WEEK 7 YANG DICHENG

2019年11月19日 星期二　　下午10:45

Task 1

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

MEAN RADIANT TEMPERATURE

The imaginary uniformity of the radiant heat exchange of the person in a real non-uniform environment closes the inner surface temperature of the blackbody environment.

OPERATIVE TEMPERATURE

The equivalent temperature of the combined air temperature and average radiant temperature on the human thermal sensation, referred to as OT.

SOLAR RADIATION DENSITY

The solar constant GSC is a flux density measuring mean solar electromagnetic radiation (solar irradiance) per unit area. The solar "constant" is not a physical constant, is an average of a varying value.

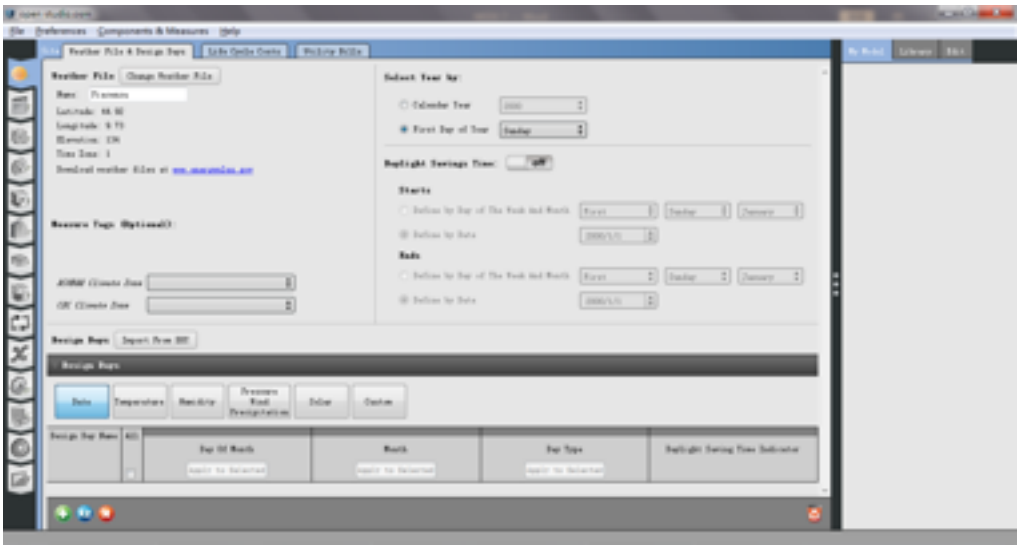
SOLAR RADIATION CHARACTERISTICS

Solar radiation is attenuated both in the spectral distribution and in the total radiation. this is due to the dispersion and absorption phenomena.

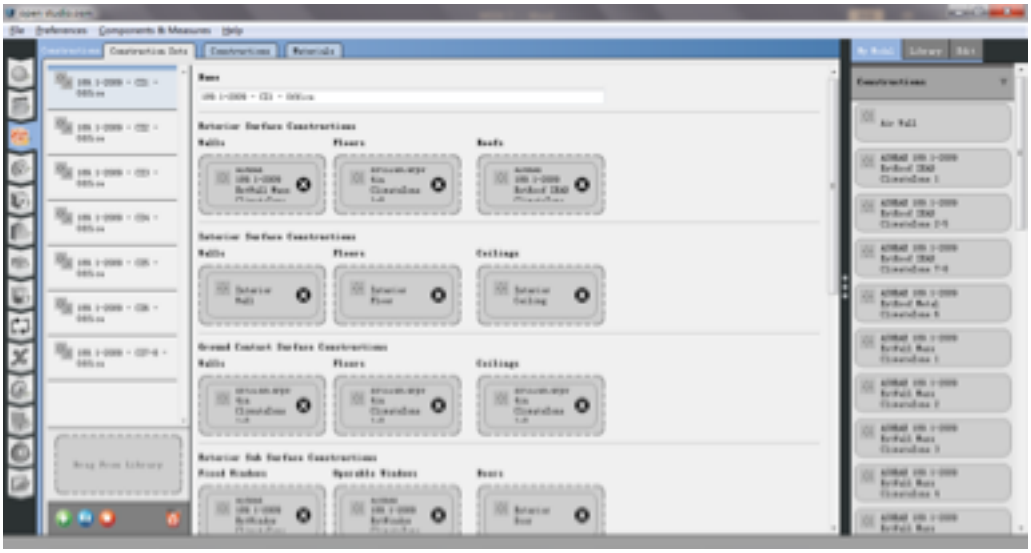
Task 2

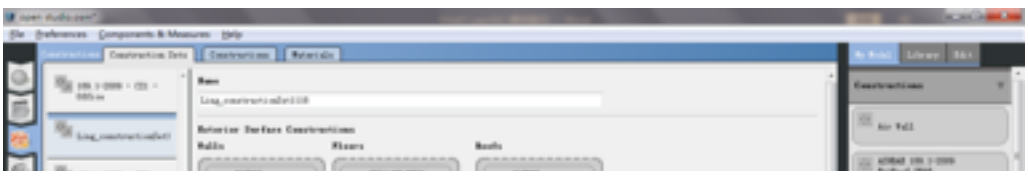
Create a pdf file with screenshots of all of the steps we went through in the second lesson on OpenStudio and explain briefly the reason behind the use of each step.

