Week 7

Task 1 ： Provide a summary of the main concepts that went through about solar radiation (formulas are not needed)

Task 2 ： Create a pdf file with screenshots of all of the steps we went through in the second lesson on open Studio and explain briefly the reason behind the use of each step (in your own words!)

Solar radiation is electromagnetic energy emitted by the sun.

When the sun is radiating energy, some of it is transmitted, while other is absorbed or scattered.

Direct solar radiation (also known as direct iridescence) is the radiation that maintained the direction of incidence.

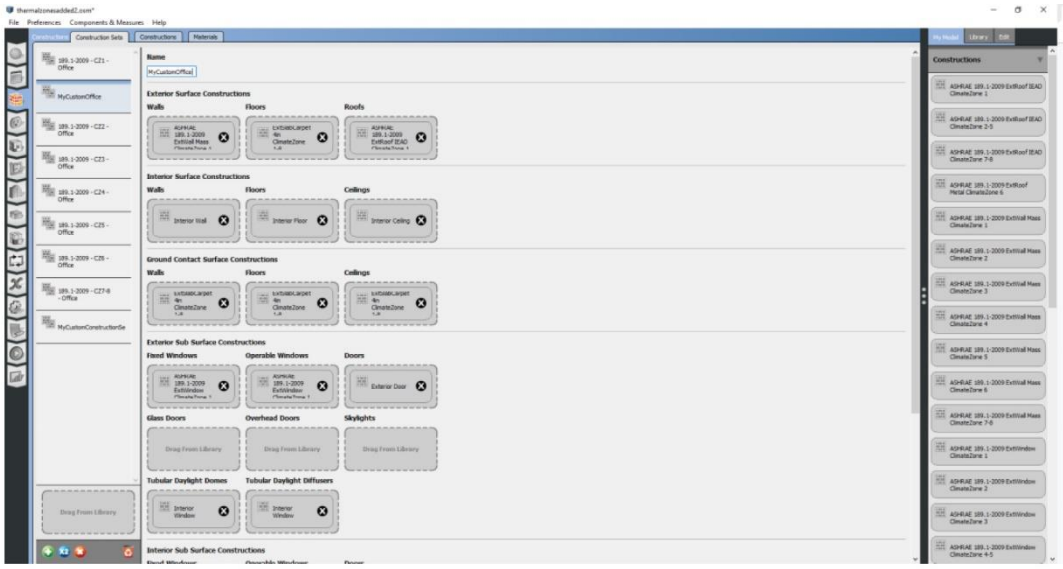
Solar radiation absorption is due to some atmospheric components which absorb the incident radiation in specific wavelength bands which modifies its energetic spectrum

When the sun is perpendicular to the plan of the horizon, it crosses the minimum thickness of the atmosphere

When the sun is at an angle it crosses a large thickness of the atmosphere

Solar radiation available on the Earth‘s surface for conversion in other energy forms (such as solar electrical energy) depends on: the suns position, the weather condition, the site’s sea level, and the daylight hours.

