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Building Plan & Management Group

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Dear Sir/Madam

RELEASE OF DAYLIGHT REFLECTANCE DESIGN GUIDE

Objective

This circular informs the industry on the release of the Daylight Reflectance Design Guide (“Guide”).

Background

2 To achieve attractive architectural effects, the design of buildings has become more diverse with prevalent use of reflective materials such as glass and metal cladding. Glare from reflected sunlight from a building façade can be a significant issue in Singapore with its strong solar radiation characteristic and highly built-up urban environment. Appropriate planning and design can help to improve the visual performance of a building façade and minimise incidences of reflected glare.

Purpose of the Guide

3 Under the Building Control Regulations 2003, the external surface (including a roof) of a building must be designed and constructed in a manner such that any reflection of sunlight off the external surface of the building does not result in loss of amenity to occupants of other buildings in the vicinity of that building. While the industry is familiar with this regulatory requirement, designers should also take into consideration other parameters that contribute to solar reflectance at the onset of design. The Guide

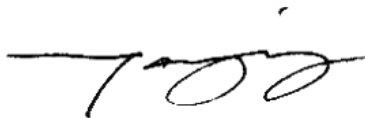
highlights the key design factors related to solar reflectance from the urban planning and building design's perspective based on local research findings. It recommends a set of considerations for assessing the site and building parameters as well as mitigating measures to minimise the occurrences of reflected glare. In addition, an example of using computer simulation method for solar glare evaluation is also included in the Guide to assess a building's potential to cause significant glare to neighbouring buildings.

4 We would like to encourage designers and developers to adopt the recommendations of the Guide in the planning and design of building projects. The Guide is available on BCA's website (<https://go.gov.sg/bca-daylight-reflectance-guide>)

Clarifications

5 We would appreciate if you could share this circular with your members. If you need any clarifications, please contact us through BCA's Online Feedback Form at <https://www.bca.gov.sg/feedbackform/>

Yours faithfully



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