

## To be filled by the CIDC VKA applicant & handed over to CIDC evaluators

### 13th CIDC Vishwakarma Awards 2022 - CIDC Green Building Rating – Evaluation Form

Criterion	Commitment	Complying	
A.	Site Selection & Design	Yes	No
1.	The selected site should be in conformity with the development plan/master plan/ UDPFI guidelines. This should comply with the provisions of ecosensitive zone regulations, coastal zone regulations, heritage areas, water body zones, various hazard prone area regulations, and others if the site falls under any such area.		
2.	The selected site should be located within ½ km radius of an existing bus stop, commuter rail, light rail or metro station and/or select Brownfield site.		
3.	Site development uses a previously developed site.		
4.	Site development uses reclaimed land.		
5.	Site contamination assessment on developed or reclaimed land and implementing measures for rehabilitation as necessary, and/or proper preparation of sites and structures adjacent to landfill sites.		
6.	Neighborhood services are sufficient to provide for basic needs of the sites/users.		
7.	Availability of adequate open space and existing recreational facilities for users.		
8.	Site design appraisal report which demonstrates a proactive approach to achieve greater integration of site planning issues.		
9.	Development does not have a negative impact on sites of cultural heritage		
10.	Designs that demonstrate how landscaping and other site design strategies minimizes ecological impact for greenfield sites, or contributes positively to the ecological value of brownfield sites		
11.	Utilization/Use of previous materials for a minimum of 50% of hard landscaped areas		
12.	Reduce elevated temperatures in exposed public areas due to site layout and choice of material		

13.	Site development must have no negative impact on neighboring buildings in respect of access to daylight, views and natural breezes.		
14.	Provide safe and efficient access for vehicles entering and leaving the site		
15.	Zoning of areas on-site is appropriate to the existing site features (slopes, vegetation, water bodies and other natural formations)		
16.	Total paved area of site under parking, roads, paths, or any other use not to exceed 25% of site area		
17.	Total surface parking not to exceed the capacity permitted by local bylaw (mandatory) and		
18.	Ensure access to facilities and services by adopting appropriate site planning to eliminate barriers as per NBC2005 (BIS 2005f)		
<b>B.</b>	<b>Environmental Protection</b>		
1.	Proper implementation of staging and spill prevention plan and effective erosion and sedimentation control to prevent soil erosion.		
2.	Carry out detail site analysis and ensure sustainable site planning		
3.	Integration of building envelopes systems which optimizes the integrity of the envelope over the building life.		
4.	Preserve top soil by employing measures described in the technical background		
5.	Preserve existing vegetation by means of non-disturbance or damage to the trees and other form of vegetation OR trees/plants replanted within site premises in ratio of 1:3		
6.	Proper top soil laying for supporting vegetative growth		
7.	Proper stabilization of soil		
8.	Provision in the contract document that the contractor will undertake the responsibility to prevent air pollution		
9.	Climate responsive building design		
10.	Obtrusive light from exterior lighting meets the specified performance for the environmental zone in which the site development is located.		
11.	All the insulation used in building are free of Chlorofluorocarbons (CFCs) and HydroChloroFluoroCarbons (HCFCs)		

12.	All the HVAC and refrigeration equipment are free of CFCs and HCFCs		
13.	The fire suppression systems and fire extinguishers installed in the building are free of halon		
<b>C.</b>	<b>Construction Methodologies &amp; Processes</b>		
1.	Ensure proper timing of construction with respect to rain and confine construction activity to pre designated areas		
2.	Execution of all construction activities as per their respective method statements		
3.	Employment of certified skilled labour		
4.	Compliance with NBC norms on construction safety for ensuring safety during construction		
5.	Adopt measure to prevent air pollution in the vicinity of site, due to construction activities		
6.	Provision for Health and sanitation facility as specified above		
7.	Reduction in water consumption by 30% to 50%		
8.	Efforts to minimize potable water use during construction		
9.	Demolition/Construction Management Plan including provisions for Environmental Monitoring and Auditing		
<b>D.</b>	<b>Material Usage During Construction</b>		
1.	Consumption of locally available construction materials		
2.	Reuse of 15%-30% or more of the existing building sub structure or shell.		
3.	Demonstrating that in applications where rapidly renewable materials can be employed at least 50% are used in the building.		
4.	Application of modular and standardized design in buildings.		
5.	Manufacture of 50% - 80% of listed building elements has been off-site.		
6.	Virgin forest products are not used for temporary works during construction.		
7.	Sourcing timber and composite timber products which are from well managed sources, including reuse of salvaged timber.		
8.	Use 50% of recycled materials in site exterior surfacing work, structures and features.		
9.	Design providing flexibility through the choice of building structural system that allows for change in future use, and which is coordinated with interior planning modules		

