Designing buildings that use materials with higher SRI values will help to reduce both absolute urban temperatures and reduce the daytime temperature range. This will improve pedestrian and building occupant comfort and is likely to reduce cooling demand within some building typologies. Cool roof products (fig. 304.01(2)) also help to reduce heat gain.

Fig 304.01(2): Example for Cool Roof

APPLICABILITY

This regulation is applicable to all building types. Refer to Table 101.07(1) in Section One - Administration for detailed applicability levels.

IMPLEMENTATION

The calculation of the total roof area does not include the area required for heating, ventilation, and air conditioning (HVAC) equipment, renewable energy generating equipment, building maintenance units, walkways for access to plant equipment and storage tanks. Walkways must be provided to allow service access to any equipment located on the roof.

Indicative SRI values for some common roofing materials is given in Table 304.01(2).

Table 304.01(2): SRI Values for Roofing Materials

Roofing Materials	Typical SRI Value
Grey EPDM (enthlene propylene diene monomer)	21
Unpainted Cement Tile	25
Red Clay Tile	36
Light Gravel on Built-up Roof	37
Aluminum	56
White Ceramic Tile	90
White Coating	100
Light Beige Concrete Tile	76
Light Brown Concrete Tile	48
Pink and Grey Concrete Tile	63
Off White Concrete Tile	92

Dark hard surfaces with high heat retention increase the overall temperature of the area and should be avoided where possible. Use of dark materials around buildings lead to increase in temperature at ground level and is discouraged.