1. Add the weather data of Piacenza.

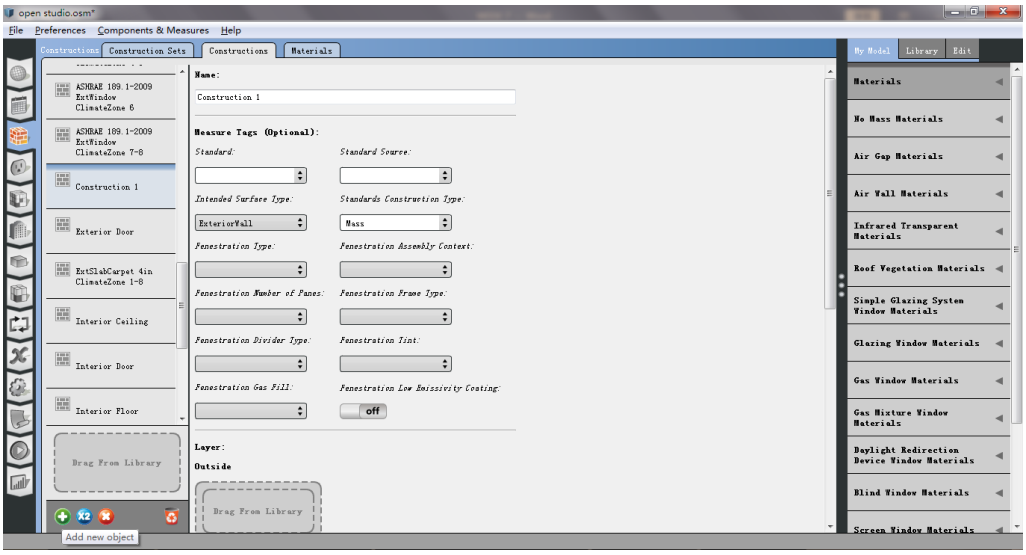


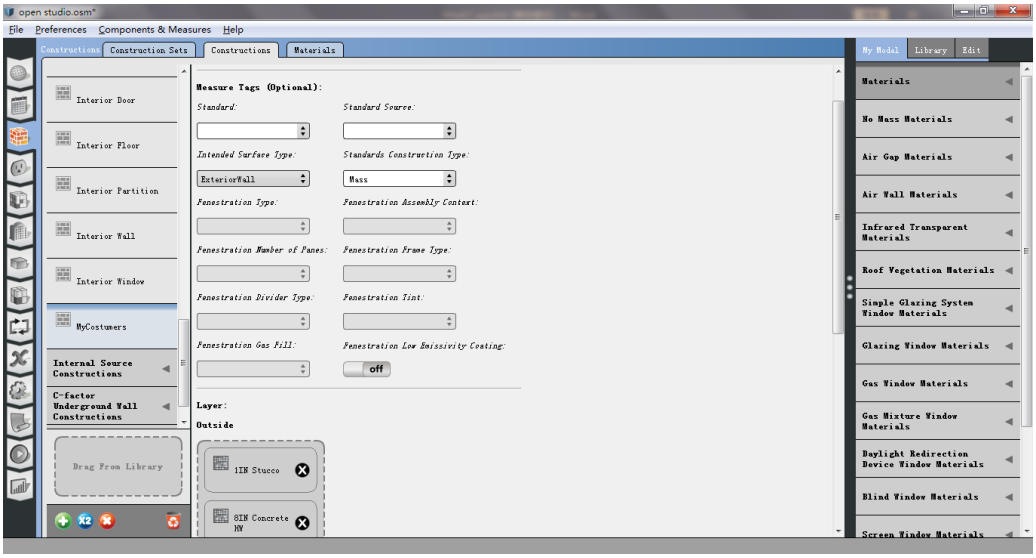
2. Find “construction”, customize the building.



