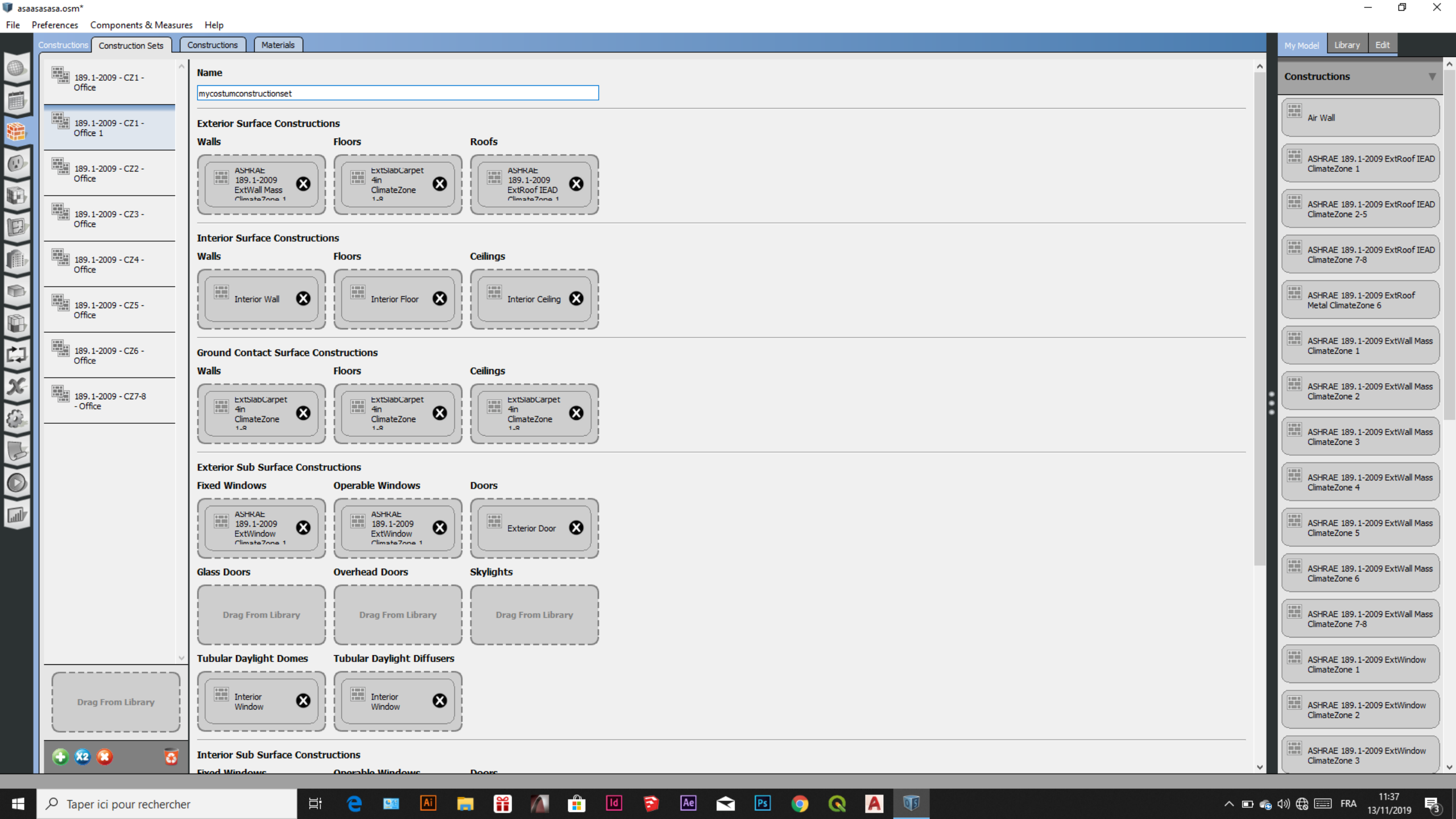


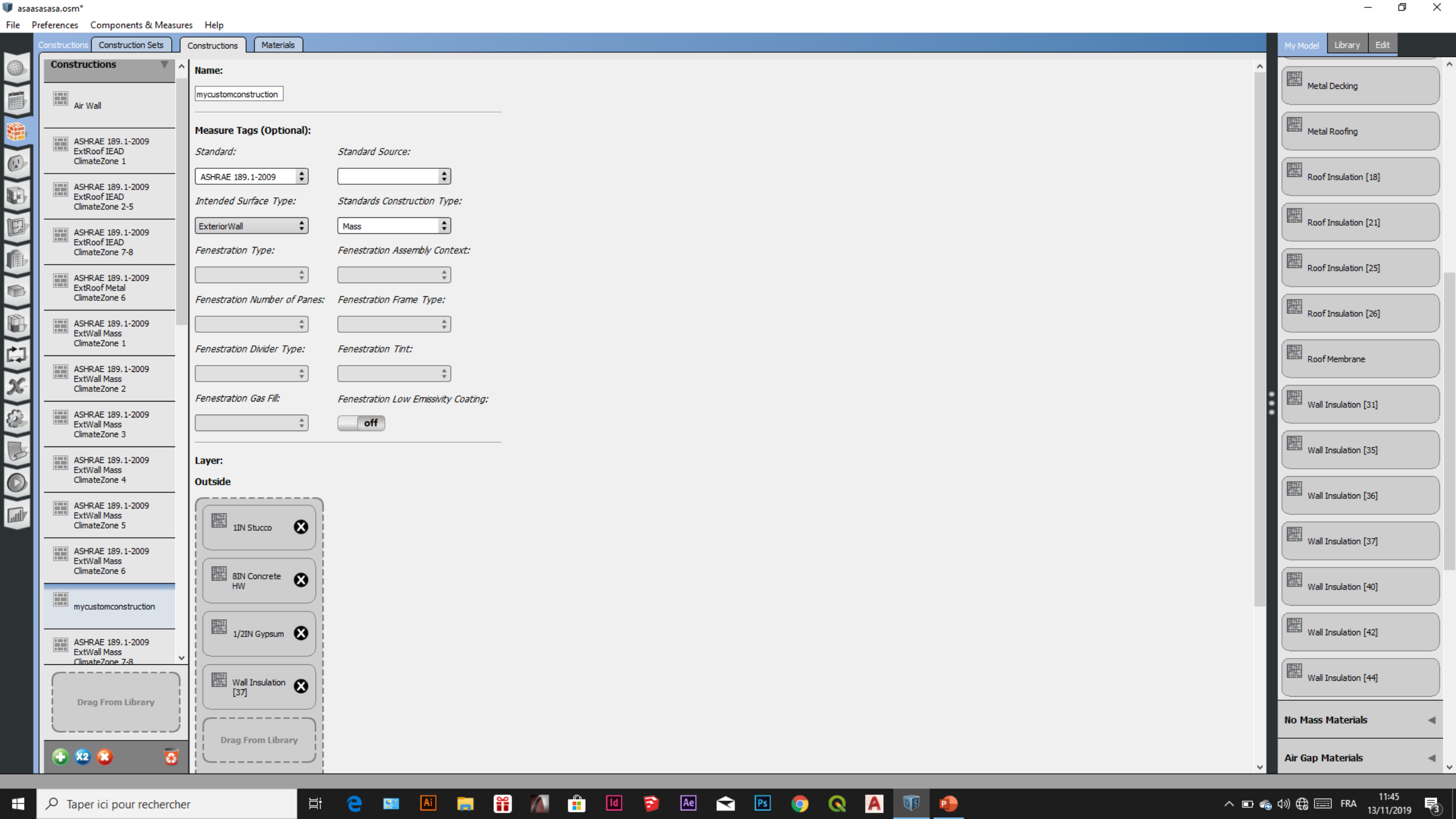
Task 1 : solar radiation summary

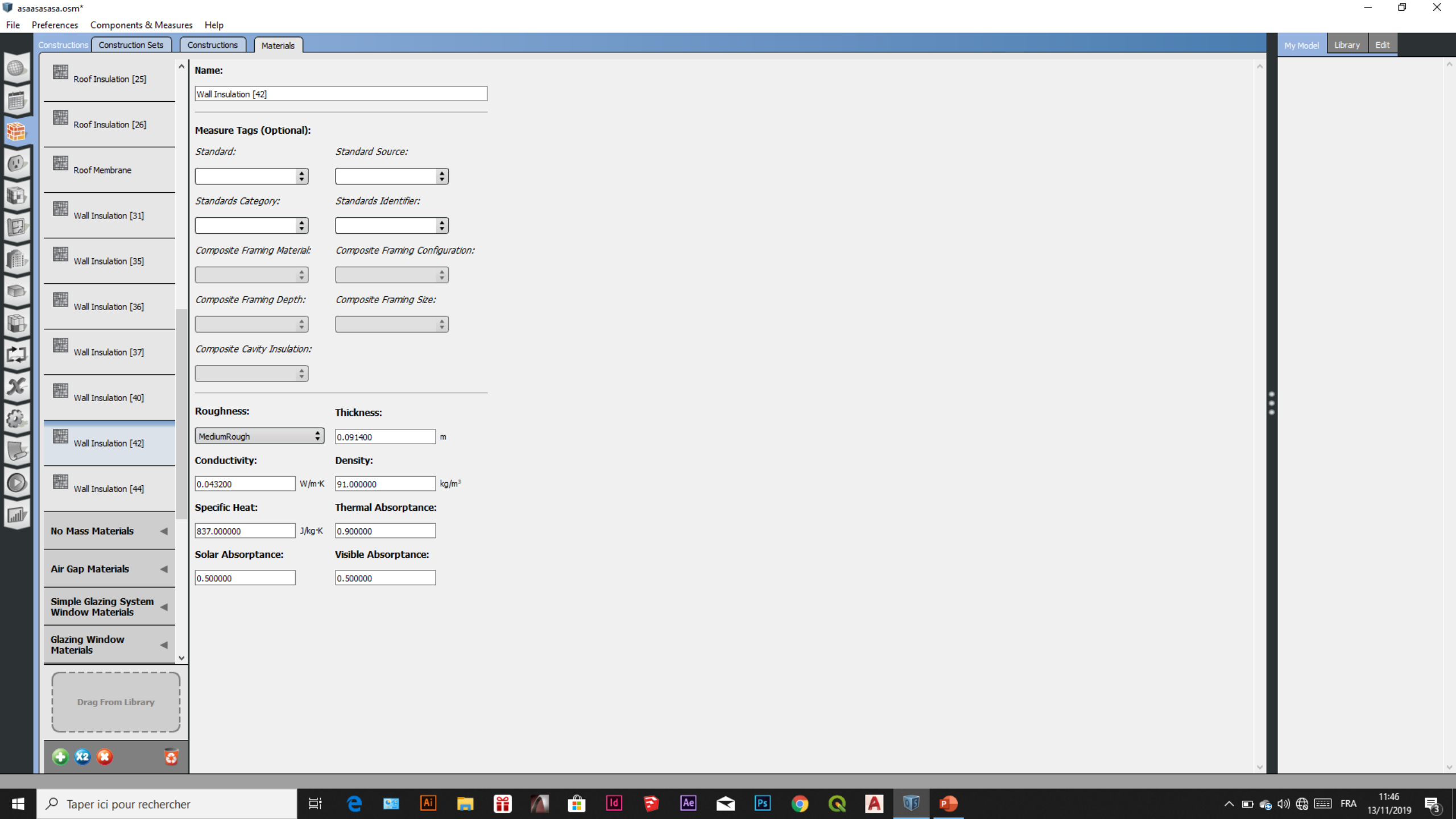
- Solar radiation is an electromagnetic energy emitted by the sun,
- This radiation is either absorbed by the atmosphere molecules and sent back (absorption) or scattered by them (dispersion),
- The spectrum of the solar radiation at the earth's surface has several components. Direct radiation comes straight from the sun, diffuse radiation is scattered from the sky and from the surroundings. Additional radiation reflected from the surroundings (ground or sea) depends on the local albedo. The total ground radiation is called the global radiation. The direction of the target surface must be defined for global irradiance. For direct radiation the target surface faces the incoming beam.
- When the sun's rays are vertical, the Earth's surface gets all the energy possible. The more slanted the sun's rays are, the longer they travel through the atmosphere, becoming more scattered and diffuse.
- Absorption and scattering levels change as the constituents of the atmosphere change.
- Solar radiation depends on the altitude, direction, geography, time, seasons and weather,
- If we want to measure the total solar radiation, we use a pyranometer, if we want to measure only the diffused one, we add shadowing to the device, if we want to measure the direct one we use the pyrhelimeter

