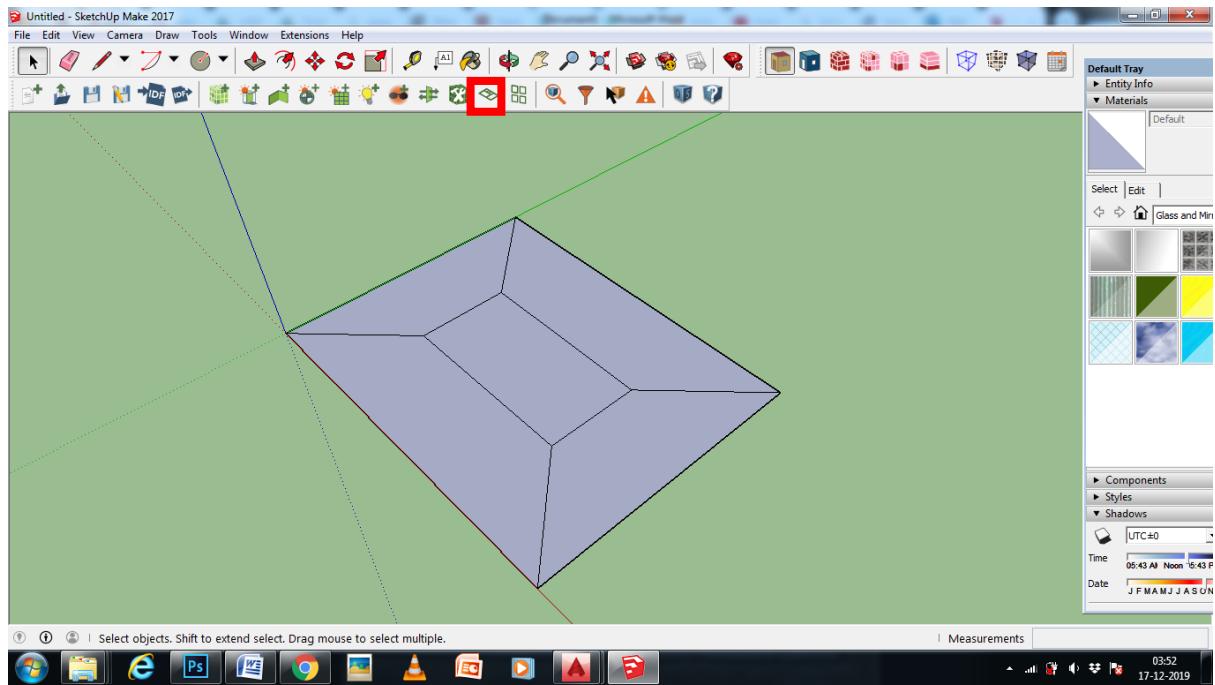
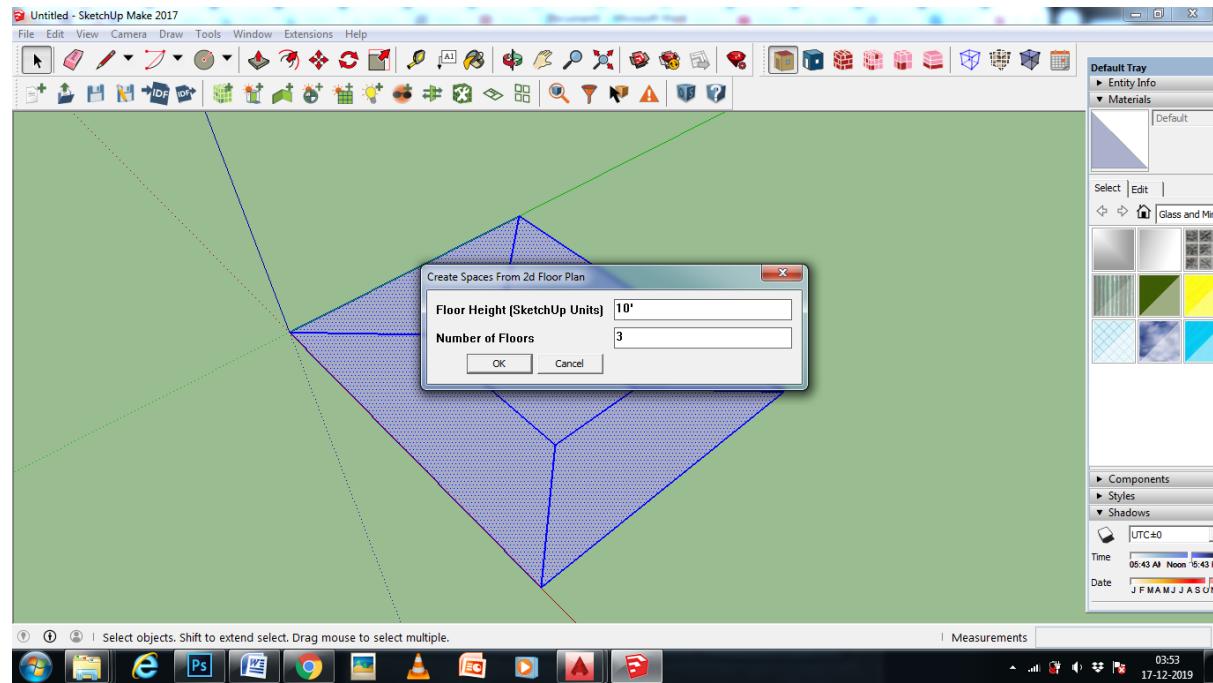


