Singapore - Green Mark Scheme

The **BCA Green Mark Scheme** was launched in January 2005 as an initiative to drive Singapore's construction industry towards more environment-friendly buildings. It is intended to promote sustainability in the built environment and raise environmental awareness among developers, designers and builders when they start project conceptualisation and design, as well as during construction.

BENEFITS OF GREEN MARK

BCA Green Mark provides a meaningful differentiation of buildings in the real estate market. It is a benchmarking scheme which incorporates internationally recognized best practices in environmental design and performance. This can have positive effect on corporate image, leasing and resale value of buildings. Benefits of BCA Green Mark include:

- Facilitate reduction in water and energy bills,
- Reduce potential environmental impact,
- Improve indoor environmental quality for a healthy and productive workplace,
- Provide clear direction for continual improvement.

APPLICATIONS AND ASSESSMENT PROCESS

- Developers, building owners and government agencies would have to submit an application form to BCA to register their interest in participating in the BCA Green Mark Scheme.
- BCA assessment team will have a preliminary meeting with the project team or building management team to brief on the criteria and request for relevant reports and documentary proofs to substantiate the subsequent submissions.
- Actual assessment will be conducted on a later date once the team are ready. The
 assessment will include design and documentary reviews as well as site verification.
 Documentary evidences are to be submitted at the end of the assessment. Upon completion
 of the assessment, a letter of award showing the certification level of the projects will be sent
 to the team.
- Go to http://bca.gov.sg/Greenmark/green_mark_criteria.html to view <u>BCA Green Mark</u> <u>Scheme Assessment Criteria and Application Forms</u>

BCA Green Mark is a green building rating system to evaluate a building for its environmental impact and performance. It is endorsed and supported by the National Environment Agency. It provides a comprehensive framework for assessing the overall environmental performance of new and existing buildings to promote sustainable design, construction and operations practices in buildings.

Under the assessment framework for new buildings, developers and design teams are encouraged to design and construct green, sustainable buildings which can promote energy savings, water savings, healthier indoor environments as well as the adoption of more extensive greenery for their projects. As for existing buildings, the building owners and operators are encouraged to meet their sustainable operations goals and to reduce adverse impacts of their buildings on the environment and occupant health over the entire building life cycle.

The assessment criteria cover the following key areas:-

- Energy Efficiency
- Water Efficiency
- Environmental Protection
- Indoor Environmental Quality
- Other Green Features and Innovation

The assessment process involves a pre-assessment briefing to the project team for a better understanding and evaluation of BCA Green Mark requirements and the certification level sought. Actual assessment would then be carried out at later stage to verify the relevant reports and documentary evidences and that the building project meets the intents of the criteria and certification level.

The assessment identifies the specific energy efficient and environment-friendly features and practices incorporated in the projects. Points are awarded for incorporating environment-friendly features which are better than normal practice. The total number of points obtained will provide an indication of the environmental friendliness of the building design and operation. Depending on the overall assessment and point scoring, the building will be certified to have met the BCA Green Mark Platinum, Gold^{Plus}, Gold or Certified rating.

Certified Green Mark buildings are required to be re-assessed every three years to maintain the Green Mark status. New buildings certified will subsequently be re-assessed under the existing buildings criteria. Existing buildings will be re-assessed under the existing buildings criteria.

The revised BCA Green Mark Criteria for new buildings (Version 4.0) will come into effect in 1 Dec 2010. All Green Mark applications for new buildings that are submitted on or after this date will be assessed and certified based on this version.

Which category do our sensors come under the BCA Green Mark Critieria?

CO2 sensor Part 1 Energy Efficiency, 1-2 Airconditioning System Part 4 Indoor Environmental Quality, 4-4

CO sensor Part 1 Energy Efficiency, 1-7 Ventilation In Carpark Part 4 Indoor Environmental Quality, 4-4

Occupancy sensor Part 1 Energy Efficiency, 1-6 Artificial Lighting