

IGBC GREEN SCHOOLS RATING SYSTEM - SCORECARD

THE PUPIL SAVEETHA ECO SCHOOL, CHENNAI
RATING ACHIEVED: PLATINUM

Registration No.: GS 16 1026
 Date: 25 September 2017

90	0	18	Certified 55 to 65 Points, Silver 66 to 76 Points, Gold 77 to 87 Points, Platinum 88 to 110 Points			
Achieved	Pending	Not Attempted	Credits	Existing Schools (ES)	Review Comments	
Site Selection & Planning (SSP)						
Y			SSP Mandatory Requirement 1	Local Building Regulations	Required	The school has submitted approved plans and sanction letter documents. This meets the requirements of the mandatory requirement.
1			SSP Credit 1	Top-Soil Preservation	1	The school has submitted a narrative stating the measures implemented on site to prevent soil erosion along with photographs. Measures implemented during construction include: 1. Top soil preservation and stockpiling 2. Sedimentation trenches throughout the site 3. Temporary seeding and mulching Also a narrative has been provided describing the measures implemented to avoid soil erosion in post-construction stage such as landscape, maintenance and stormwater management plans along with photographs.
2			SSP Credit 2	Eco-friendly Commuting Practices	2	A declaration indicating that 54% of the students & teachers will commute through school bus has been provided. Submittal also includes a contract agreement between school management & the service provider for buses and list of bus routes. This meets the requirements.
2			SSP Credit 3	Parking Capacity	2	The campus has provision for parking 100% of the buses. Site plan and photographs have been provided to support the claim.
1		1	SSP Credit 4	Greenery in Campus 20%, 30%	2	Calculations have been provided indicated that landscape area against the total playground area is 27.56%. Also, landscape plan and photographs have been provided. This meets the requirements and one credit point is awarded.
		2	SSP Credit 5	Minimise Heat Radiation: Non-roof 50%, 75%	2	To meet credit requirements the school should provide trees to cover with shade for atleast 50% of non-roof impervious areas.
2			SSP Credit 6	Minimise Heat Radiation: Roof 50%, 75%	2	The school has submitted calculations indicating that 98.28% of the roof area excluding service areas has been covered with high SRI paint. Photographs and test report indicating the SRI value of the coating have been provided. This meets the credit requirements.
2			SSP Credit 7	Universal Design	2	A narrative has been submitted stating that school has provided features for differently abled people including ramps with handrails, designated toilets and designated parking space. Photographs of features have also been provided. This meets the credit requirement.
10	0	3	TOTAL		13	

Sustainable Water Practices (SWP)						
Y			SWP Mandatory Requirement 1	Rainwater Harvesting, Roof & Non-roof, 25%	Required	The school has provided a narrative stating that water table in site is less than 4m. A report from engineer has been provided indicating that ground water is available at 3.2m. This meets the mandatory requirements.
		2	SWP Credit 1	Rainwater Harvesting, Roof & Non-roof 50%, 75%	2	Not Attempted
2			SWP Credit 2	Water Efficient Plumbing Fixtures 10%, 20%	2	School has used efficient plumbing fixtures such as low flow faucets and low flor urinals. Calculations have been provided indicating that school has reduced water consumption by 21.45% against the baseline. Photographs of plumbing fixtures and manufacturer letter indicating flow rates have also been provided. This meets the requirement.
1		1	SWP Credit 3	Turf Design 30%, 15%	2	Landscape plan and calculations have been provided indicating that 318.58 sq.m of area has been provided with turf against the total landscape area of 1,358.128 sq.m i.e. 23.56% Photographs of turf areas have been submitted. This meets the requirements for one credit point.
2			SWP Credit 4	Water Efficient Landscaping 25%, 50%	2	Landscape plan and calculations have been provided indicating that 1039.548 sq.m of area has been planted with native species against the total landscape area of 1,358.128 sq.m i.e. 76.54% List of native species and photographs of turf areas have been submitted. This meets the requirements.
1			SWP Credit 5	Water Efficient Irrigation System	1	A narrative has been provided stating that irrigation systems used in the campus including: 1. Central shut-off valve 2. Sprinklers for lawn area 3. Drippers for shrubs & trees Photographs have been provided.
4			SWP Credit 6	Waste Water Treatment 75%, 95%	4	A narrative has been submitted stating that off-site waste water treatment plant of same educational group is available in adjacent college site. All the waste water will be treated in the same plant. Photographs of STP and schematic have been provided. The submittal also includes photograph of pump used to the send waste water to the common STP and test report of the treated water. This meets the credit requirements.
2			SWP Credit 7	Use of Treated Grey Water 25%, 50%	2	A narrative and calculations have been provided indicating that 54% of water required annually is sourced from treated water available. The project has also submitted declaration from owner indicating that A declaration from owner indicating that treated water from STP is being reused for irrigation in the campus has been provided. Also photographs of pipe line & taps connected to take treated water have been provided. This meets the credit requirement.
1			SWP Credit 8	Water Use Monitoring	1	A narrative has been submitted indicating that water meters are provided for bore well & treated water systems. Photographs have been provided. This meets the requirements.
13	0	3	TOTAL		16	