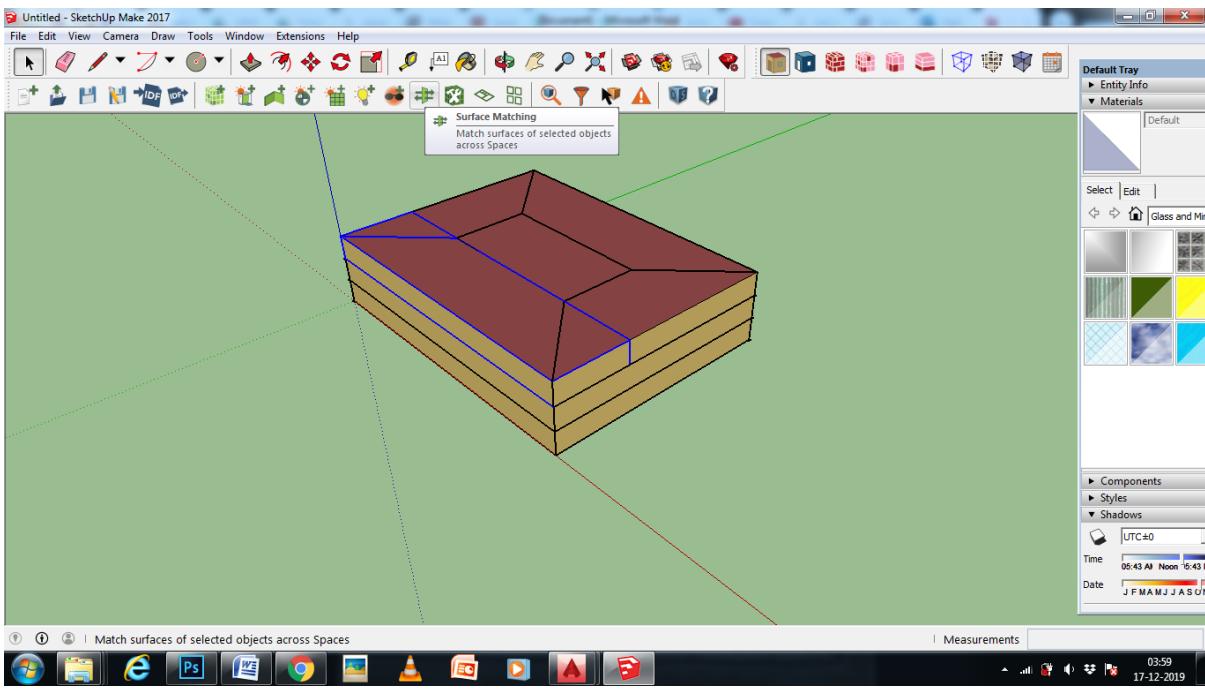
By: Rubén Darío Uriza Escobar

Create a rectangle, make and offset and join with internal lines

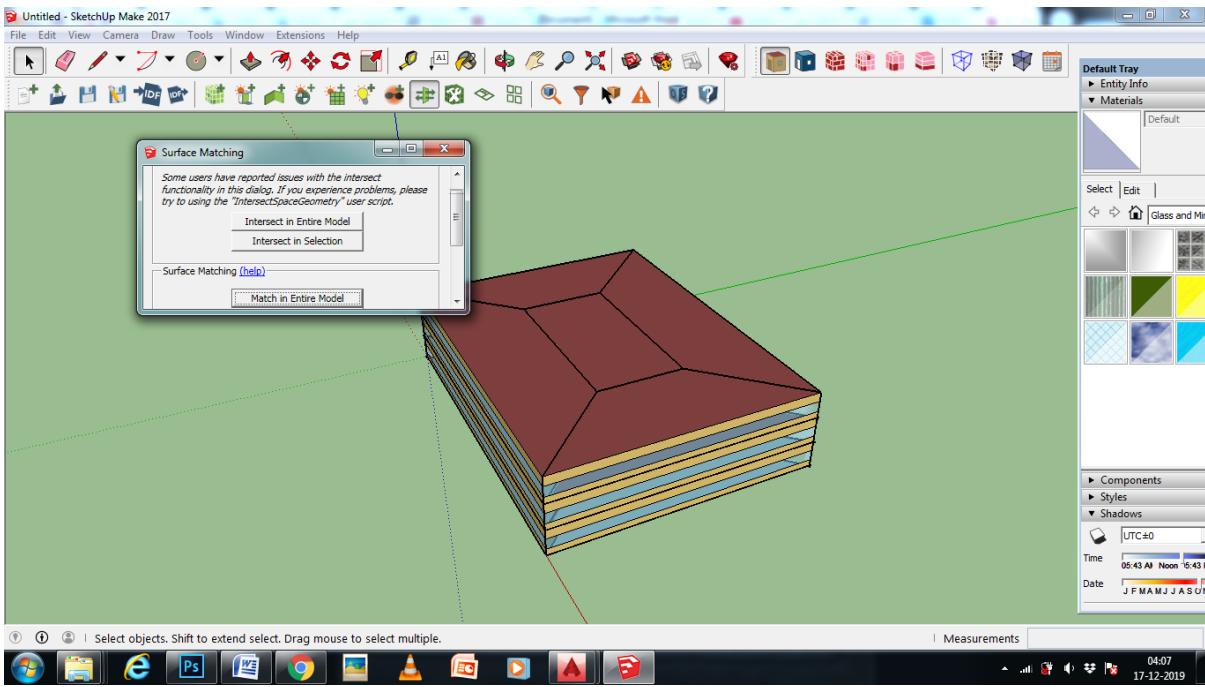


