 Mark
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Objective

Safeguarding the natural environment, minimizing the impact on natural environment in the construction implementation by following an effective management and safeguard measures

Methodology

Preparation of Environmental Management Plan and Environmental safeguard plan with guidelines to follow during the building construction and usage (marks will be doubled if the contractor is ISO 14001 certified)

01 Mark

Plans/Documents required for evaluation (DA)

	Applicant	Green unit
1. Detail report on Environmental Management and Safeguard Plan prepared in relation to the project		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green unit
1. Detailed report on implementation of environmental management and protection prepared for project evaluation		
2. Additions and alterations done to submitted information for evaluation		

Objective

Assigning of more outdoor open spaces with the green cover in development initiative and to encourage to use endemic and indigenous trees and plants in the landscape.

Methodology

Open areas shall be kept as declared by Urban Development Authority or Local Authority. 70% of these open areas shall be of green covers which 40% of it consisting of endemic and indigenous plants. When there is no sufficient space to have a green cover on the ground. Vertical and roof gardens shall be encouraged.

02 marks

Plans/Documents required for evaluation (DA)

	Applicant	Green unit
1. Landscape layout with the footprint of the proposed building. Lengths from building to the boundaries of the proposed site. Soft and hard landscape design.		
2. Endemic and indigenous vegetation cover ratio should be reflected in the landscape plan		
3. List of names of proposed plants, planting schedule and planting pallet elaborating the features of the pants, heights, form etc.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As Built Drawing of the completed Landscape layout with the footprint of the proposed building. The lengths from building to the boundaries of the site. Soft and hard landscape.		
2. Endemic and indigenous vegetation cover ratio should be reflected as-built plan of the landscape		
3. List of names of proposed plants, planting schedule and planting pallet for Landscape plan.		
4. Additions and alterations were done to submitted information for evaluation		

Objective

Controlling of Soil erosion, reduction of air pollution caused during construction work by dust and minimizing sediments along canals.

Consultants and owners shall follow a proper sedimentation and erosion management plan at the early design stage and this aspect shall be taken into account in procurement

Methodology

Following requirements shall be fulfilled by complying engineering actions specified by CIDA for mitigation of sedimentation and erosion

- Reducing soil erosion caused by the rainwater runoff and to reduce silt deposition in the canals and to reducing the spread of dust in the air and noise pollution shall be done during construction of building

01 Mark**Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
1. Plan/ proposal for control sedimentation and erosion		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Report on sedimentation and erosion control certified by a qualified person		
2. Additions and alterations were done to submitted information for evaluation		

Objective

Utilization of quality assessment system familiarized by CIDA for building construction. In order to achieve the quality of the construction

Methodology

- The quality of the construction work shall be achieved for each and every building feature as per the specifications published by CIDA.
- All consultants, contractors, building owner, and sub-contractors shall be aware of quality assessment and construction quality of buildings.
- Construction shall be monitored by a qualified person and contractor and subcontractors shall adopt the CIDA publication.

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Report on proposed plan to comply with the relevant CIDA publication		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Certification by Project Engineer and Project Architect to state that the quality was achieved accordance to CIDA specifications		
2. Additions and alterations were done to submitted information for evaluation		

Objective

To reduce pollution caused by waste generated by the site workers and other discarded materials.

Methodology

- Preparation and implementation of Site facilities Plan for site workers
- Following objectives shall be achieved by the facility plan
- Providing suitable accommodation for construction workers within the site or temporarily lease premises closer to the site
- Providing Septic tanks to prevent pollution caused by sewer mixing to the rain water drains
- Preventing site pollution, air pollution by introducing proper garbage disposal system and preventing open burning of garbage
- Providing health and sanitary facilities for site workers and safety facilities and maintaining safety.
- Preventing mosquito breeding at site by avoiding water stagnate in the site

01 Mark**Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
1. The layout of the location of the staff and workers' facilities, including health and sanitation.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Report certified by a qualified person including photographs and site records.		
2. Additions and alterations were done to submitted information for evaluation		

SM9 -Minimizing the Use of Private Vehicles and Encouraging Public Transport Usage

02 Marks

Objective

To reduce pollution caused by increased usage of motor vehicles during a new construction of the building by the planning of using public transportation in the initial design phase.