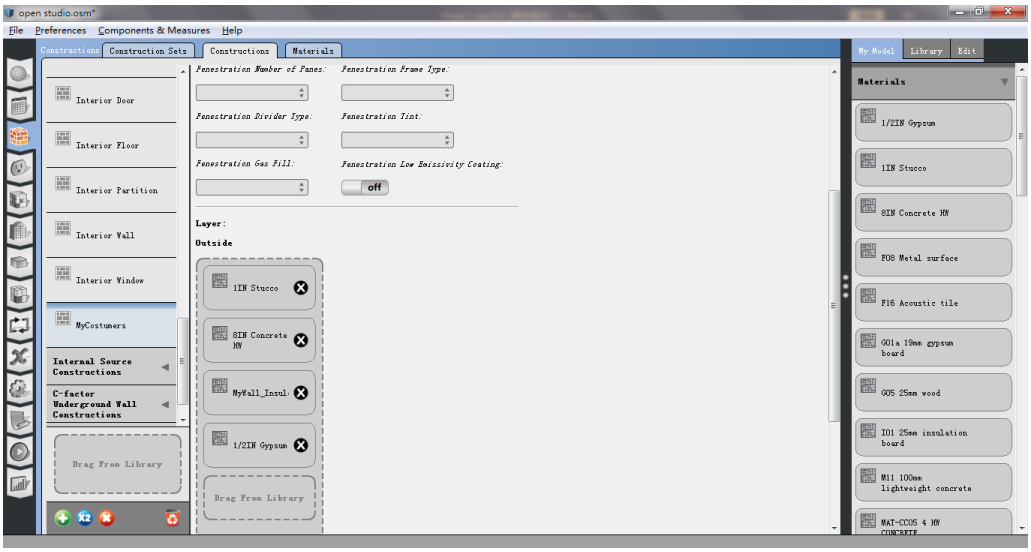


3. Add a new project and start customizing the wall package in the “construction sets” window.

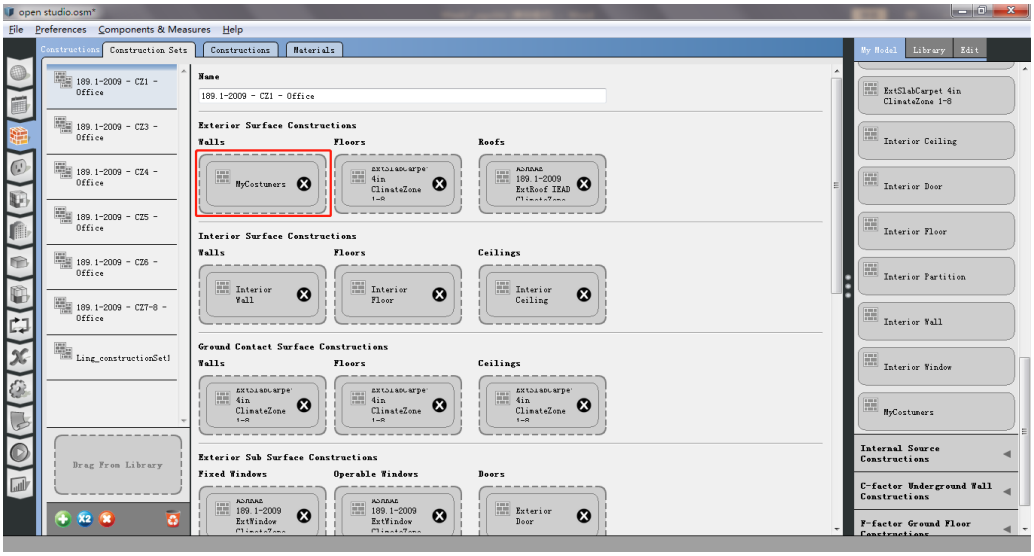




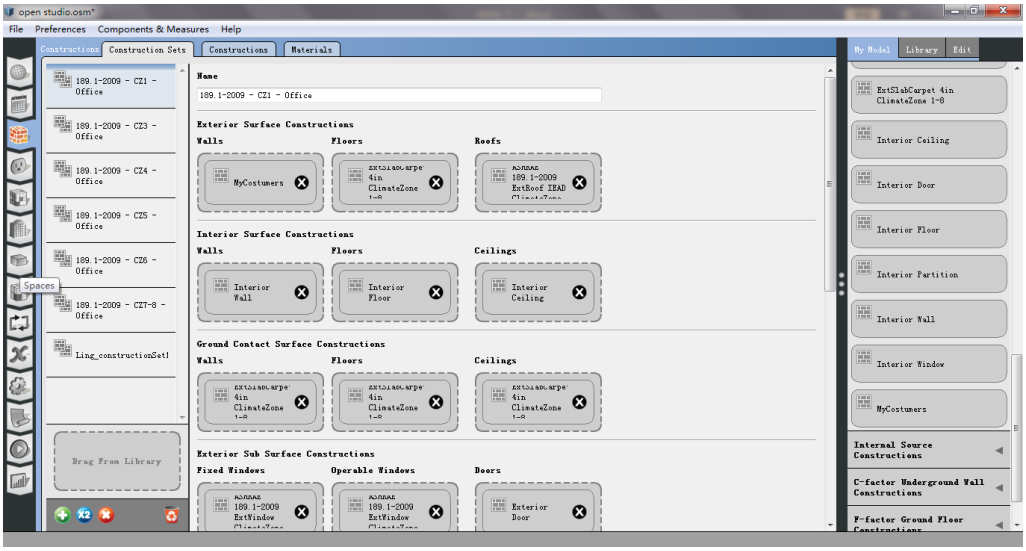
4.Find “Material” then add a new material and decide the type of wall insulation and insert it.