Create by diagram

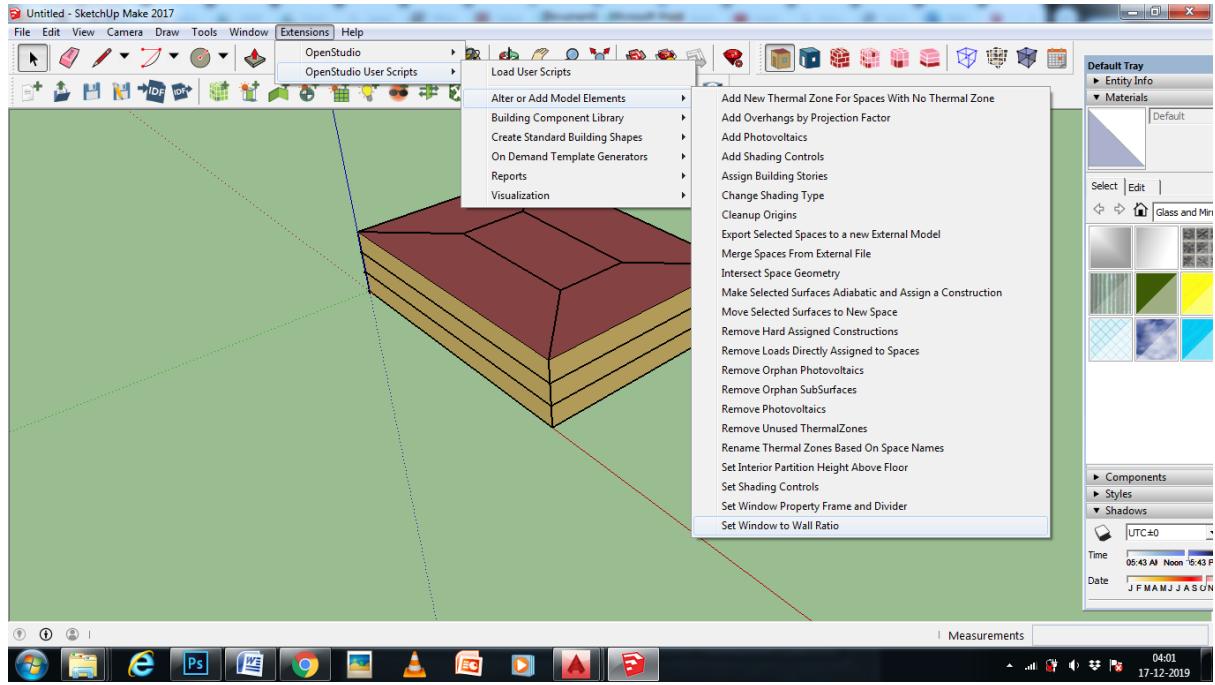




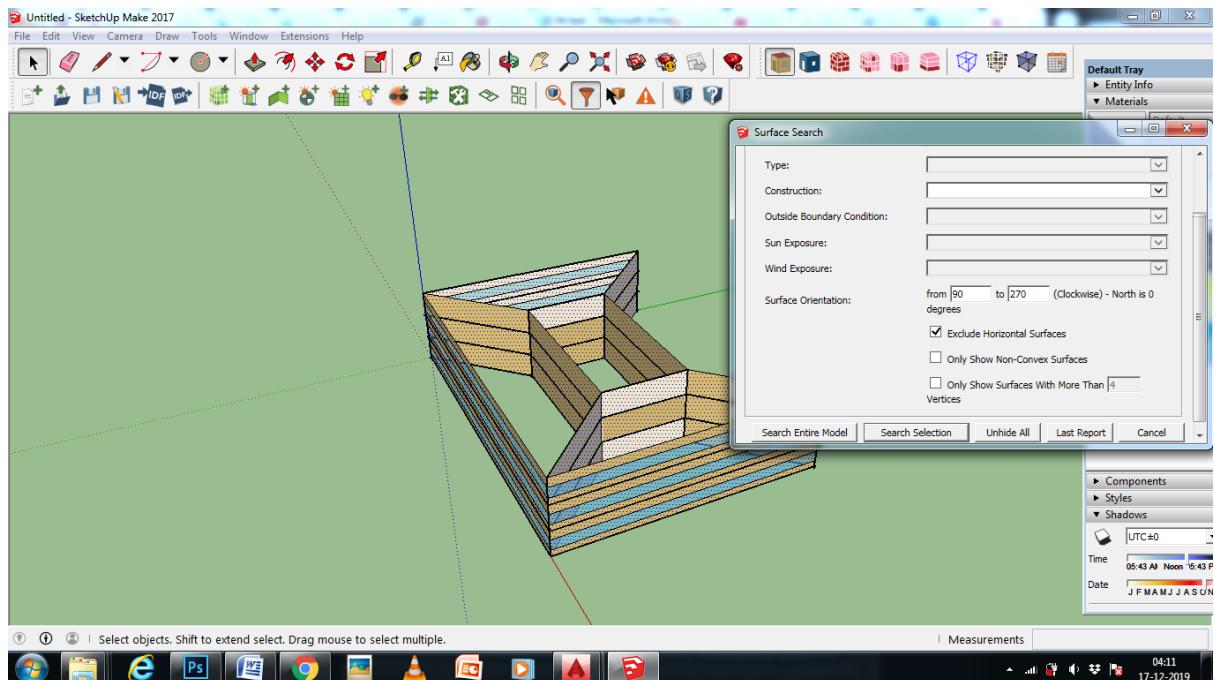
Match in Entire Model



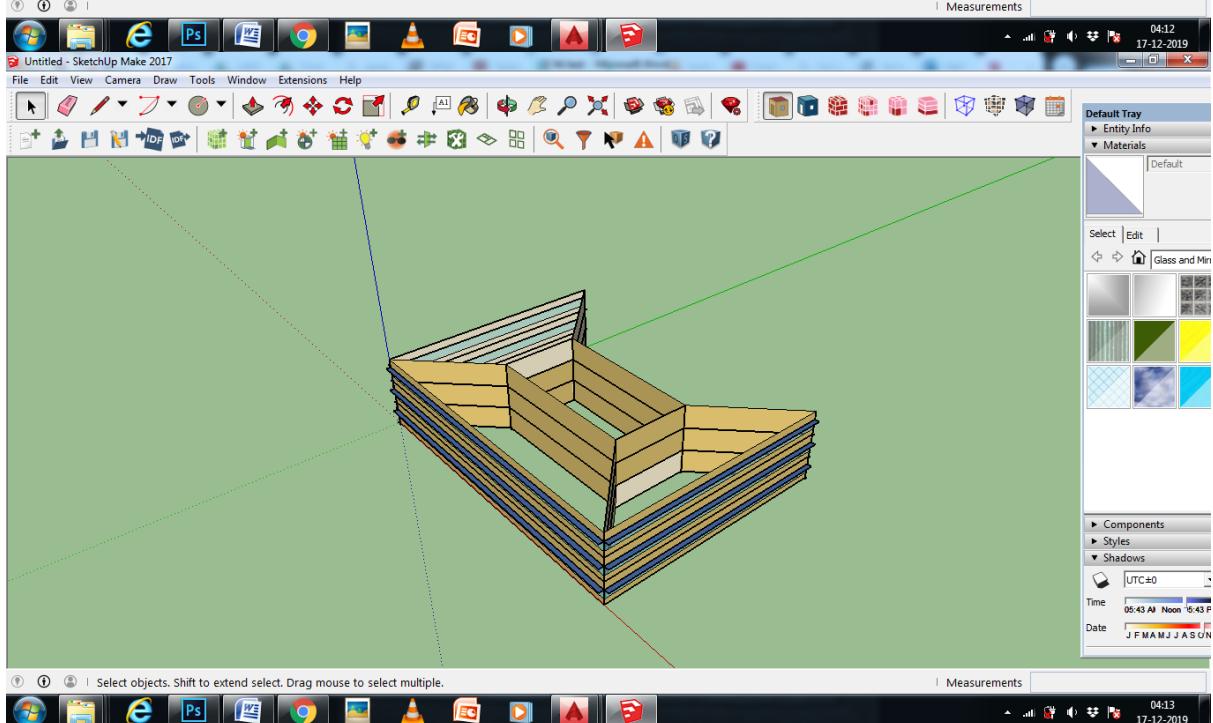