If we want to measure the total solar energy that it direct and diffused, we can use a pyranometer.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Interior Floor
Interior Ceiling
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Ceilings
Exterior Sub Surface Constructions
Fixed Windows
Operable Windows
Doors
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Glass Doors
Overhead Doors
Skylights
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Tubular Daylight Domes
Tubular Daylight Diffusers
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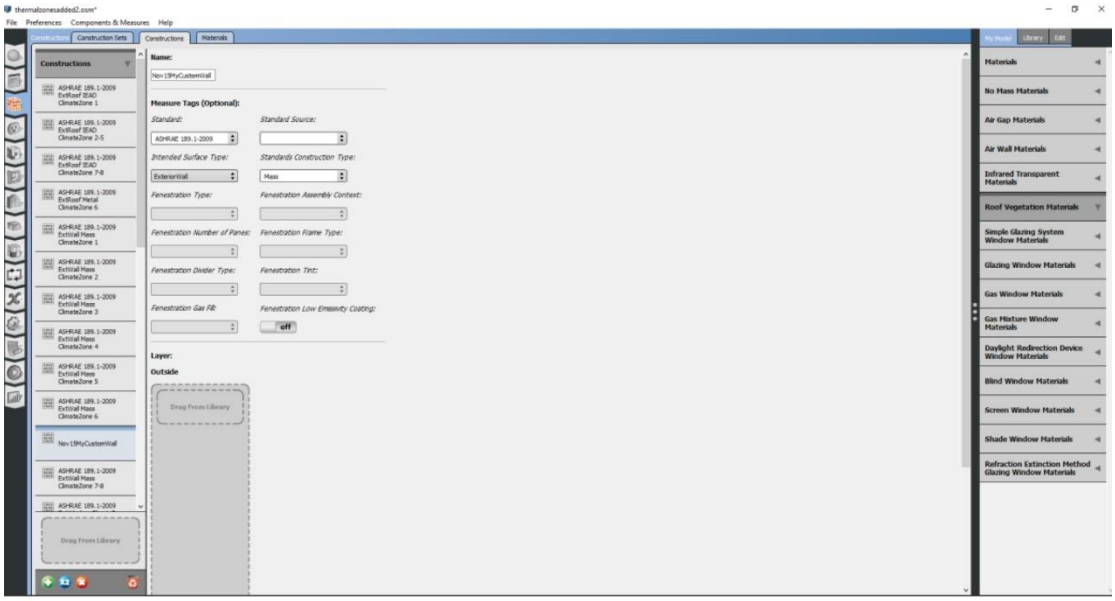