Methodology

- There shall be an existing or proposed bus stop within 250 meters to the site
 - Minimize the pollution caused by the Traffic and to reduce impact caused by land development, transportation system to the site shall be designed with minimum distance main transport stream and integrated transport system with adjacent building and reserved parking lots without separation walls
- To promote the use of green vehicles. (E.g., hybrid or electric vehicles)
 - Providing suitable parking places for green vehicles
 - Separation parking places for green vehicles shall be designed in the Project Concept Design stage and to encourage further use of green vehicles parking places shall be at areas closer to the elevators.
 - Providing charging centers for electric vehicles inside the site premises

01 Mark

01 Mark

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Building orientation on land, existing and proposed public transportation plan (Google map view is sufficient).		
2. An number of minimum parking spaces.		
3. Proposal for parking allocated for 5% of the long-term residents		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As build plan confirmed with photographs including transportation facilities.		
2. Additions and alterations were done to submitted information for evaluation		

Objective

To reduce pollution caused by individual vehicles and to reduce urban traffic congestion by encouraging the use of carpooling and public transport facilities. A minimum number of parking slots should be provided as per requirement at the initial design phase.

Methodology

To prevent providing access parking plots

- Provided $\geq 2\%$ of the parking space for carpools and vanpools
- Provided $\geq 5\%$ of the parking space for carpools and vanpools

01 Mark**02 Marks****Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
1. Layout of the parking facilities allocated for carpools and vanpools and calculation of percentage to obtain marks		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As build drawing of the parking facilities allocated for carpools and vanpools and calculation of percentage to obtain marks		
2. Confirmation from a qualified person on the calculation of parking places provided.		
3. Additions and alterations were done to submitted information for evaluation		

SM11 – Rain Water Drainage Plan - Quantity and Quality Control

02 Marks

Objective

Minimizing the impact caused by the reduction of water perforation to the ground due to the construction of buildings and managing the excess rain water. In the initial design stage, a mechanism shall be designed to manage the quantity and quality of the rainwater by retaining the water and by increasing the ground absorption.

Methodology

Measures to control the amount of water caused by 50mm rainfall should be submitted.

- In case of current surface, perforation is less than 50%, to maintain the surface water run off same as before the construction of the building
- In the case of a current surface, perforation is more than 50%, to reduce the surface water runoff by 25% after completion of the building.

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Preliminary study report on rainwater drainage plan		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. A full report including photographs and site records certified by a qualified person		
2.Additions and alterations were done to submitted information for evaluation		

Objective

Minimizing the impact of temperature on Human settlements, wildlife habitat, and microclimate by reducing the heat island effect.

To create an appropriate environment with suitable solar reflective indicators (Solar Reflectance Index - SRI) in the conceptual planning stage and ensure compliance of suitable materials and encourage the use of a flat green roof.

Methodology

i. Encouraging green covers on hard landscapes.

Use any of the following strategies for 50% of hard landscape areas surrounding the building (roads, footpaths, courtyards and parking areas)

- Planting of shady plants to provide shade to the hard landscape
- Use of paving materials with solar reflectance index 29

01 Mark

ii. Use of Roof Covers / Canopies

The roofs with angle less than 10 degrees is considered as canopy (Roof with less angle)

- a. 75% of the total roof area with shallow and sharply angled roof canopies with Solar Reflectance Index (SRI) 78% and 29% respectively
- b. For green roof and other roofs

$$\frac{\text{Solar reflective index rain water}}{0.75} + \frac{\text{area of green roofs}}{0.5} > \text{total area of the roofs}$$

- Minimum 75% of the total roof area with shallow and sharply angled roof canopies with Solar Reflectance index (SRI) 78% and 29% respectively
- Minimum 50% of the roof area shall be covered with plants. Suitable plans for roof gardens shall be used.