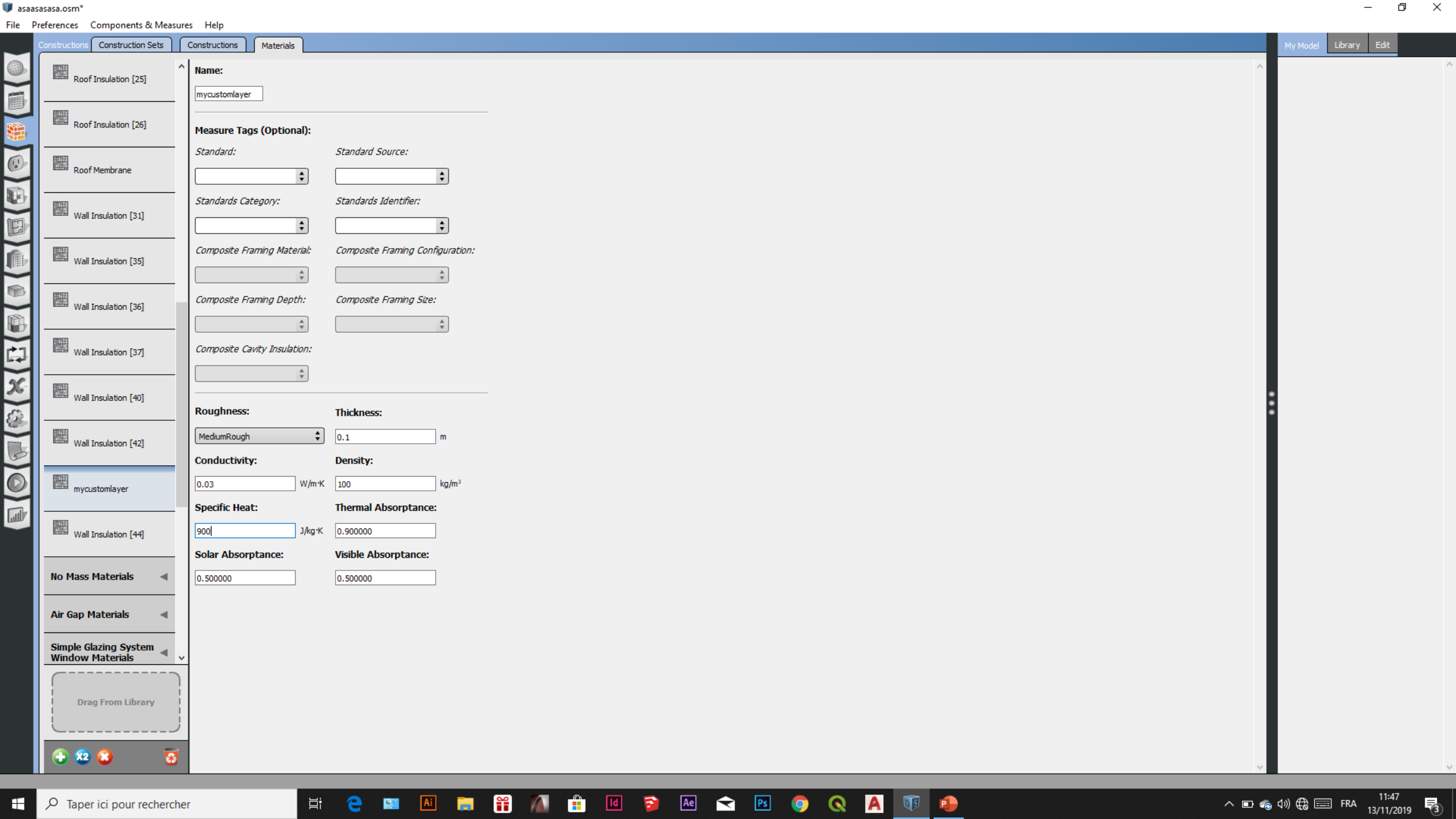
Task 2 : Open studio steps

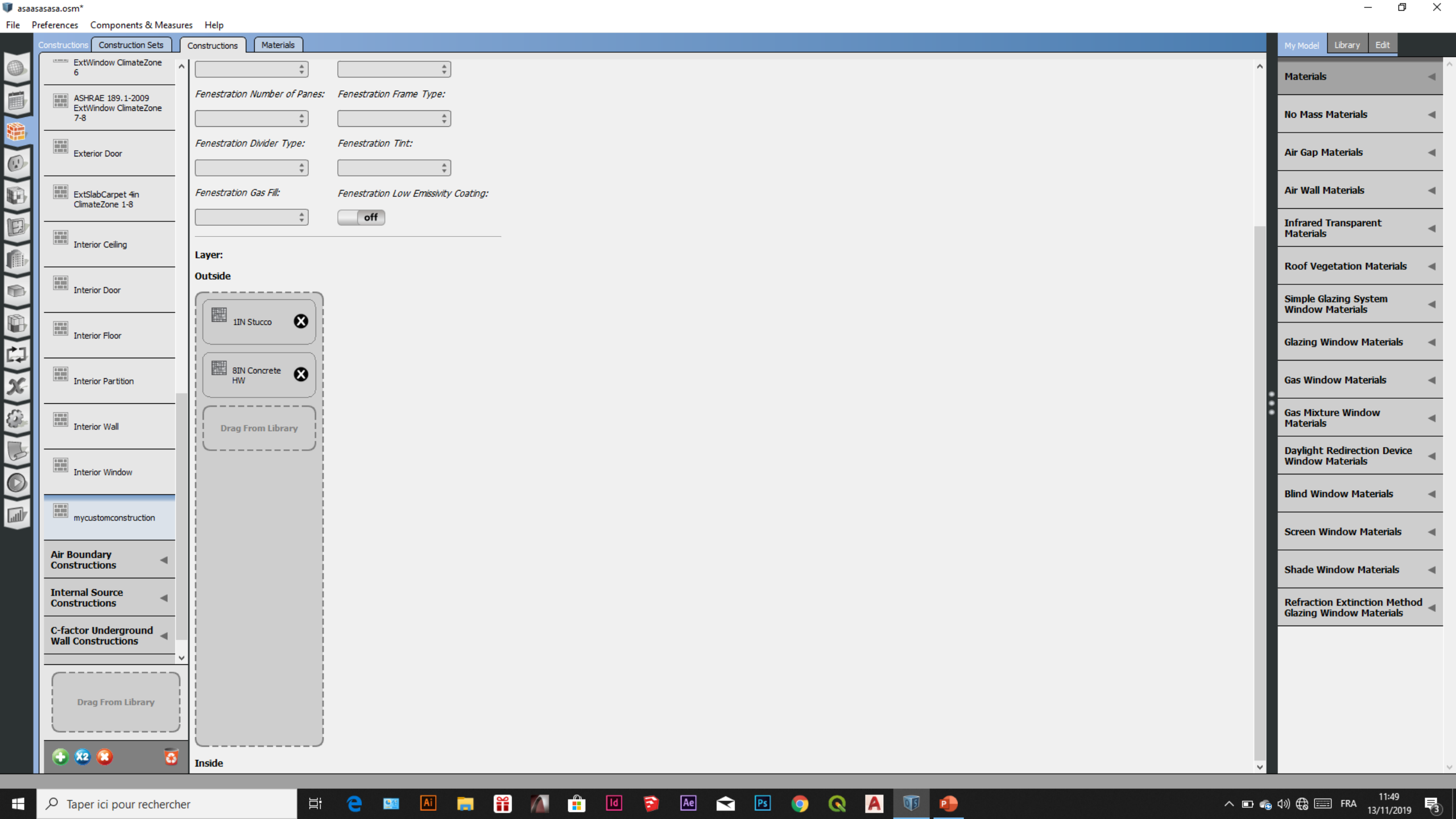
**Customize walls in the
buildings**

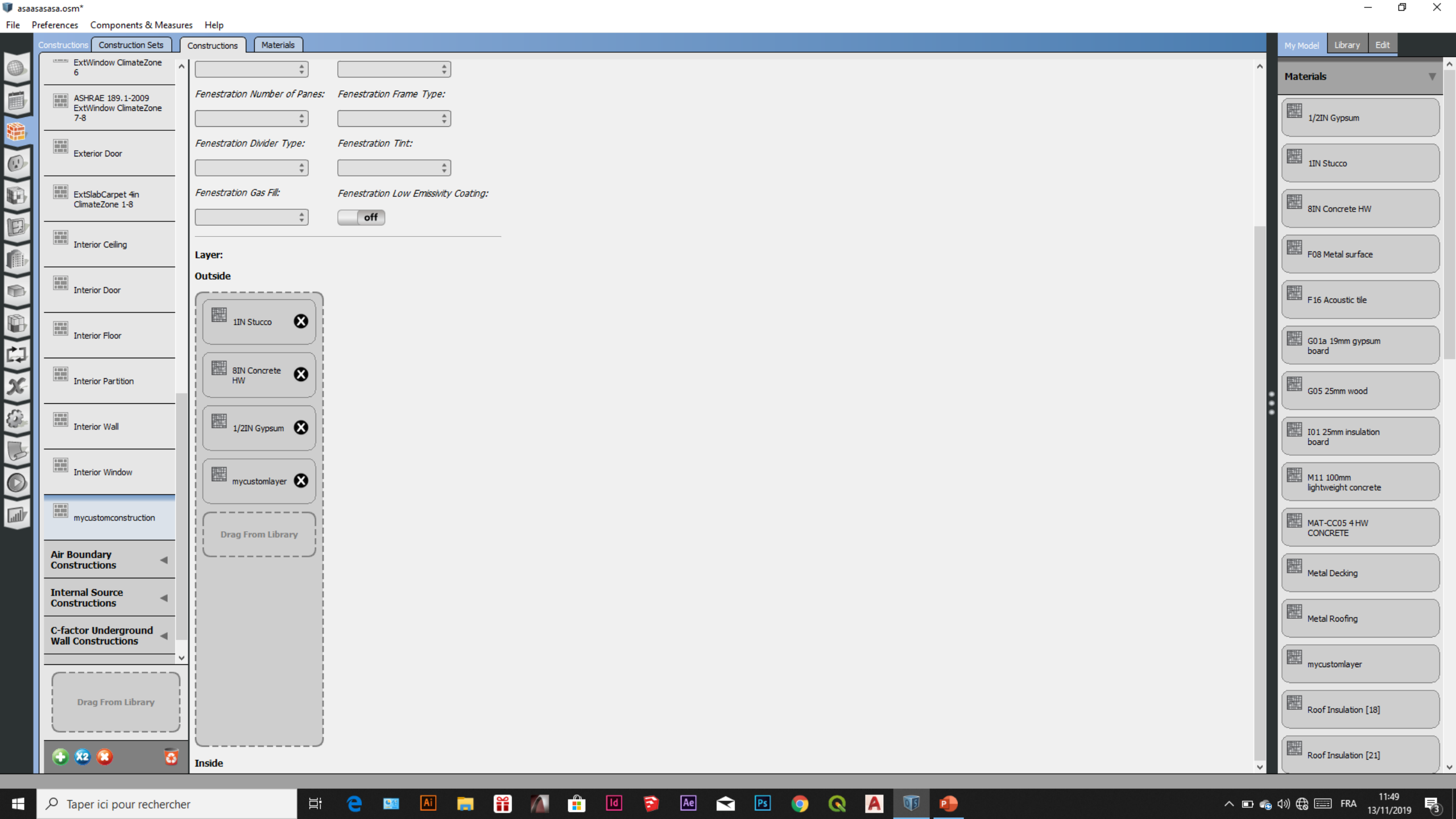


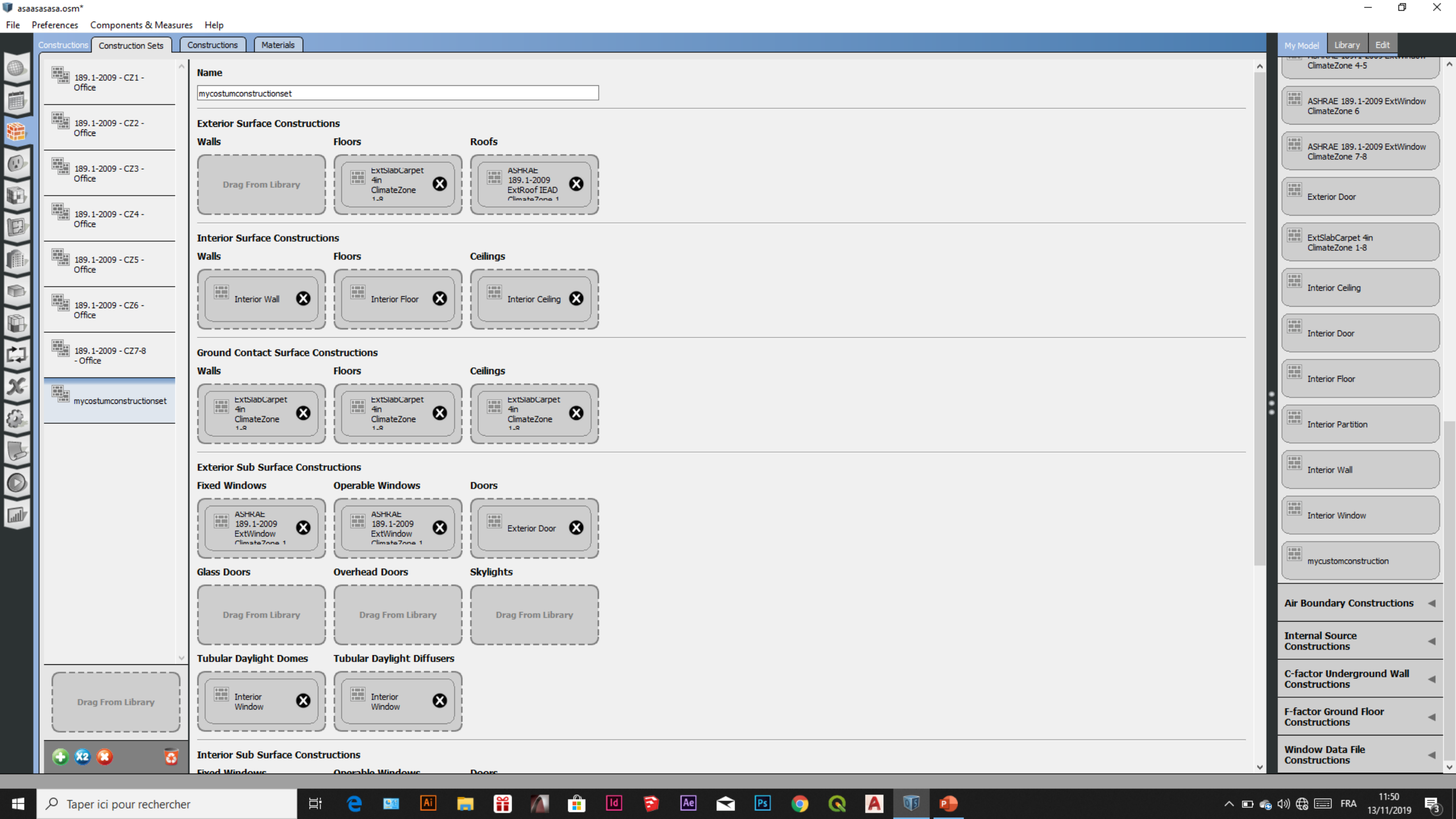


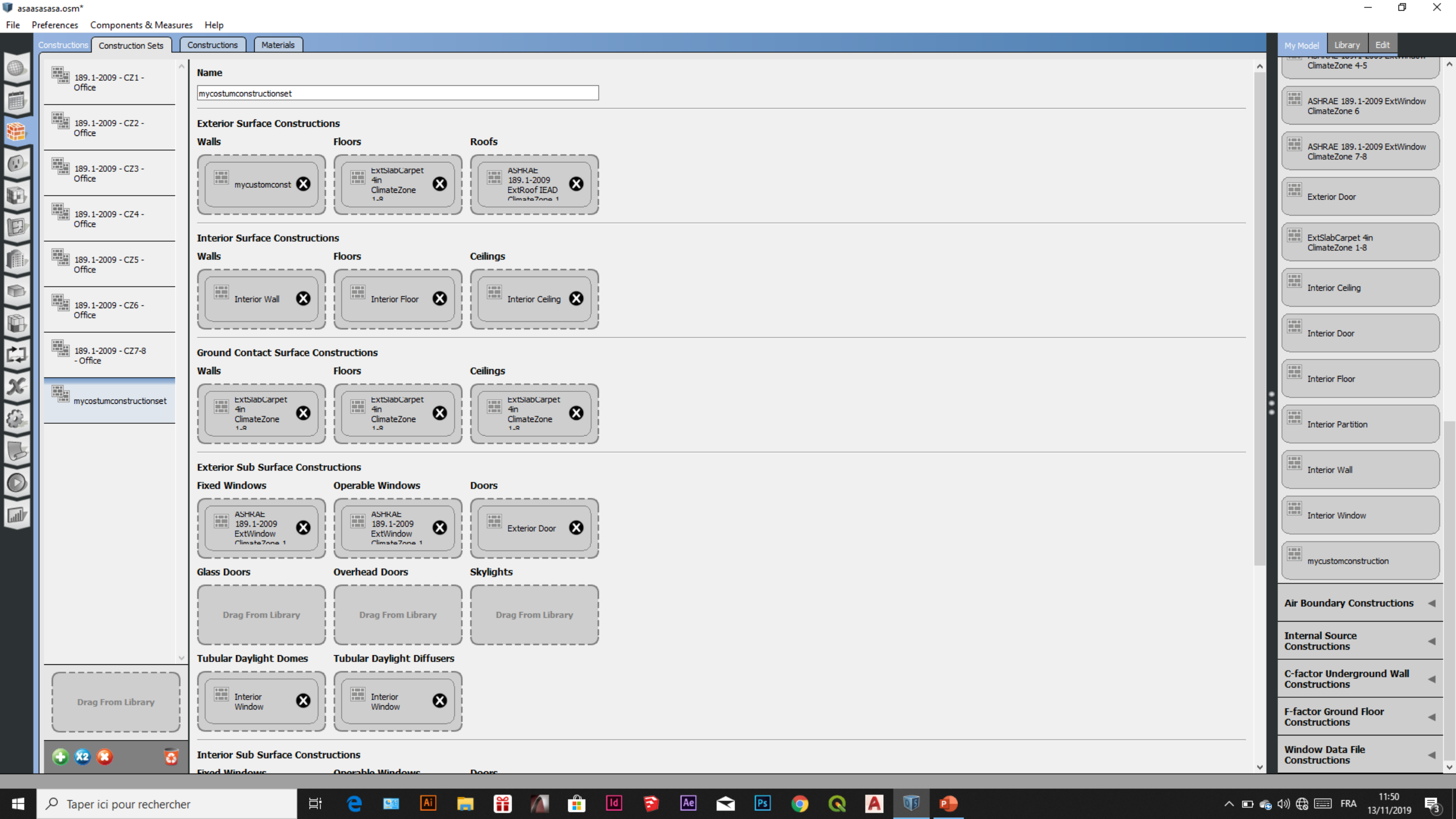












General Airflow Custom

Filters: Story Thermal Zone Space Type

Space Name	All	Story	Thermal Zone	Space Type	Default Construction Set	Default Schedule Set	Part of Total Floor Area
	<input type="checkbox"/>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>
<div>Space 101</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 102</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 103</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 104</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 2</div>	<div>189.1-2009 - Office - BreakRoom</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 105</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 201</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 202</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 203</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 204</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 4</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 205</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 301</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 302</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 303</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 304</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 6</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 305</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>189.1-2009 - CZ1 - Office</div>	<div></div>	<input checked="" type="checkbox"/>

General Airflow Custom

