

Development of a green building rating tool for special nature buildings (hotels) in Sri Lanka

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Increased importance on the green building concept lead to introduce an assessment tool called rating system to be used for evaluating the building performance under sustainable framework. Separate rating tools are important to assess different types of building to maintain the sustainability while fulfil their special requirements. The main objective of the present research was to develop criteria and indicators to formulate a new rating tool for special nature building type which has shown an increasing attention to develop a separate rating tool in Sri Lanka. The study was undertaken with the comparison of LEED, Green building index, Green mark and Indian rating tools for identifying the building types which possess separate rating tools.

The research was conducted based on primary and secondary data. The selected building type was ‘hotels’ which has a high demand to develop a new rating tool in Sri Lanka. Eight main criteria were identified together with seventy indicators. Criteria were weighted by using a survey. The responses were obtained from hotel management staff and green building professionals. The point allocation from the highest to the lowest as follows: energy efficiency (22), water efficiency (20), occupant health and comfort (15), material and resource selection (12), sustainable site planning and management (10), waste management (8), innovation and cost reduction (8) and social and cultural identity (5). Maximum point allocation was 100 and overall ratings were designated as follows: certified 40–49 points, silver 50–59 points, gold 60–69 points and platinum 70 points and above.

Keywords: Energy efficiency, green building rating system, occupant health and comfort, sustainable dimensions.

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