01 Mark

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Site layout with proposed green cover plan and the hard landscape plan shown with the roof plan drawn to scale		
2. Cross Section of the green roof drawn to scale		
3. List of names of proposed plants, planting schedule and planting pallet elaborating the features of the plants, height, form etc.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. The materials used and the solar reflectance index (Solar Reflectance Index - SRI) value list, roof construction drawings with plans and cross sections		
3. Photographs of materials used for roofs		
4. Additions and alterations were done to submitted information for evaluation		

Objective

Preparation of a user manual to provide information and as a guide to maintain performance for users including green building design, a list of features and strategies

Methodology

Preparation of user manual of the building

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Contribution to development of the framework and content of the user manual of the building		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Building user's manual		
2. Additions and alterations were done to submitted information for evaluation		

MR Building Materials & Resources

Mandatory procedures to be followed

1. Timber used for the construction of buildings shall be legitimate and certified by the State Timber Corporation
2. Asbestos shall not be used for the roof or for the ceiling
3. Solid waste collected in the building shall be segregated to the applicable standards
4. Using legitimate timber for building design.

MR1- Re-use and selection of materials

02 Marks

Objective

To encourage reuse of materials as much as possible to reduce the demand for natural resources used as building materials,

Methodology

Materials to the value of $\geq 2\%$ of total value of the project should be reused material.

01 Marks

Or

Materials to the value of $\geq 5\%$ of total value of the project should be reused material.

02 Marks

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. List of materials proposed to be re-used in the project		
2. Estimated cost of the proposed re-used materials		
3. Estimated cost of the Building materials proposed to be re-used in the project		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Photographs of reused materials during construction		
2. List of materials reused and available locations of reused materials in the building.		
3. Cost of re-used materials and restoration cost of the material		
4. Cost of the Building materials used in the project		
5. Additions and alterations were done to submitted information for evaluation		

MR2 - Material Containing recycled substance.**02 Marks****Objective**

Encouraging designers to use of recycled materials as much as possible to reduce the demand for natural resources used as building materials,

Methodology

1. Use of recycled material of $\geq 2\%$ of the total value of the building

01 Mark

2. Use of recycled material of $\geq 5\%$ of the total value of the building

02 Marks**Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
1. Document of items content of recycled material		
2. Percentage of the cost of the recycled material before construction and after construction of the building		
3. Content of the sources of recycled materials and suppliers' Details		
4. A document stating estimated cost of the materials used in the project against estimated cost of recycled material.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. A document containing details of materials containing recycled materials re-used in the construction phase along with photographs.		
2. Calculation of the amount of recycled material contained in each material used		
3. Sources of materials content of recycled materials/suppliers' details		
4. A document calculating the percentage of the cost of recycled materials on the total cost of materials used for the project.		
5. Additions and alterations were done to submitted information for evaluation		

Objective

Increasing the lifespan of the building is expected by conservation of building structures, conservation of resources, maintenance of cultural values, reducing waste generation by increase the percentage of re-use of existing buildings, conservation and redevelopment. It is also expected to minimize the damage caused to the environment in the new construction and transformation.

Methodology

- Re-use of 30% - 49% of the area of existing building

01 Mark

- Re-use of 50% or more than 50% of the area of existing building

02 Marks**Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
01. Plan of existing building used for development project		
02. Proposed re-used parts shows in different colors and proposed used of the reused area		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As built drawing of re-used building and how it was used		

MR4 - Regionally Available Materials for Building Construction

03 Marks

Objective

To encourage the use of regionally available materials in new building construction, conservation and refurbishment of existing buildings to minimize environmental impact in the transportation of building materials.