Filters: Story Thermal Zone Space Type

Space Name	All	Story	Thermal Zone	Space Type	Default Construction Set	Default Schedule Set	Part of Total Floor Area
	<input type="checkbox"/>	<input type="text" value="Apply to Selected"/>	<input type="text" value="Apply to Selected"/>	<input type="text" value="Apply to Selected"/>	<input type="text" value="Apply to Selected"/>	<input type="text" value="Apply to Selected"/>	<input type="text" value="Apply to Selected"/>
<input type="text" value="Space 101"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 1"/>	<input type="text" value="Thermal Zone 1"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="mycustomconstructionset"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 102"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 1"/>	<input type="text" value="Thermal Zone 1"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 103"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 1"/>	<input type="text" value="Thermal Zone 1"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 104"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 1"/>	<input type="text" value="Thermal Zone 2"/>	<input type="text" value="189.1-2009 - Office - BreakRoom"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 105"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 1"/>	<input type="text" value="Thermal Zone 1"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 201"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 2"/>	<input type="text" value="Thermal Zone 3"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 202"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 2"/>	<input type="text" value="Thermal Zone 3"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 203"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 2"/>	<input type="text" value="Thermal Zone 3"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 204"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 2"/>	<input type="text" value="Thermal Zone 4"/>	<input type="text" value="189.1-2009 - Office - ClosedOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 205"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 2"/>	<input type="text" value="Thermal Zone 3"/>	<input type="text" value="189.1-2009 - Office - OpenOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 301"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 3"/>	<input type="text" value="Thermal Zone 5"/>	<input type="text" value="189.1-2009 - Office - ClosedOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 302"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 3"/>	<input type="text" value="Thermal Zone 5"/>	<input type="text" value="189.1-2009 - Office - ClosedOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 303"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 3"/>	<input type="text" value="Thermal Zone 5"/>	<input type="text" value="189.1-2009 - Office - ClosedOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 304"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 3"/>	<input type="text" value="Thermal Zone 6"/>	<input type="text" value="189.1-2009 - Office - ClosedOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>
<input type="text" value="Space 305"/>	<input checked="" type="checkbox"/>	<input type="text" value="Building Story 3"/>	<input type="text" value="Thermal Zone 5"/>	<input type="text" value="189.1-2009 - Office - ClosedOffice"/>	<input type="text" value="189.1-2009 - CZ1 - Office"/>	<input type="text" value=""/>	<input checked="" type="checkbox"/>