10.	Designs providing spatial flexibility that can adapt spaces for different uses, and allows for expansion to permit additional spatial requirements to be accommodated.		
11.	Use of products in the building fabric and services that avoids the use of ozone depleting substances in their manufacture, composition or use.		
12.	Use of 5% of recycled materials, other than fly ash, in the construction of the building; and maximizing use of fly ash or similar in concrete.		
13.	If minimum 15% replacement of portland cement with fly ash by weight of cement used in structural concrete		
14.	If the above is > 30%		
15.	If minimum 40% replacement of portland cement with fly ash by weight in building blocks for wall		
16.	If the above is > 40%		
17.	If certify minimum 30% replacement of portland cement with fly ash in plaster/masonry mortar		
18.	If the above is >30%		
19.	Reduction of material consumption from standard material consumption rates by 5%		
20.	Reduction of material consumption from standard material consumption rates by 5% to 10%		
21.	Reduction of material consumption from standard material consumption rates by 10% to 15%		
<b>E.</b>	<b>Energy Investment During Construction</b>		
1.	If the embodied energy in the major elements of the building structure of the assessed building is reduced by 10%		
2.	If the embodied energy in the major elements of the building structure of the assessed building is reduced by 10% to 15%		
3.	If the embodied energy of the sub-assembly/internal partitions/paneling/false ceiling/in-built furniture is reduced by 10%		

4.	If the embodied energy of the sub-assembly/internal partitions/paneling/false ceiling/in-built furniture is reduced by 15%		
5.	If the embodied energy in the flooring of the assessed building is reduced by 10%		
6.	If the embodied energy in the flooring of the assessed building is reduced by 15%		
7.	If the embodied energy in the doors/windows, frames of the assessed building is reduced by 10%		
8.	If the embodied energy in the doors/windows, frames of the assessed building is reduced by 15%		
<b>F.</b>	<b>Energy Expenses During Usage</b>		
1.	Specify the use of certified energy efficient appliances.		
2.	Luminous efficiency of 100% of lamps used in outdoor lighting meets the corresponding lamp luminous efficacy prescribed in CCGR		
3.	Automatic controls for 100% of outdoor lights		
4.	Percentage of total outdoor lighting fixtures with solar lighting system, (25% to 50% of total number or minimum of 15% of total connected load, whichever is higher).		
5.	Efficient artificial lighting system design		
6.	Compliance with Energy Conservation Building Code of the BEE		
7.	Reduction in energy consumption compared to benchmarked figure		
8.	If reduction in energy consumption up to 10% of the benchmarked figure and the thermal comfort criteria are fully met		
9.	If reduction in energy consumption between 11% and 20% of the benchmarked figure and the thermal comfort criteria are fully met		
10.	If reduction in energy consumption between 21% and 30% of the benchmarked figure and the thermal comfort criteria are fully met		

11.	If reduction in energy consumption between 31% and 40% of the benchmarked figure and the thermal comfort criteria are fully met		
12.	If reduction in energy consumption by 40% of the benchmarked figure and the thermal comfort criteria are fully met		
13.	Installation of lift and escalator complying with the Code of Practice for Energy Efficiency of Electrical Installation		
14.	Complying with the recommended installation positions for air-conditioners with regard to internal spaces		
15.	Complying with the minimum width of any external recess with regard to heat rejection for air conditioner		
16.	Complying with the items listed in the assessment check-list for air conditioner unit		
17.	Provide suitable facilities which utilize the natural environment for the majority of residential units.		
18.	Installation of energy efficient lighting equipment and control for the lamps in areas where daylight is available.		
19.	Use heat reclaim chillers or heat pumps for pre-heating domestic hot water supply or pre-heating hot water supply for winter space heating.		
20.	Use of energy efficient ventilation fans that will consume less electricity than those meeting the zero credit requirements by 15% or more.		
<b>G.</b>	<b>Indoor Environmental Quality</b>		
1	Demonstrating design integration between fire services systems, communication systems, and non-fire services systems.		
2	Designs that meet the electromagnetic compatibility requirements in respect of power quality and low frequency magnetic fields		
3	Designs that reduce the potential for transmission of harmful bacteria viruses, and odours		
4	Provision of hygienic refuse collection system		