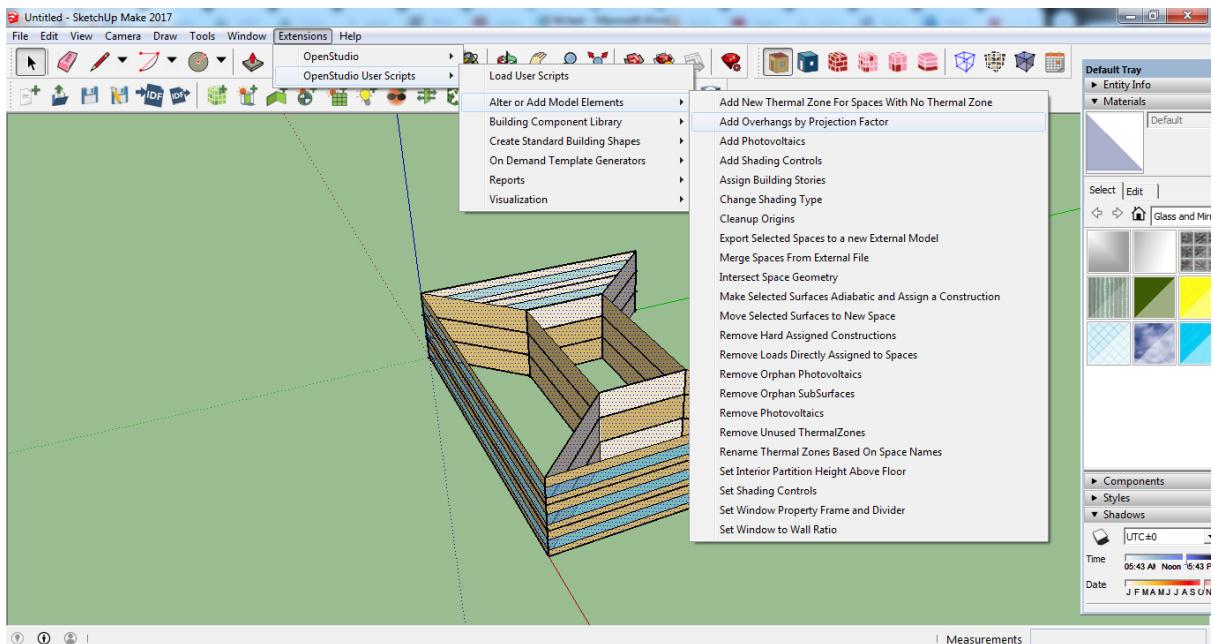
Add windows following the steps



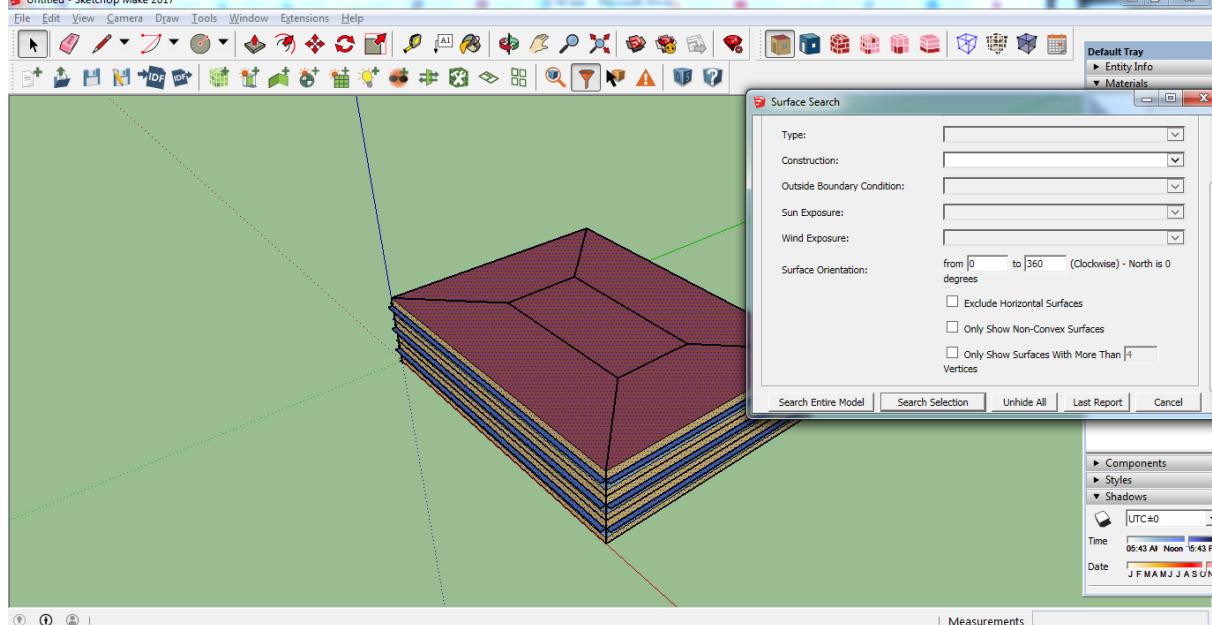
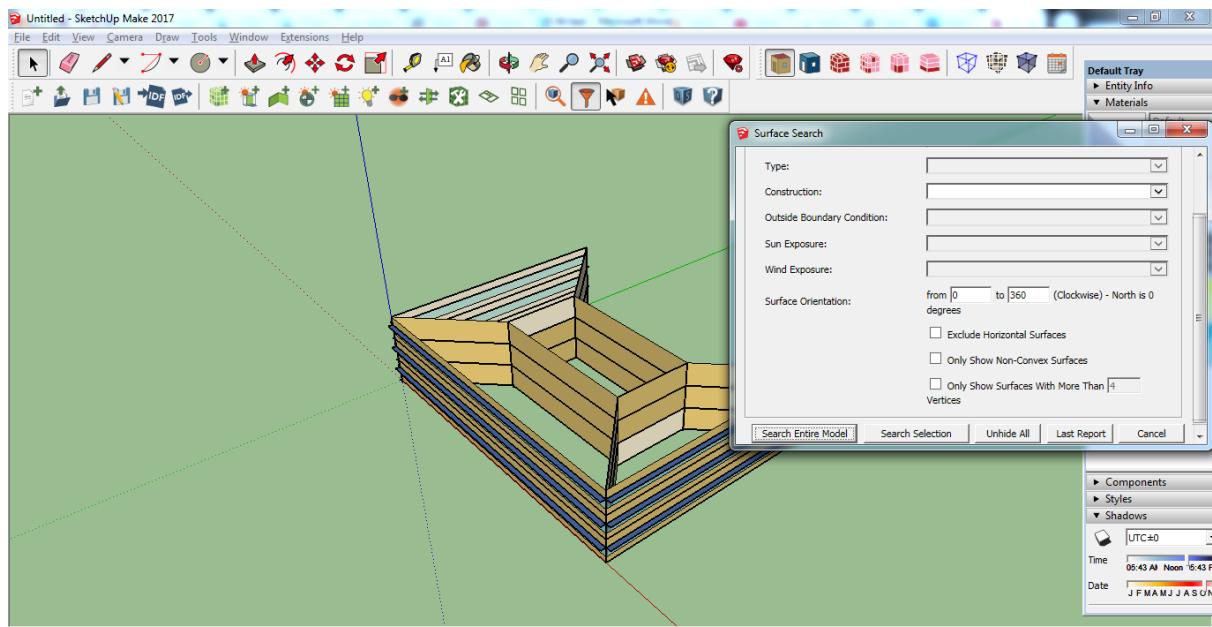
Search surface, introduce values 90-270