We apply the new construction set to all walls

Interior Partition Surface

Building Stories

Thermal Zones

Space Types

Construction Sets

189.1-2009 - CZ1 - Office

189.1-2009 - CZ2 - Office

189.1-2009 - CZ3 -
Office

189.1-2009 - CZ4 -
Office

189.1-2009 - CZ5 -
Office

189.1-2009 - CZ6 -
Office

189.1-2009 - CZ7-8
- Office

mycostumconstructionset

Schedule Sets

Design Specification Outdoor Air

People Definitions

Lights Definitions



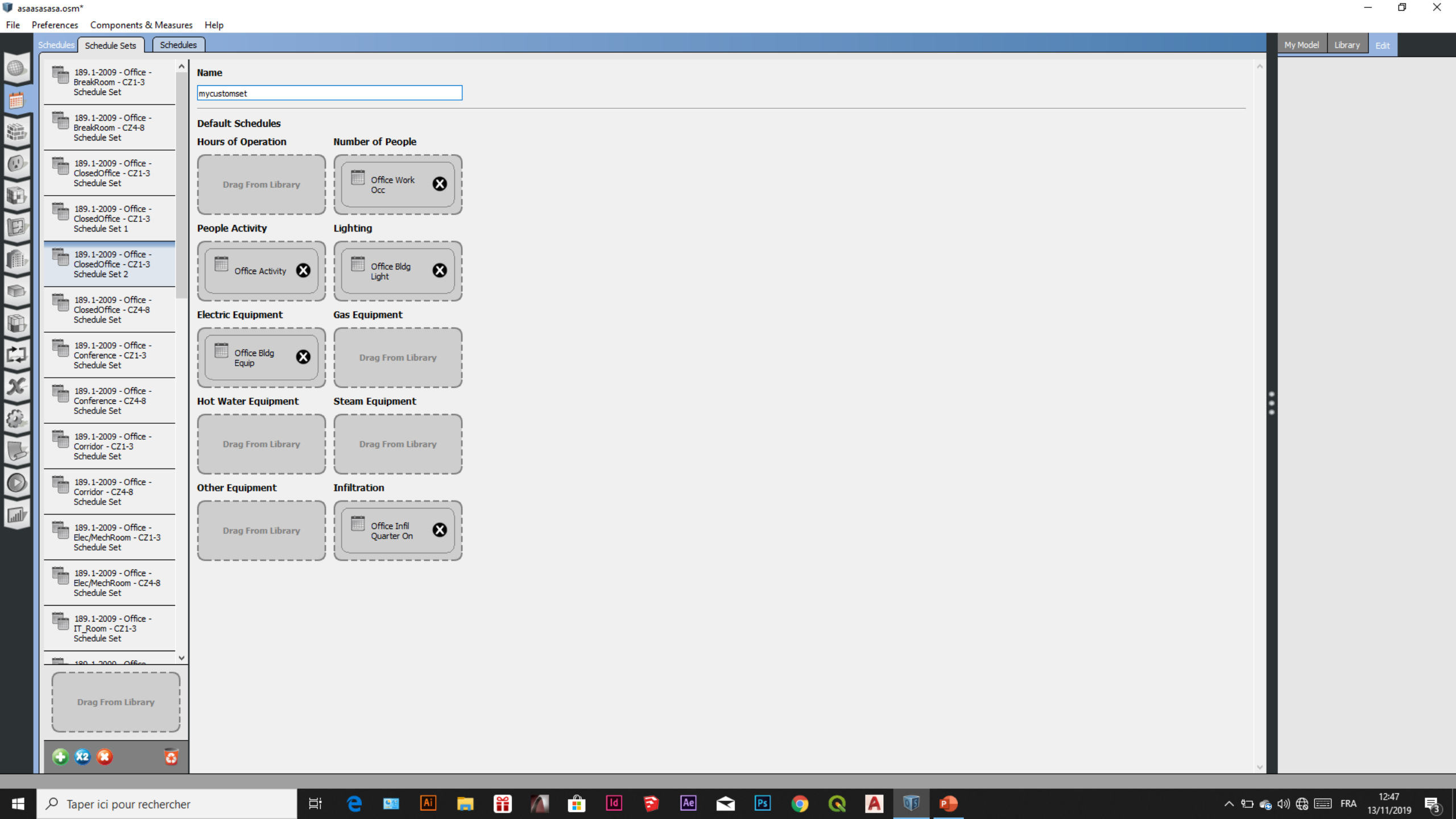
Run

66%

Show Simulation

Initializing workflow.
Processing OpenStudio Measures.
Translating the OpenStudio Model to EnergyPlus.
Processing EnergyPlus Measures.
Starting Simulation.
EnergyPlus Starting
EnergyPlus, Version 9.2.0-921312fa1d, YMD=2019.11.13 12:32

