

Microclimate and Outdoor Comfort

304.01 Urban Heat Island Effect

For all new buildings, all opaque external roofing surfaces must comply with a minimum Solar Reflectance Index (SRI) value according to Table 304.01 (1), for a minimum of 75% of the roof area:

Table (1) 304.01 - Roof SRI Requirements

Type of Roof	Minimum Roof SRI
Steep Sloped Roofs (slopes steeper than 1:6)	29
Flat and Low Sloped Roofs	78

304.02 Heat Rejection Equipment Installation

For all new buildings, individual heat rejection equipment having a power rating greater than 4.0 kW and which exhausts externally, must be installed not less than 3m above the ground level of the building.

304.03 Green Roofs

For Platinum Sa'fa and for all new buildings, the roof of the building should be provided with vegetated roof (green roof) for at least 30% of the total roof area, or for the remaining area after complying the following conditions:

- The services should be grouped and distributed on each surface so that the space is optimized.
- At least 150 m² of roof area is available on any roof surface.

304.04 Colours on the Outside of Buildings

For all new buildings, at least 75% of the area for external walls must have a minimum Light Reflectance Value (LRV) of 45%.

304.05 Orientation of Glazed Façades

For all new buildings, one of the following must be achieved for Silver Sa'fa, whereas for Golden and Platinum Sa'fa both the requirements must be achieved:

1. At least 50% of the total glazed surface area of the building, (excluding glazed areas with back insulated panels), must be facing the angle located between the east and the north-west which equals to 135° starting from the east.
2. South and west glazed areas, excluding glazed areas with back-insulated panels, must be treated environmentally.

304.06 Hardscape

For all new buildings, 50% of the hardscape of the development must achieve at least one of the following:

1. Demonstrate a Solar Reflectance Index (SRI) of at least 29
2. Use an open grid pavement system
3. Be shaded by vegetation
4. Be shaded by materials with an SRI equal to or greater than those specified in Table 304.01 (1)

304.07 Shading of Public Access Areas

For all new buildings, all pedestrian linkages within the plot area must be shaded using materials having a Solar Reflectance Index (SRI) equal to or greater than those specified in Table 304.01 (1).

Environmental Impact Assessment

305.01 Environmental Impact Assessment

For all new buildings, if any of the following criteria is applicable, then an Environmental Impact Assessment (EIA) and/or a Construction Environmental Management Plan (CEMP) would be required and must be submitted and approved by Environment Department of Dubai Municipality:

1. If the building is intended as industrial building
2. If the building has the potential to generate hazardous or toxic wastes such as laboratories, waste recycling or waste treatment.

The Dubai Municipality Environment Department's relevant Technical Guidelines for the Environmental Impact Assessment Procedure must be followed.