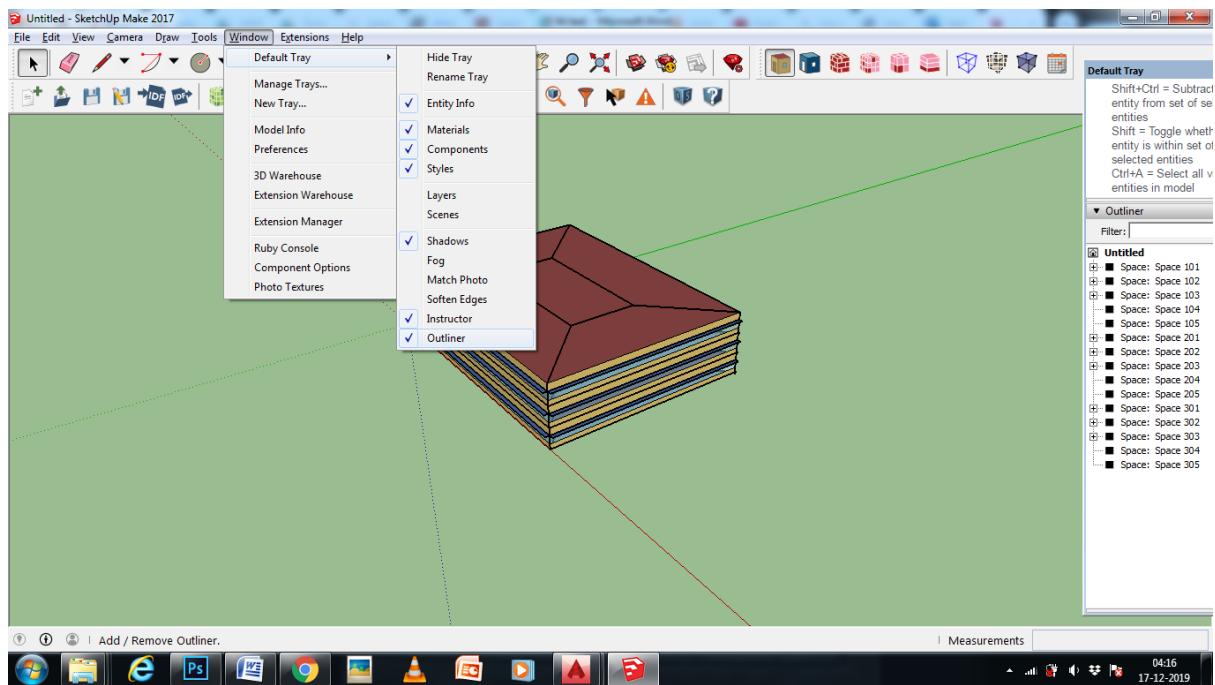
Add overhangs.