Methodology

- Use of at least 10% of total cost of the material from regionally available materials (within 200km)

01 Mark

- Use of at least 20% of total cost of the material from regionally available materials (within a 200km)

02 Marks

- Use of at least 30% of total cost of the material from regionally available materials (within a 200km)

03 Marks

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. List and details of local raw materials and materials used in this project		
02. Provide the following: • Name of the Product • Production cost The distance to the manufacture from project site		
3. Estimated total cost of the materials		
4. Percentage of the cost of proposed local materials from total cost of the material		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Details of the local material production shall be given with following details • Distance to the local material manufacturer • Percentage of the cost of building materials used in construction using local raw materials from total cost of the materials used		
3. Calculation of total cost of the raw material		
4. Costs of local material as a percentage of the total cost of the materials		
5. Additions and alterations were done to submitted information for evaluation		

Objective

Reducing the devastating impact on the natural forest by growing trees with the high growth rate for timber and use of timber through scientifically accurate quality methods, increasing the lifespan of the wood.

Methodology

Use of 100% of total timber requirement through certified quality timber products.

Taking above mention requirement into consideration in accordance with the Timber Corporation classification of timber for green building;

Using of class 3 timber

01 Mark

Using of class 2 timber

02 Marks

Using of class 1 timber

03 Marks

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. List of all timber products proposed for the project with estimated cost		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Permits and classification certificated for timber produced by Timber Corporation and Forest Department for used timber		
2. Additions and alterations were done to submitted information for evaluation		

Objective

Encouraging the use of high green value material in development projects to minimize the damage caused to the environment and to the people who use buildings.

Methodology

According to the CIDA specifications of Green Value measurement of the buildings

Using of materials with $\geq 2.5\%$ green value 20%-40% of total material cost

01 Mark

Use of materials with $\geq 2.5\%$ green value 40%-60% of total material cost

02 Marks

Using of materials with $\geq 2.5\%$ green value $\geq 60\%$ of total material cost

03 Marks

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. List of building materials with ≥ 2.5 green value.		
2. Documents to support calculation of green value with the following content a. Description of materials b. Energy consumption and CO₂ emission c. Chemical reaction and raw material content d. Maintenance requirements e. Emission of chemicals during usage f. Final value		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. List of building materials with ≥ 2.5 green value		
2. Document stating calculation of building green value of materials used with following content a. Description of raw materials b. Energy consumption and CO₂ emission c. Chemical reaction and raw material content d. Maintenance requirements e. Emission of chemicals during usage. f. final value		
3. Additions and alterations were done to submitted information for evaluation		

Objective

Encouraging to devise a program to manage construction waste by minimizing of construction waste production, recycle and disposal, utilization of construction waste as a filling material

Methodology

1. Recycling $\geq 25\%$ of nonhazardous construction waste or convert to salvaged material **01 Mark**
2. Recycling $\geq 50\%$ of nonhazardous construction waste or convert to salvaged material **02 Marks**

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Preparation of table of materials proposed to convert into salvage material, for recycle and used for ground filling and calculation of quantity		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Reports to confirm, the quantity of salvage material, recycled material, materials used for filling according to the construction waste management plan.		
2. Additions and alterations were done to submitted information for evaluation		

Objective

To encourage use of materials with zero entry ozone compounds and compounds that minimize the global warming and to identify the above materials

Methodology

1. Use of Refrigerants & Clean Agents with global warming index less than 2000 but not more than 700 **01 Mark**
2. using of natural (not made artificially) zero Ozone compounds and using of Refrigerants & Clean Agents with global warming index less than 700 **02 Marks**

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Specifications of proposed Refrigerants and /or Refrigerants and clean agents presently used.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Specifications and list of used Refrigerants and clean agents		
2. Additions and alterations were done to submitted information for evaluation		

EQ - Quality of Internal Environment of the Building

EQ1 – Monitoring and Controlling of CO₂

02 Marks

Objective

Improving the health condition of the building uses by providing good ventilation system by measuring CO₂ content.