Conserving & Harvesting Energy (CHE)						
Y			CHE Mandatory Requirement 1	Eco-friendly Refrigerants (For air-conditioning)	Required	A declaration has been provided stating that refrigerant used in the school is R410A. Also photographs have been provided. This meets the prerequisite requirements.
1			CHE Credit 1	Ozone Depleting Substances	1	Photographs of R410A refrigerant based system and dry powder based fire suppression system have been provided. This meets the requirements.
2			CHE Credit 2	Energy Efficient Lighting Fixtures 25%, 50%	2	The school is using efficient lighting fixtures. List of lighting fixtures along with calculations have been provided indicating that energy consumption for lighting fixtures is reduced by 53.98% against the baseline. Photographs of fixtures have been provided. This meets the credit requirements.
2			CHE Credit 3	Energy Efficient Fans 30%, 40%	2	A declaration from school has been submitted indicating that BEE star rated fans have been used for 100%. Photographs of installed fans have been provided. This meets requirements.
2		1	CHE Credit 4	Energy Efficient Appliances and Equipment	3	The school is using efficient air conditioning systems and BEE star rated refrigerator. Photographs have been provided.
1			CHE Credit 5	Energy Sub-metering	1	A narrative has been submitted indicating that for continuous monitoring sub-meters have been installed for: 1. Lighting 2. Air conditioning 3. UPS panel 4. DG panel 5. Lift panel Photographs have been provided.
4			CHE Credit 6	Onsite Renewable Energy 5%, 10%	4	A narrative has been submitted indicating that 150 kW capacity of solar panels have been installed in the campus. Calculations have been provided indicating 180,000 units is generated from solar panels i.e. 75% against the annual energy consumption of 238,584 units. Submittal includes electricity bills, purchase order of solar panels and photographs of installed solar panels. This meets the credit requirements.
		1	CHE Credit 7	Solar Water Heating Systems	1	Not Attempted
		1	CHE Credit 8	Distributed Power Generation	1	Not Attempted
12	0	3	TOTAL		15	

Eco-friendly School Material (ESM)						
Y			ESM Mandatory Requirement 1	Waste Segregation	Required	<p>School has a system in place to collect dry and wet waste. Submitted narrative states that separate bins on each floor is placed and also at common collection area waste is further segregated. Photographs of bins have been submitted.</p> <p>The submittal also indicates that collected dry waste is given to recycler and wet waste is sent to organic waste convertor within the site. A declaration from owner on waste collection & segregation has been provided.</p>
2			ESM Credit 1	Organic Waste Management 75%, 95%	2	The school has an tumbler organic waste convertor to treat 100% of organic waste generated. Manufacturer brochure of the convertor, photographs, site plan showing the location of tumbler on site and a declaration from school has been provided. This meets the requirement.
			ESM Credit 2	Green Policy	Not Applicable	
		1	ESM Credit 3	Salvaged Materials 2.5 %	1	Not Attempted
			ESM Credit 4	Eco-friendly Wood Based Materials, 25%, 50%	Not Applicable	
2		1	ESM Credit 5	Materials with Recycled Content 10%, 20%, 30%	3	School has provided list of materials used and manufacturer letters indicating the recycled content of material. Submittal indicates that 23.56% of materials procured for the school have recycled content by value. This meets requirement for 2 credit points.
3			ESM Credit 6	Local Materials 20%, 30%, 40%	3	School has provided list of materials used and manufacturer letters indicating the distance between manufacturing unit and school campus material. Submittal indicates that 56.93% of materials procured for the school are within 400km radius. This meets credit requirement.
7	0	2	TOTAL		9	

