

# Selective Radiation or Shadowing

Use the *Element Radiation Switches* to deactivate selected elements or geometry groups for radiation calculations. The element will remain part of the thermal model.

[Locate the icon.](#)

## Disable Element Shadowing

The selected elements will not block radiation; that is, the elements will simply not be considered when TMG performs view factor shadowing checks. (Shadowing checks are described in *Creating a Radiation Request*.) However, the elements are still modeled as emitting and reflecting radiation (view factors are calculated for them). You can use this to reduce radiation model solution time by disabling shadowing checks for elements which you know do not shadow (e.g. elements on the surface of a uniformly concave enclosure).

## Ignore Elements for all View Factor Calculations

The selected elements will not participate at all in the radiation calculations: they cannot emit, reflect, or block radiation.

## Ignore Elements for Solar/Orbital/Radiative Heating

Solar, Albedo and Earth view factors will not be calculated for the selected elements.

## Elements for Radiation Switches

The following element types are supported:

Front of:

- 2-D thin shell elements
- Beam elements with cross section defined
- Lumped mass elements
- Free faces of 3-D solid elements
- Axisymmetric shell elements
- Free edges of axisymmetric solid elements

Reverse of:

- 2-D thin shell elements
- Axisymmetric shell elements

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