Methodology

Installation of CO₂ gauges inside the building where internal air exhausted out of the building maintain the CO₂ content < 1000 ppm

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Documents on CO ₂ sensor equipment installed to monitor and control the CO ₂ content		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Specifications of CO ₂ sensors and control units in the building		
2. Brief description of CO ₂ controlling and monitoring system, equipment and its' locations		
3. Manufacturers details and specifications of the equipment		
4. Photographs of the equipment and their locations.		
5. Additions and alterations were done to submitted information for evaluation		

Objective

To minimize adverse health effects of the building users by minimizing the use of volatile organic compounds (VOC).

Methodology

Wall paints, other applications, and flooring are considered in this

- Using of paints, carpets and other flooring materials contain low VOC
01 Mark
- Not using materials with urea and formaldehyde for building construction
01 Mark

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Test report shall be submitted to the effect that the proposed paints and other applications are free of VOC and formaldehyde		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Drawing of the building where low amount VOC materials used		
2. A list of low VOC materials used, and its' specifications		
3. description of the material manufacturer certification and test reports of the low VOC materials used, to be eligible for marks		
4. photographs of sections established with minimum VOC materials.		
5. Additions and alterations were done to submitted information for evaluation		

EQ3 –Design and Installation of Optimum Temperature Control Units

02 Marks

Objective

To maintain the efficiency and comfort of building users by providing a user comfort temperature through designing and maintaining an optimum temperature in the building

Methodology

Installing an HVAC system of the building to maintain the building interior temperature in optimum level, and to achieve the external cover ASHRAE level 55-2004 (Temperature comfort level) and installment of equipment to control and measure optimum temperature level

02 Marks

Plans/Documents required for evaluation (DA)

	Applicant	Green unit
1. Details of the design used to maintain ASHRAE standards 55 – 2004 levels		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As built drawing of installed equipment to measure and control optimum temperature level to achieve building ASHRAE level 55-2004 of human comfort level		
2. Temperature data taken during a period of 72 Hrs		
3. Temperature data of spaces individually and group used		
4. Photographs of control sensors fixed.		
5. Additions and alterations were done to submitted information for evaluation		

Objective

Avoid mixing of inflow and exhausted air to maintain a better ventilation system in the building.

Methodology

To achieve following air quality, of 90% area of the building. Design of the air supply unit of the building to $ACE > 0.95$

01 Mark

Air change effectiveness – (ACE) measure from 1m height from the finish floor level ASHRAE 129-1997

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Summary report of the system used to optimize the air quality of the each space		
2. Design of the ventilation system to achieve marks		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Ventilation system installation diagram		
2 Summary report on system installed to optimize the air quality of the each space of the building		
3. Measurement chart		
4.Additions and alterations were done to submitted information for evaluation		

Objective

To encourage the use of daylight inside the building

Methodology

- To maintain the daylight lux level measured from 800 mm above the finished ground level of the building at 2% and to light up $\geq 30\%$ of the total building area from daylight

01 Mark**Or**

- To maintain the daylight lux level measured from 800mm s above the finished ground level of the building at 2% light up $\geq 50\%$ of the total building area from daylight

02 Marks**Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
1. Summary report and design drawings of the light intake into the building include glare control strategy		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As built drawing showing the installed daylight intake system		
2. Layout with the daylight lux level at every area		
3. Building layout with solar diagram and sun path including the heights of the existing and proposed buildings		
4. Summary of daylight lux level		
5. Photographs of each equipment fixed		
6. Additions and alterations were done to submitted information for evaluation		

Objective

Establishment of glare cut off system of the daylight

Methodology

Cutting off uncomfortable glare on external glass facia of the building by using blinds or covers

1. Avoiding of direct sunlight flow to the internal spaces of the building and maintaining the lux level at less than 2000
2. Avoiding direct sunlight flow to the building user by maintaining the light direction angle at 15-60 degrees (measured from 1.2m of the finished ground level)

Suitable trees can be planted to cut off the direct sunlight flow to the building

3. Avoiding direct sunlight and obtaining a minimum of lux level $\geq 2\%$ of 75% of the total building area

Plans/Documents required for evaluation (DA)