5	Demonstrated use of minimization and consolidation of transportation/service corridors		
6	Use of aggregate utility corridors		
7	Consolidation of utility corridors along the previously disturbed areas or along the new roads, in order to minimize unnecessary cutting and trenching, and to ensure easy maintenance		
8	Adequate day-lighting in each functional area (minimum level mandatory and higher levels optional)		
9	Zero/low-VOC paints – zero/low - VOC paints for 100% of all paint used in the interior of the building		
10	Low-VOC sealants and adhesives - 100% of all the sealants and adhesives used are water based rather than solvent based /low in solvent content		
11	100% of composite wood products with no urea formaldehyde resins		
12	Water quality confirming to Indian standards. Drinking : IS 10500-1991, Irrigation: IS 11624-1986		
13	The outdoor noise levels are Within the acceptable limits as set in Central Pollution Control Board-Environmental Standards-Noise (ambient standards)		
14	The indoor noise levels are within the acceptable limits as set in National Building Code of India-1984, Part VIII-Building Services, Section 4-Acoustics, Sound insulation and noise control.		
15	Company policy for ban/prohibition of smoking within the building premises		
16	A signed template by HVAC/architectural consultant certifying that all compliances are met in case designated smoking areas are provided		
<b>H.</b>	<b>Renewable Energy</b>		
1.	Rated capacity of proposed renewable energy system is equal to more than 1% of internal lighting and space conditioning connected loads or its (Mandatory) equivalent in the building		
2.	If rated capacity of proposed renewable energy system meets annual energy requirements equivalent to at least 5% of internal lighting connected load		

3.	If rated capacity of proposed renewable energy system meets annual energy requirements equivalent to at least 10% of internal lighting connected load		
4.	If rated capacity of proposed renewable energy system meets annual energy requirements equivalent to at least 20% of internal lighting connected load		
5.	If rated capacity of proposed renewable energy system meets annual energy requirements equivalent to at least 30% of internal lighting connected load		
6.	If annual energy saved by proposed renewable energy system is 20% to 50% of annual energy required for water heating to meet the hot water requirement of the occupants in the building		
7.	If annual energy saved by proposed renewable energy system is 60% to 70% of annual energy required for water heating to meet the hot water requirement of the occupants in the building.		
8.	If annual energy saved by proposed renewable energy system is 60% to 70% of annual energy required for water heating to meet the hot water requirement of the occupants in the building.		
<b>I.</b>	<b>Waste Management During Construction</b>		
1.	Implementation of a waste management system that provides for the sorting and proper disposal of inert and non-inert demolition materials.		
2.	Sorting and recycling specified demolition waste.		
3.	50%-75% of demolition waste is recycled.		
4.	Implementation of a waste management system that provides for the sorting and proper disposal of inert and non-inert construction materials.		
5.	Sorting and recycling specified construction waste.		
6.	50%-75% of construction waste is recycled.		
7.	Facilities for the collection, sorting, storage and disposal of waste and recovered materials		
8.	Segregation of inert and hazardous wastes and recycling and safe disposal of segregated wastes		
<b>J.</b>	<b>Waste Management During Usage</b>		



1.	Treated water should meet the prescribed disposal standards		
2.	Provision of multi-coloured bins of segregation of waste at source		
3.	Allocate separate space for the collected waste before transferring it to the recycling/disposal stations.		
4.	Zero waste generation through appropriate resource recovery measures		
<b>K.</b>	<b>Water Usage &amp; Recycling</b>		
1.	Fresh water plumbing installations comply with the referenced good practice guides and demonstrating that the quality of potable water meets the referenced drinking water quality standards at all points of use.		
2.	Annual water reuse up to 25%		
3.	Additional points for annual water reuse from 25% to 50%		
4.	Additional points for annual water reuse from 50% to 75%		
5.	Installation of automatic shut-off of devices for the purpose of water conservation		
6.	Installation of monitoring water leakage within the fresh water distribution system		
7.	Installation of monitoring of water flow at main supply branches for audit purposes		
8.	Use of an irrigation system which does not require the use of municipal potable water supply after a period of establishment is complete		
9.	Harvesting of rainwater will lead to a reduction of 10% or more in the consumption of fresh water		
10.	Provision of plumbing and drainage systems that provide for separation of grey water from black water.		
11.	Installation of water efficient facilities and appliances		
12.	Reduction in annual sewage volumes by 25%		
13.	Recharge of surplus rain water into aquifer		
<b>L.</b>	<b>Operation &amp; Maintenance</b>		
1.	Appendage of specific clause in the contract document for commissioning of all electrical and mechanical systems to be maintained by the owner, supplier or operator.		

2.	Provision of a core facility/service management group (IF applicable), or the owner or occupants themselves (in the case of single owner, commercial buildings) undertaking the responsibility for the operation and maintenance of the building.		
3.	Documentation of the operation and maintenance best practices for the building, electrical and mechanical systems.		
4.	Provide fully documented operations and maintenance manual to the minimum specified		
5.	Provide training to operations and maintenance staff to the minimum specified and demonstrating that adequate maintenance facilities are provided for operations and maintenance work.		
<b>M.</b>	<b>Innovation and Performance Enhancement</b>		
1.	The project team may identify other innovative interventions that have a significant positive environmental impact in the context of their project.		
<b>Details of the Company Representative/Project Manager</b>			

**Name:**

**Designation:**

**Signature:**

**Stamp**

**Contact Details:**

**Mobile No:**

**Email:**

**Date:**

**Time:**