Indoor Environmental Quality (IEQ)						
Y			IEQ Mandatory Requirement 1	Tobacco Smoke Control	Required	"No Smoking" signages have been installed at the entrance and common spaces in the school. Photographs showing the same have been provided.
Y			IEQ Mandatory Requirement 2	Minimum Daylighting 40%	Required	A narrative has been submitted stating that 50% of the regularly occupied spaces have prescribed daylight factor. Daylight modeling images and photographs of classrooms have been provided. The project has also submitted, list of regularly & non-regularly occupied spaces and simulation report showing that more than 50% of the spaces have been provided with daylight factor 2. Hence, this meets the mandatory requirement and 2 points under IEQ credit 3.
Y			IEQ Mandatory Requirement 3	Fresh Air Ventilation 40%	Required	Submitted narrative states that all regularly occupied spaces have provision for fresh air openings to outside. Floor plan and photographs showing opening have been provided. Specifications sheet of fresh air units provided has been provided indicating that the minimum ventilation rate of 0.12 cfm/ sq.ft is achieved by 10 cfm/ occupant in all regularly occupied spaces. Photographs of units and open courtyards have been provided to support the claim.
		2	IEQ Credit 1	Area of classrooms	2	The classrooms in the school are meeting the prescribed gross area per student. This meets the credit requirements.
6			IEQ Credit 2	Anthropometric dimensions in spaces	6	The school has different levels of classroom furniture for primary & secondary standards. Photographs have been provided. The submittal also includes photographs of plumbing fixtures installed at various heights for primary & secondary standards and details on parapet height (1m), stairs riser height (0.15m) & sill height (0.7 - 0.75m). This meets the credit requirements.
2		4	IEQ Credit 3	Daylighting 50%, 75%, 95%	6	Please refer to IEQ Mandatory Requirement 2
6			IEQ Credit 4	Fresh Air Ventilation; 5 cfm, 7.5 cfm, 10 cfm	6	Please refer to IEQ Mandatory Requirement 3
1			IEQ Credit 6	Toxin-free Environment	1	A letter from manufacturer indicating that paint has VOC within the limits as prescribed. Details confirming that low VOC paints will be used in the school has been provided. Also manufacturer cutsheets indicating the VOC content and declaration from the owner has been submitted.
1			IEQ Credit 7	Dust-free Interiors	1	A narrative has been submitted describing the cleaning processes in the school. Purchase order & photographs of dust free chalks and photographs of foot mats at entrances have been provided. This meets the requirements.
2			IEQ Credit 8	Exhaust Systems	2	Drawings showing the location of exhausts have been provided. Submittal also includes photographs showing exhausts installed in toilets and laboratories.
1			IEQ Credit 9	Building Flush-out	1	A narrative and declaration has been submitted stating that building flush-out has been performed for 10 days after painting & coatings are done in the school.
19	0	6	TOTAL		25	

Health & Hygiene (HH)						
Y			HH Mandatory Requirement 1	Toilet Facilities	Required	The school has provided toilet facilities for boys and girls. A narrative explaining the cleaning process, for plans highlighting the location of toilets and log sheet record of toilet maintenance have been provided. This meets the mandatory requirements.
Y			HH Mandatory Requirement 2	Drinking Water Facility	Required	Submittal includes test certificate of the water and photographs of drinking water facility in the campus. This meets requirements.
4			HH Credit 1	Access to Healthy Food	4	The school management has indicated that instructions have been given to students & their parents on nutrition food to be sent for lunch. Also a declaration has been provided stating that note will be sent to parents every quarter in a year and nutritious food is served in canteen. Photographs of posters placed in school that encourages students to have healthy food have been provided. This meets the requirement.
4			HH Credit 2	Minimum Sports Amenities	4	The school has provided facility for various indoor and outdoor sports within the campus including tennis, table tennis & badminton, basketball, swimming. Photographs have been provided. This meets the credit requirements.
4			HH Credit 3	Dedicated Play Area	4	A declaration from school has been provided stating that students can use playground that is in dental college campus which is owned by same management. Photographs and google map showing the location of playground have been provided.
1			HH Credit 4	Organic Fertilisers & Pesticides	1	The school uses organic fertilisers and list of fertilisers used has been submitted.
2			HH Credit 5	Green House-keeping	2	A list of eco-friendly house-keeping chemicals used in the campus has been provided. Also submittal includes manufacturer letters, photographs and purchase orders of the green house-keeping chemicals. This meets requirements.
15	0	0	TOTAL		15	
Green Education (GE)						
4			GE Credit 1	Green Schools Committee	4	The school has a green school committee in place with students and teachers. A list of team members of the committee and activities have been provided.
6			GE Credit 2	Green extra curricular activities	6	A narrative describing the list of awareness programmes, educational tours, environment related competitions scheduled has been provided.
10	0	0	TOTAL		10	

Innovative Practices (IP)						
1			IP Credit 1.1	Exemplary Performance: Minimise Heat Exposure to Sub: Roof	1	<i>The school has applied for exemplary performance under SSP credit 6. Submitted calculations indicate that 98.28% of the roof area excluding service areas has been covered with high SRI paint. Photographs and test report indicating the SRI value of the coating have been provided. This meets the exemplary performance requirements.</i>
1			IP Credit 1.2	Exemplary Performance: Energy Efficient Fans	1	<i>Submittal indicates that 100% of fans installed in the school are with BEE star rated. This exceeds the threshold requirement of exemplary performance i.e. 50%, hence the credit is awarded.</i>
1			IP Credit 1.3	Exemplary Performance: Local Materials	1	<i>School has provided list of materials used and manufacturer letters indicating the distance between manufacturing unit and school campus material. Submittal indicates that 56.93% of materials procured for the school are within 400km radius, which exceed the threshold requirement of 50%.</i>
		1	IP Credit 2	Innovation in Practices	1	<i>The school has applied for innovation credit for using porotherm blocks for the entire facade construction which helps in reduction of heat ingress inside the school building. Manufacturer cutsheets and photographs of materials used in the school construction have been provided. However to show credit compliance, the school should provide details showing quantification on U-value or percentage of energy consumption reduction through the porotherm blocks. Due to lack of supporting document the credit is not awarded.</i>
1			IP Credit 3	IGBC AP	1	<i>An IGBC AP has been part of the certification process of the school. Certificate of the participant has also been provided. This meets the credit requirements.</i>
4	0	1	TOTAL		5	
90	0	18	TOTAL		108	