	Applicant	Green unit
1. Description of daylight control system		
2. A summary report confirming on daylight intake when the daylight glare control system is activated.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green unit
1. As built drawing of the building ensuring the original design has been followed		
2. A summary report and certification on daylight intake when daylight control system is in function		
3. Description of system installed		
4. Photographs of different types of glacer control systems installed.		
5. Additions and alterations were done to submitted information for evaluation		

Objective

To encourage designing of effective and efficient electrical lighting systems

Methodology

To achieve final amended standard issued by Sustainable Energy Authority

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Brief description on lighting design		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As built drawing of the lighting design		
2. Lux gauge explain the lighting level to obtain marks		
3. Photographs of established lighting system		
4. Additions and alterations were done to submitted information for evaluation		

Objectives

To preserve the physical and mental fitness of the building users and to reduce the eyestrain of the users, protect the natural environment and the views. Selecting external views suitable for the building when designing a building.

Methodology

Taking borrowed views of the surrounding landscape by minimizing the external solid walls and internal partitions

- Designing a direct view paths 1.2m from the finished floor level of 60% of the total building area

Plans/Documents required for evaluation (DA)

	Applicant	Green unit
1. Floor layout marked with external views		
2. Internal arrangement of the building with external framed view		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As built drawing showing the external spaces views of the building		
2. As-built drawings and photographs of the building showing outside views from the interior		
3. Additions and alterations were done to submitted information for evaluation		

Objective

To maintain the internal noise level of the building in user comfort level.

Methodology

- High volume unrest those who lives in the internal environment. Therefore, to ensure maintaining the internal noise at acceptable level, 90% of the total building interior space shall be at the noise level of GVB4/16 CIBSE Guide B4: Noise and Vibration Control for Building Services System

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. A report on strategic plan including drawings to maintain the level of internal noise at a given limit		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Report with data sheet obtained by measuring the noise level to ensure the achievement of required noise level		
2. Photographs of materials facilitated sound control		
3. Additions and alterations done to submitted information for evaluation		

WE - Water Efficiency

Mandatory procedures to be followed

An audit for water usage in every 02 years to evaluate water efficiency in every building should be done.

WE1 - Rain Water Harvesting

02 Marks

Objective

To reduce the amount of portable water usage, designing of a method to collect rainwater that flows over roof and ground runoff water.

Methodology

Percentage of rainwater collection into the total water requirement of the building as follows

Using of rain water 05% or above

01 Mark

Using of rain water 10% or above

02 Marks

Percentages shall be calculated referring to the usage of rainwater relative to the basic water needs of the building

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
1. Calculation of the total water requirement for each function of the building		
2. Methodology of rainwater collection system		
3 Rainwater collection capacity		
4. Usage of collected rainwater in the building		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. As built drawing of rainwater storage tanks and installation method of the rainwater collection system		
2. Photographs of established system Accessories		
3. Additions and alterations were done to submitted information for evaluation		

Objective

To reduce pollution caused by releasing wastewater into the environment by encouraging waste water recycling

To reduce portable water consumption in the building, encourage reuse of recycled water for sanitary pipes, and for landscape watering by means of the irrigation system.

Methodology

Establishment of the treatment plant in the site for treating of waste water (gray water / black water) and reuse refined water for landscape watering and toilet flushing. By selecting trees and plants with less amount of water consumption and using of plants easily adopted to the ground condition of the site also reduce the amount of water need for landscape watering.