**Define schedule for
peoples' activity**



Large Office Activity

Large Office Bldg Equip

Large Office Bldg Light

Large Office Bldg Occ

Large Office ClgSetp

Design Day Profiles

Summer

Winter

Run Period Profiles

Priority 1

Priority 2

Default

Large Office HtgSetp

Large Office Infil Quarter On

Medium Office Activity

Medium Office Bldg Equip

Medium Office Bldg Occ

Medium Office ClgSetp

Medium Office HtgSetp

Drag From Library

Schedule Name: Large Office ClgSetp

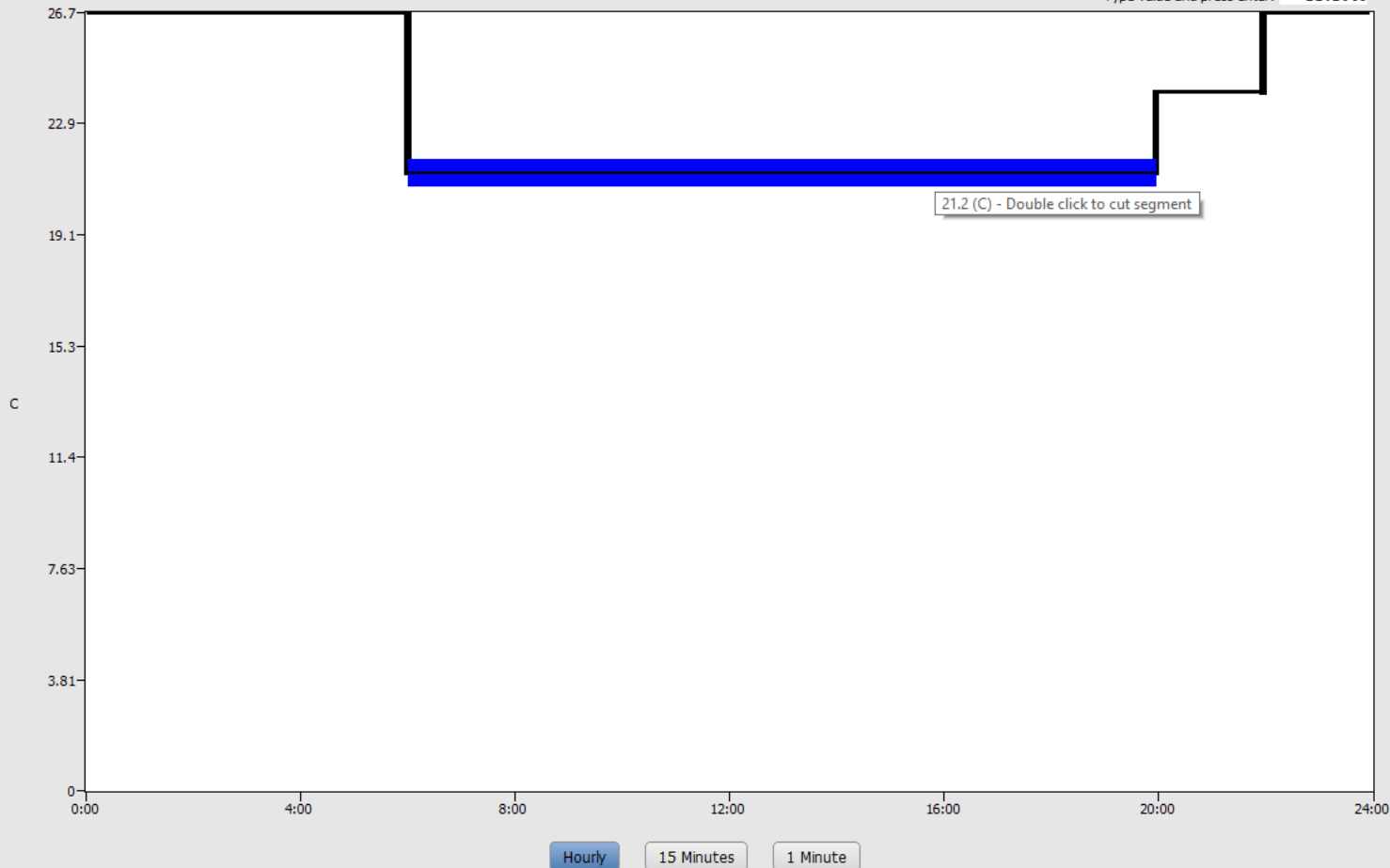
Schedule Type: Temperature 5

Default day profile.

Lower Limit: 0,00

Upper Limit: 26,70

Type value and press enter: 21.2043



Jan						
l	m	m	j	v	s	d
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Feb						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

Mar						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Apr						
l	m	m	j	v	s	d
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May						
l	m	m	j	v	s	d
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

