

The SRI value of 29 has been chosen for this regulation as it allows the use of most types of concrete and concrete pavers but excludes asphalt. Proper periodical cleaning of hardscape surfaces will be needed to maintain good reflectance.

Materials for paving and vehicle parking spaces should be specified with SRI as indicated in the Regulation. Material Specification Data Sheets (MSDS) should detail the SRI value of the products.

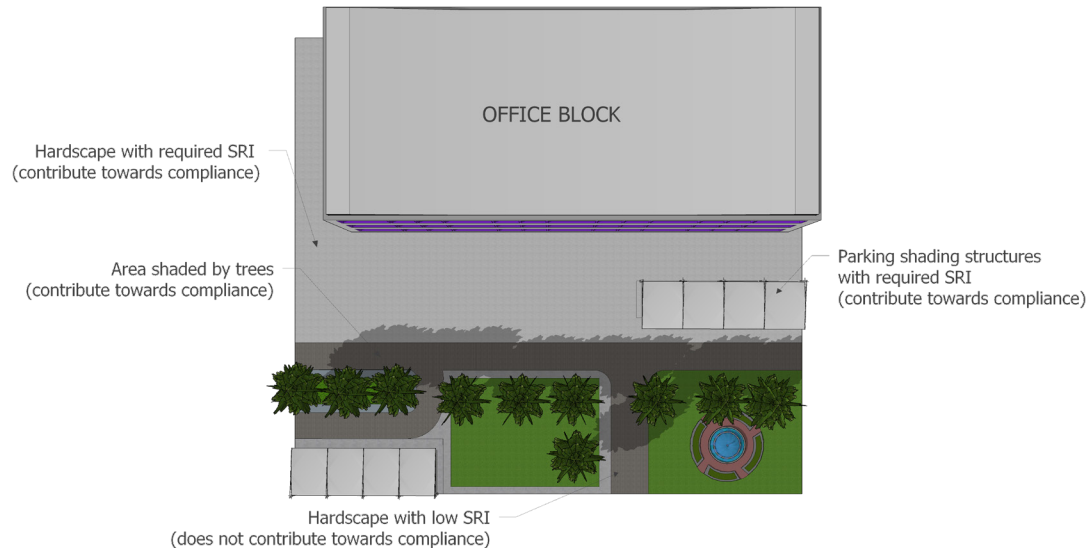


Fig 304.06(2): Sample Drawing

Refer to *Regulation 304.01: Urban Heat Island Effect* in Al Sa'fat Dubai Green Building System: Practice Guide, for information on Solar Reflectance Index (SRI).

Landscaping should utilise species as detailed in *Regulation 302.01: Local Species*.

Calculation

The following equation to be used to check compliance for this regulation:

$$\frac{\text{Area of high reflectance car parking roof} + \text{Area covered by high reflective hardscape material} + \text{Area covered by open grid pavement} + \text{Area covered by shaded vegetation}}{\text{Total hardscape area}} \geq 50\%$$

Note: Area that contain more than one compliance option, shall be counted only once.

Case Study

An office building is located on a 3,000 m² site, of which 2,000 m² is occupied by the building footprint. The remaining area is used for parking, driveway and walkways. The project team employs strategies to reduce heat island effect for non-roof surfaces, by planting trees to shade parking and driveway areas and by using light-coloured concrete having a SRI value of 35 for driving aisles and walkways. Areas that contain both light-coloured hardscapes and that are shaded by trees are counted only once.