Total wastewater volume of the building

Recycled $\geq 10\%$ of total wastewater volume

01 Mark

Recycled $\geq 30\%$ of total wastewater volume

02 Marks

Recycled $\geq 50\%$ of total waste water volume

03 Marks

Refined $\geq 50\%$ of the total wastewater volume and dispose to the environment

04 Marks

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Initial calculation of proposed water purification and recycling percentage		
02. Technical report on wastewater treatment and recycling system, storage facilities and distribution systems		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. A report on final calculation of percentage of water recycled or refined after being installed the system		
2. As built drawing of treatment plant, storage tanks, and wastewater treatment methodology		
3. Additions and alterations were done to submitted information for evaluation		

WE3 - Water Metering and Water Leaks Identification System

02 Marks

Objective

Encourage to design a water supply system with a proper supervision and management

Methodology

1. Installing sub-gauges (sub-metering) water management and supervision systems for rented spaces in the same premises. **01 Mark**
2. To limit water leakage and wastage by the positioning of EMS monitoring system. Testing for water leaks in every 2 years. **01 Mark**

Plans/Documents required for evaluation (DA)

	Applicant	Green unit
01. To limit water leakage and wastage positioning of EMS monitoring system. Testing for water leaks and in every 2 years.		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Installation of sub gauges (meters) and maintaining a data sheet		
2. A map of sub-meter positions in the building		
3. Photographs and a list of sub- meters.		
4. Additions and alterations were done to submitted information for evaluation		

Objective

Encouraging minimizing the consumption of pipe borne drinking water by using efficient Accessories

Methodology

Reduction of pipe borne water consumption of the building by using efficient water compartments, water basins, shower heads or bathing systems. Use of automatic and sensor controlled accessories to minimize the water wastage from accessories, $\geq 30\%$ of the building's total accessories.

01 Mark

Reduction of pipe borne water consumption of the building by using of efficient water compartments, water basins, shower heads or bathing systems. Use of automatic and sensor controlled accessories to minimize the water wastage from accessories, $\geq 50\%$ of the building's total accessories

02 Marks**Plans/Documents required for evaluation (DA)**

	Applicant	Green Unit
1. Short explanation on achievement of system requirement		
2. A report on proposed equipment		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Table of water efficiency equipment and percentage of the water usage reduction		
2.. Manufactures specifications and detailed layout of equipment installed.		
3. Additions and alterations were done to submitted information for evaluation		

IN - Green Innovation

IN1 - Utilization of Innovations

05 Marks

Objective

In addition, to the requirements needed to be fulfilled in the green evaluation method, to appreciate unique inventions and identification of creative innovation in green buildings

Methodology

Innovations in project implementation to be presented in the following sections.

- The introduction of new power generation sources and methods in the project.
- Eco-farming methods and landscape designs for interior and exterior of the building. (Micro Climate)
- Introduction of endothermic techniques for buildings
- Introduction of new building materials with more green value
- Introduction of self-cleaning surfaces for building exterior
- Introduction of a Low-energy ventilation system
- Introduction of a new structural design

Technical Committee will evaluate the above innovations under above listed 7 main sections to offer marks.

In order to achieve the maximum productivity, new innovations shall be implemented at the initial planning stage

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01. Project report with certification for new innovation		
02. Innovative proposals with detail drawing enabling to identify easily		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. Final project report with photographs to ensure the accuracy		
2. Daily Maintenance Manual and documents.		
3. Additions and alterations were done to submitted information for evaluation		

SC - Socio-Cultural Compatibility

SC1 - Design and Building of Socially and Culturally Compatible Buildings

02 Marks

Objective

The architecture of the proposed development shall be compatible with existing architectural context and social context (this covers historically, archeologically significant zones and zones with special architectural value).

Methodology

Confirmation that the site is in or not in a declared architecturally significant zone at the preliminary planning clearance stage and to confirm the proposed architectural style is socially and culturally compatible with the context.

Plans/Documents required for evaluation (DA)

	Applicant	Green Unit
01.Certified document to confirm that the design is done accordance with regulations of the declared zone (approved plans/documents)		
02. Project report and drawings confirming that the design is compatible with social and cultural characteristics of the context		

Documents/presentations required for accuracy evaluation in completion of building construction (CVA)

	Applicant	Green Unit
1. A copy of the certificate of conformity for the project confirming that the construction is in accordance with relevant regulations		
2. As built drawings of the construction confirming that it is compatible with Architectural characteristics and social characteristics of the surrounding context		
3. Additions and alterations were done to submitted information for evaluation		



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