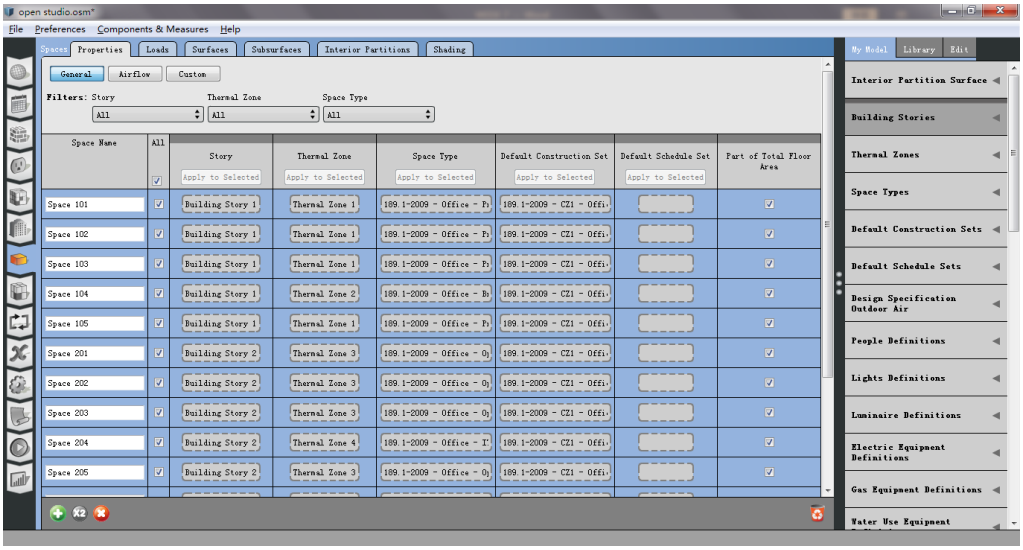


5. Insert the wall data.

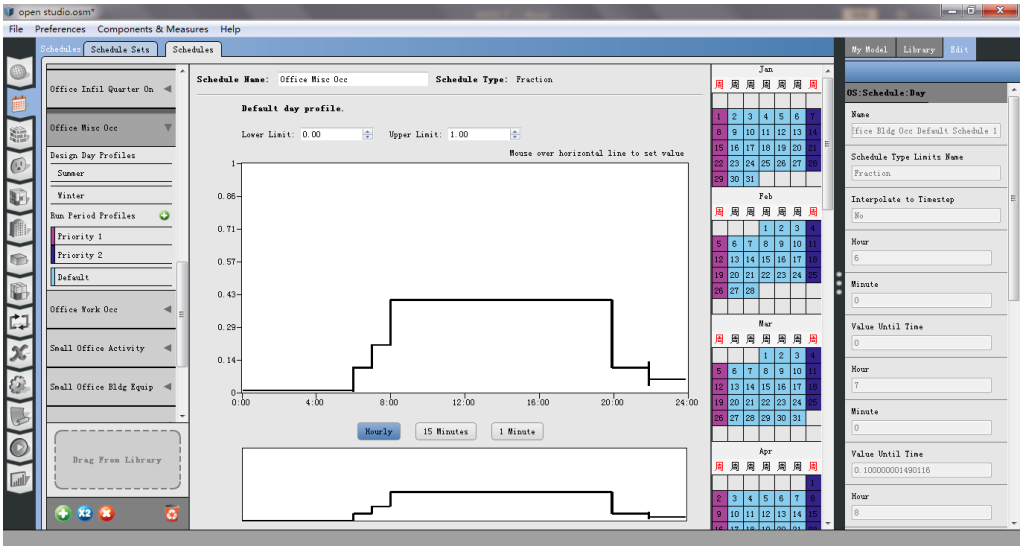


6.Insert the project layer with our modifications the applying it to the whole building in “space”.





7. Enter all the information relating to activities, equipment, and so on in “schedule sets”



8. Change other elements, like people, light, electricity with “loads” window.