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Roof Vegetation Materials
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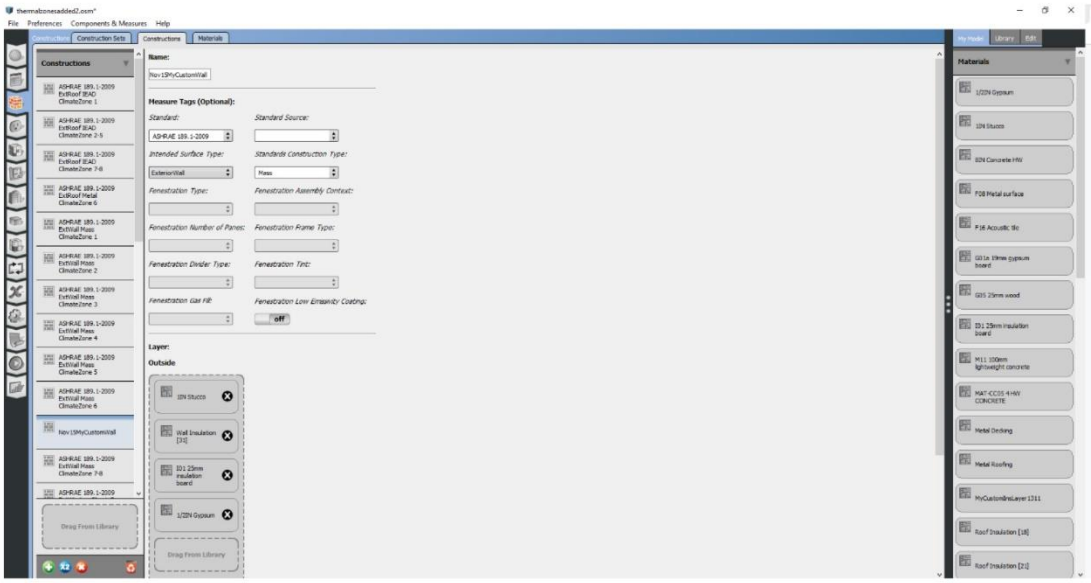
Gas Mixture Window Materials
Daylight Redirection Device Window Materials
Blind Window Materials
Screen Window Materials
Shade Window Materials
Refraction Extinction Method Glazing Window Materials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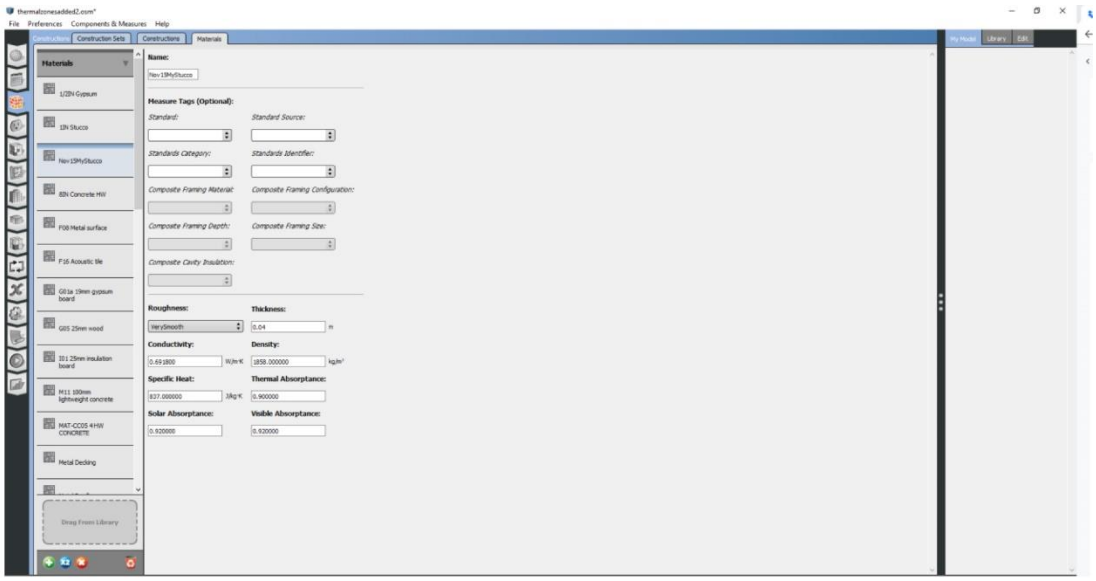
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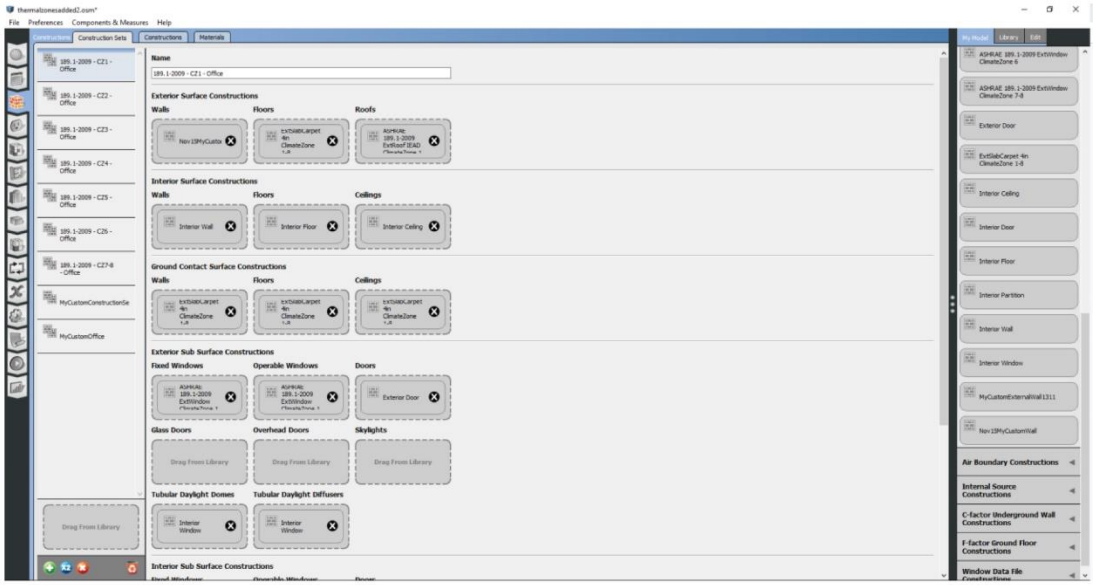
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Window Data File Constructions