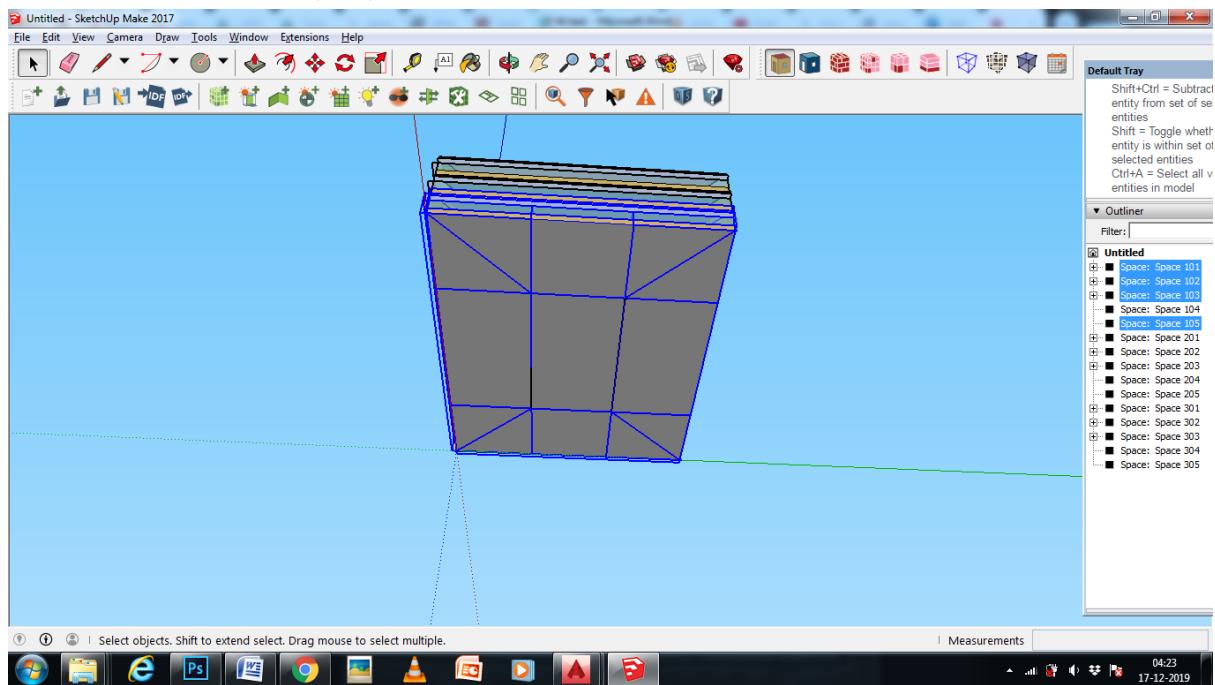
Search surface and add values 0-360

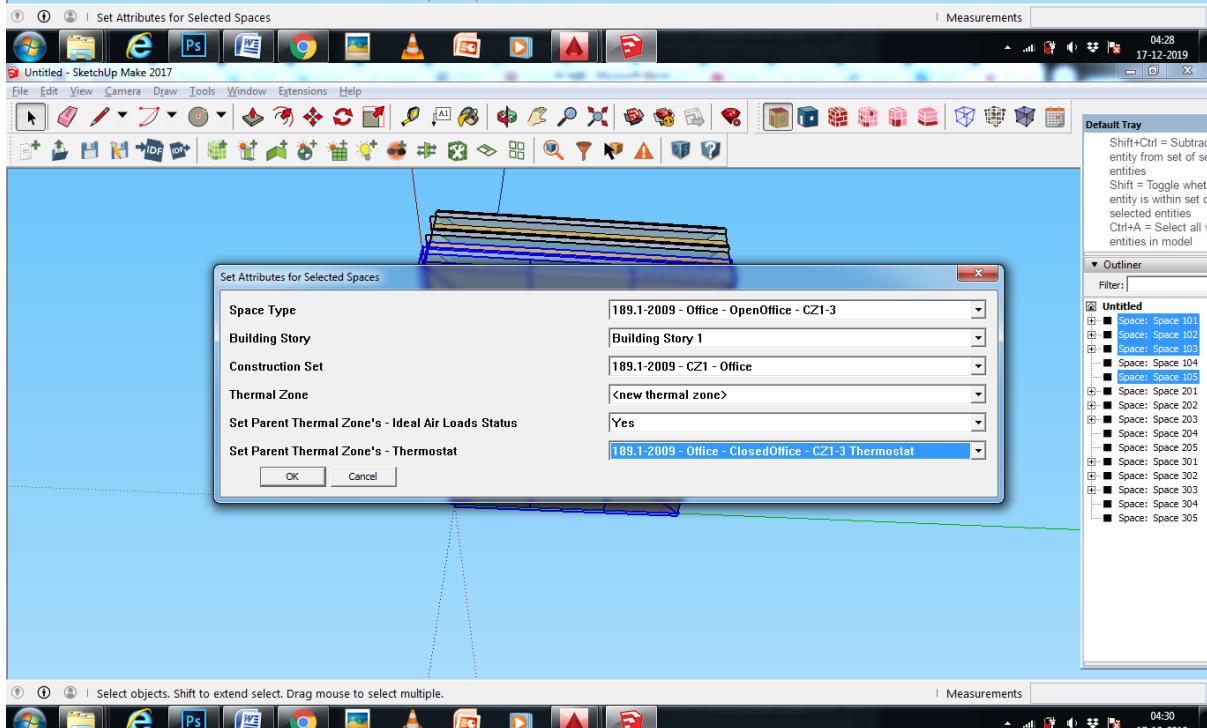
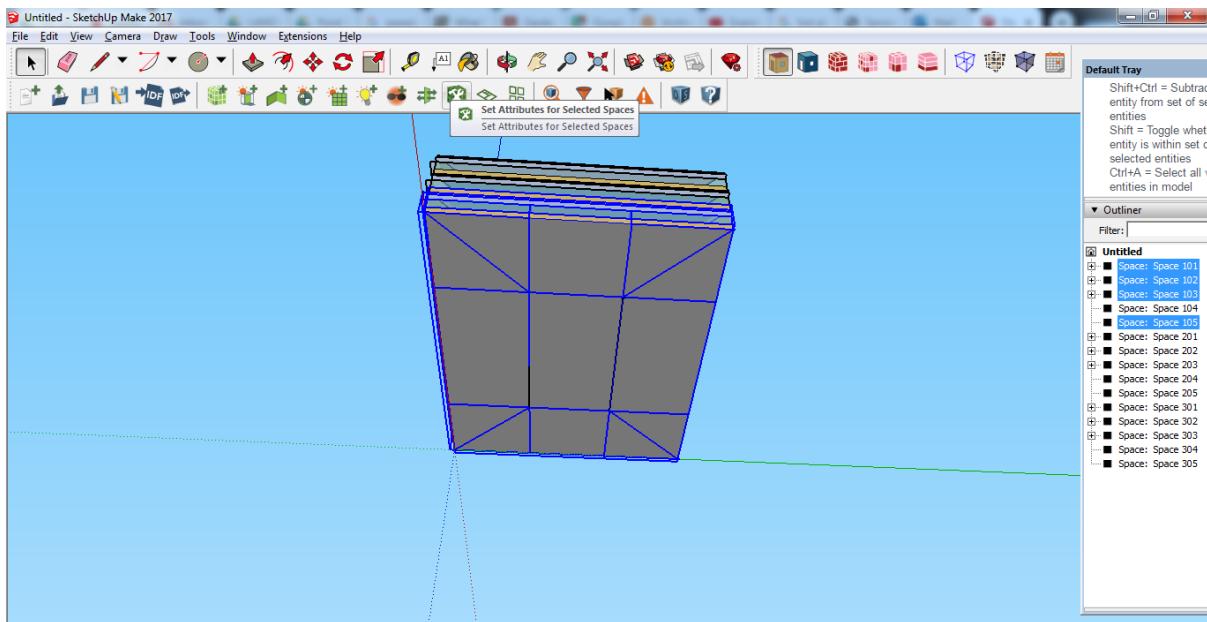


