

501.01 Minimum Envelope Performance Requirements

For all new air conditioned buildings, exterior building elements must have average thermal transmittance (also known as U Value) and Shading Coefficients (SC) that does not exceed the values specified and Light Transmittance greater than or equal to the values specified.

A. External Walls, Roofs, and Floors:

Building elements forming the external walls, roofs, and floors (where one side of the floor is exposed to ambient conditions) must have an average thermal transmittance (U Value) which does not exceed the following values:

Roof	$U = 0.3 \text{ W/m}^2\text{K}$
External Wall	$U = 0.57 \text{ W/m}^2\text{K}$

If the floor is in contact with the ground, the insulation should only be applied to one meter (1m) in from the perimeter of the building.

Glazed elements with back insulated panels must be treated as walls (and therefore must meet the performance requirement for walls).

B. Glazed Elements - Fenestration:

1. If the total area of external walls that let in light is forty per cent (40%) or less of the external wall area, then the glazing elements must meet the following performance criteria:

Thermal Transmittance (Summer U value)	$U = 2.1 \text{ W/m}^2\text{K}$ (max)
Shading Coefficient (SC)	0.4 (max)
Light Transmittance	0.25 (min)

2. If the total area of external walls that let in light is between forty percent (40%) and sixty percent (60%) of the external wall area, then the glazing elements must meet the following performance criteria:

Thermal Transmittance (Summer U value)	$U = 1.9 \text{ W/m}^2\text{K}$ (max)
Shading Coefficient (SC)	0.32 (max)
Light Transmittance	0.1 (min)