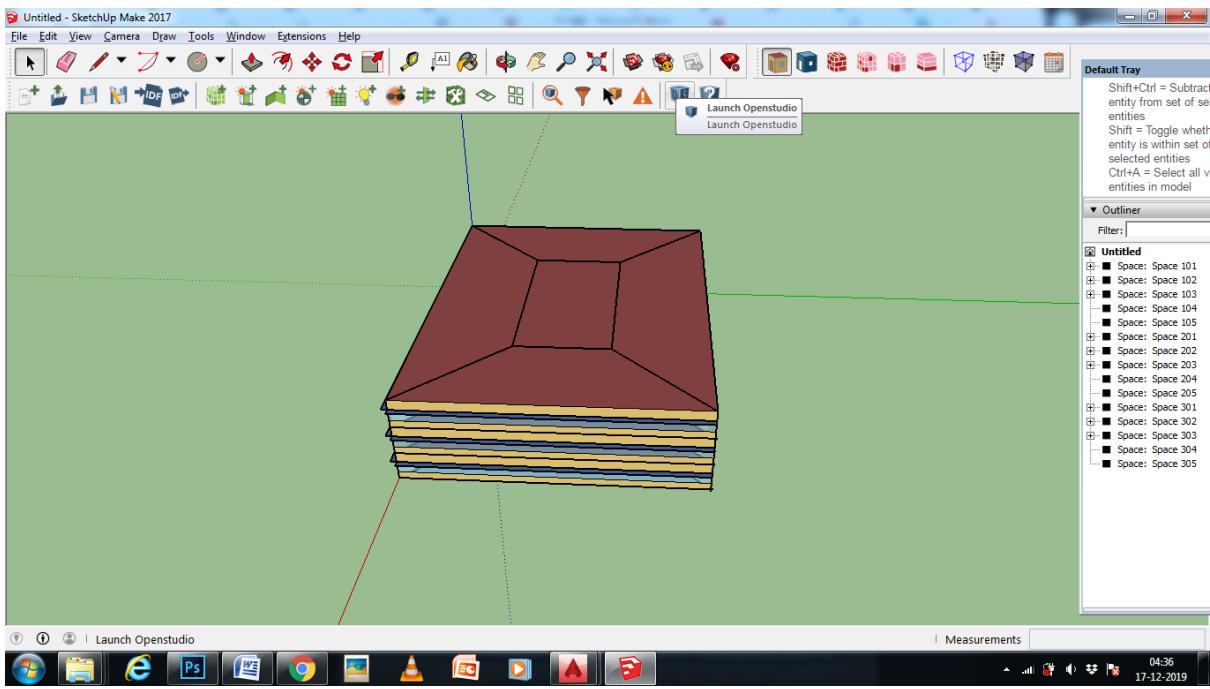
Activate “Outliner”



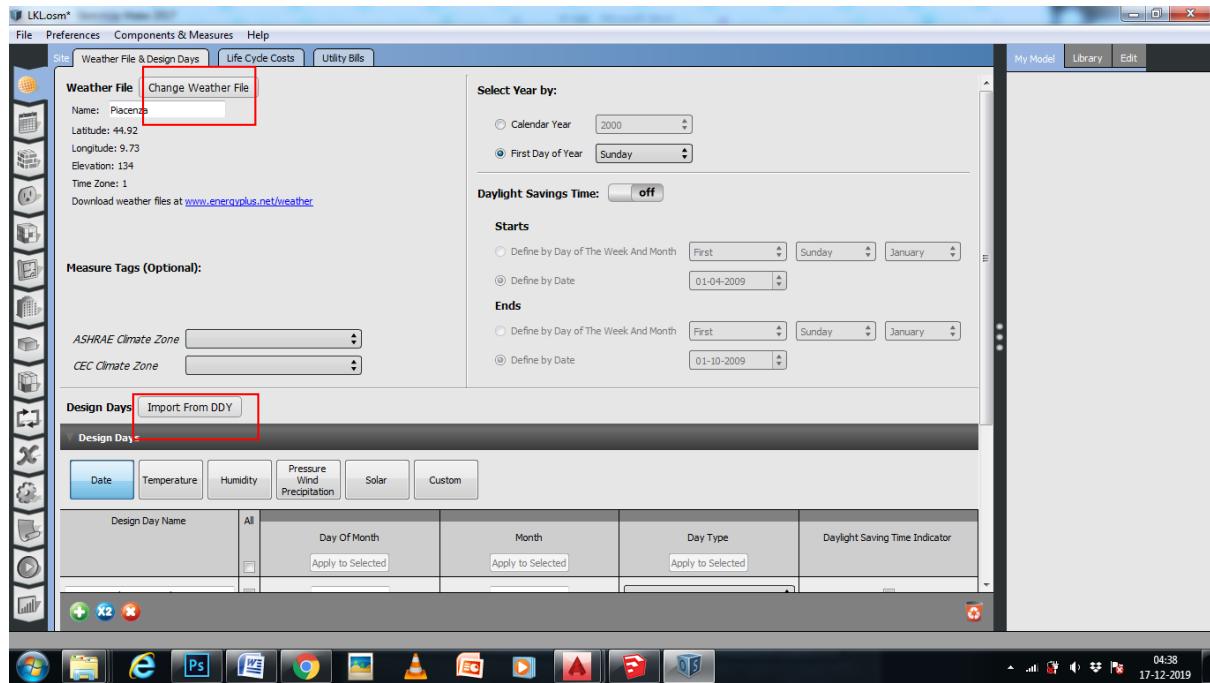
Select the surfaces 101,102,103 and 105



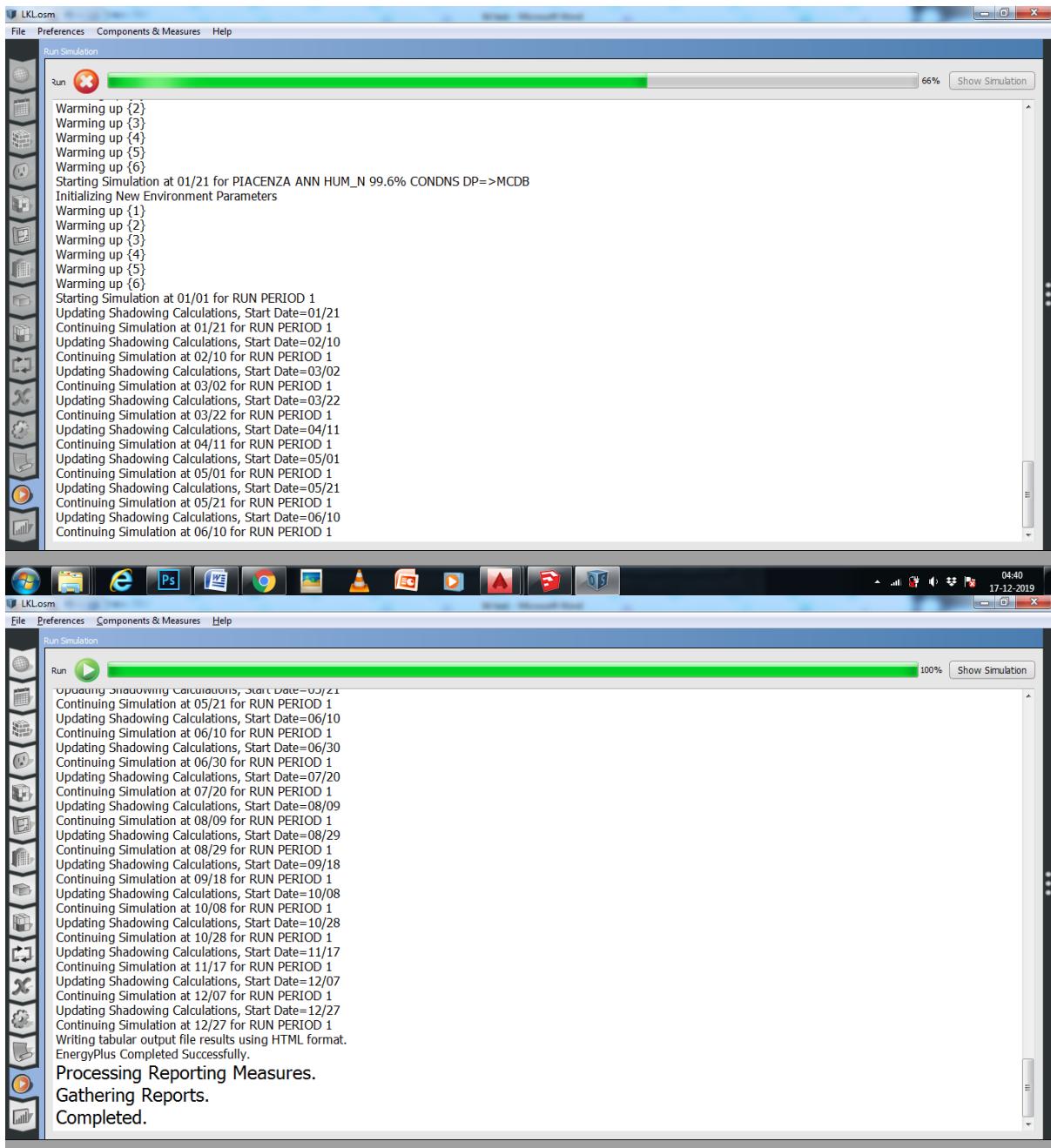




Add weather data of Piacenza.



Run the simulation



LKL.osm

File Preferences Components & Measures Help

Run Simulation

Run  66% Show Simulation

Warming up {2}
Warming up {3}
Warming up {4}
Warming up {5}
Warming up {6}
Starting Simulation at 01/21 for PIACENZA ANN HUM_N 99.6% CONDNS DP=>MCDB
Initializing New Environment Parameters
Warming up {1}
Warming up {2}
Warming up {3}
Warming up {4}
Warming up {5}
Warming up {6}
Starting Simulation at 01/01 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=01/21
Continuing Simulation at 01/21 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=02/10
Continuing Simulation at 02/10 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=03/02
Continuing Simulation at 03/02 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=03/22
Continuing Simulation at 03/22 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=04/11
Continuing Simulation at 04/11 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=05/01
Continuing Simulation at 05/01 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=05/21
Continuing Simulation at 05/21 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=06/10
Continuing Simulation at 06/10 for RUN PERIOD 1

04:40 17-12-2019

File Preferences Components & Measures Help

Run Simulation

Run  100% Show Simulation

Updating Shadowing Calculations, Start Date=09/21
Continuing Simulation at 05/21 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=06/10
Continuing Simulation at 06/10 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=06/30
Continuing Simulation at 06/30 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=07/20
Continuing Simulation at 07/20 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=08/09
Continuing Simulation at 08/09 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=08/29
Continuing Simulation at 08/29 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=09/18
Continuing Simulation at 09/18 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=10/08
Continuing Simulation at 10/08 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=10/28
Continuing Simulation at 10/28 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=11/17
Continuing Simulation at 11/17 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=12/07
Continuing Simulation at 12/07 for RUN PERIOD 1
Updating Shadowing Calculations, Start Date=12/27
Continuing Simulation at 12/27 for RUN PERIOD 1
Writing tabular output file results using HTML format.
EnergyPlus Completed Successfully.

Processing Reporting Measures.
Gathering Reports.
Completed.

04:40 17-12-2019 Read

Read the results.

LKLosm

File Preferences Components & Measures Help

Results Summary

Reports: EnergyPlus Results

Program Version EnergyPlus, Version 8.9.0-eba93e8e1b, YMD=2019.12.17 04:39

Tabular Output Report in Format: HTML

Building: Building 1

Environment: RUN PERIOD 1 ** Piacenza - ITA IGDG WMO#=160840

Simulation Timestamp: 2019-12-17 04:40:02

Report: Annual Building Utility Performance Summary

For: Entire Facility

Timestamp: 2019-12-17 04:40:02

Values gathered over 8760.00 hours

Site and Source Energy

	Total Energy [GJ]	Energy Per Total Building Area [MJ/m ²]	Energy Per Conditioned Building Area [MJ/m ²]
Total Site Energy	382.29	382.29	382.29
Net Site Energy	382.29	382.29	382.29
Total Source Energy	1143.19	1143.19	1143.19
Net Source Energy	1143.19	1143.19	1143.19

04:42
17-12-2019

LKLosm*

File Preferences Components & Measures Help

Results Summary

Reports: EnergyPlus Results

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BUILDING ENERGY PERFORMANCE - ELECTRICITY

| Meter |

BUILDING ENERGY PERFORMANCE - DISTRICT HEATING