OS:Schedule:Day

Name
Large Office ClgSetp Default Schedule

Schedule Type Limits Name
Temperature 5

Interpolate to Timestep
No

Hour
6

Minute
0

Value Until Time
26.7000007629395

Hour
20

Minute
0

Value Until Time
21.2043418884277

Hour
22

Minute
0

Value Until Time
24

Hour
24

Minute
0

Value Until Time
26.7000007629395

mycustomoffice

Design Day Profiles

Summer

Winter

Run Period Profiles

Priority 1

Priority 2

Default

Large Office ClgSetp 1

Large Office Activity

Large Office Bldg Equip

Large Office Bldg Light

Large Office Bldg Occ

Large Office ClgSetp

Large Office HtgSetp

Large Office Infil Quarter On

Medium Office Activity

Medium Office Bldg Equip

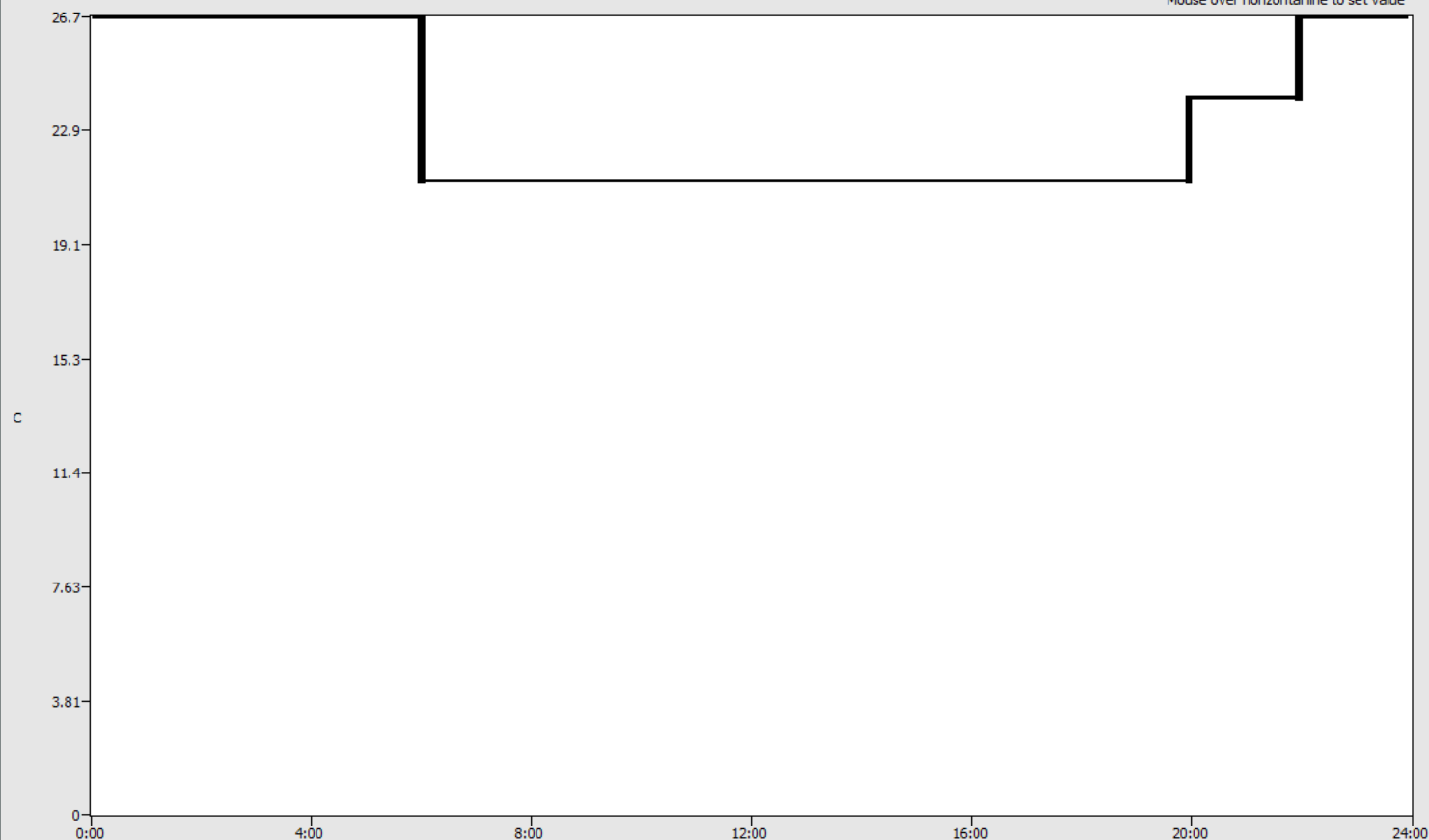
Medium Office Bldg Occ

Schedule Name: mycustomoffice Schedule Type: Temperature 5

Default day profile.

Lower Limit: 0,00

Upper Limit: 26,70



The worst case scenario for the summer

Jan						
l	m	m	j	v	s	d
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Feb						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

Mar						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Apr						
l	m	m	j	v	s	d
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May						
l	m	m	j	v	s	d
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



OS:Schedule:Day

Name

Large Office ClgSetp Default Schedule 2

Schedule Type Limits Name

Temperature 5

Interpolate to Timestep

No

Hour

6

Minute

0

Value Until Time

26.7000007629395

Hour

20

Minute

0

Value Until Time

21.2043418884277

Hour

22

Minute

0

Value Until Time

24

Hour

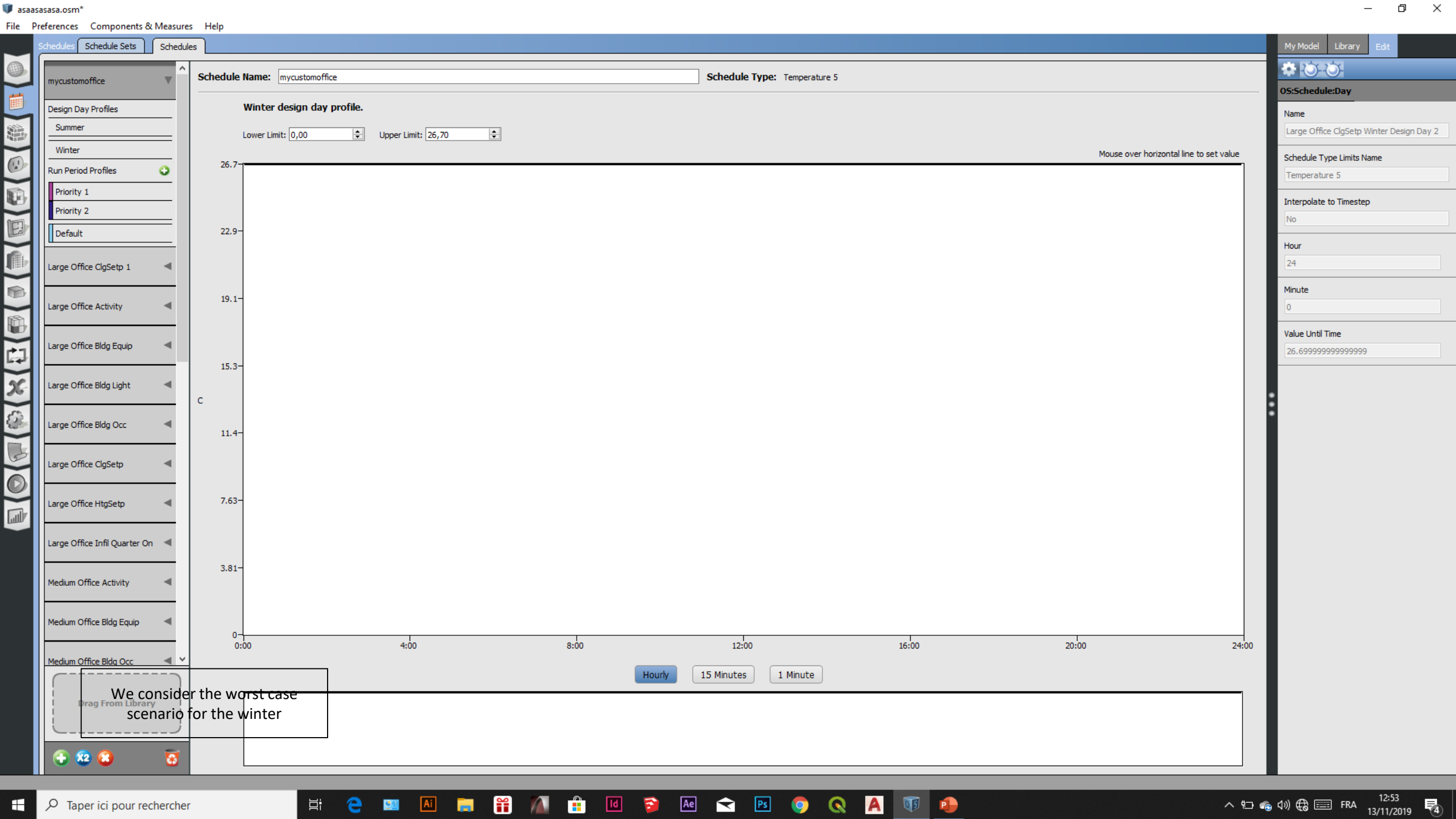
24

Minute

0

Value Until Time

26.7000007629395



**Define a schedule for
light**

Medium Office Bldg Occ

Medium Office ClgSetp

Medium Office HtgSetp

Medium Office Infil Quarter On

mycustomoffice

Office Activity

Office Bldg Equip

Office Bldg Light

Design Day Profiles

Summer

Winter

Run Period Profiles

Priority 1

Priority 2

Default

Office Infil Quarter On

Office Misc Occ

Office Work Occ

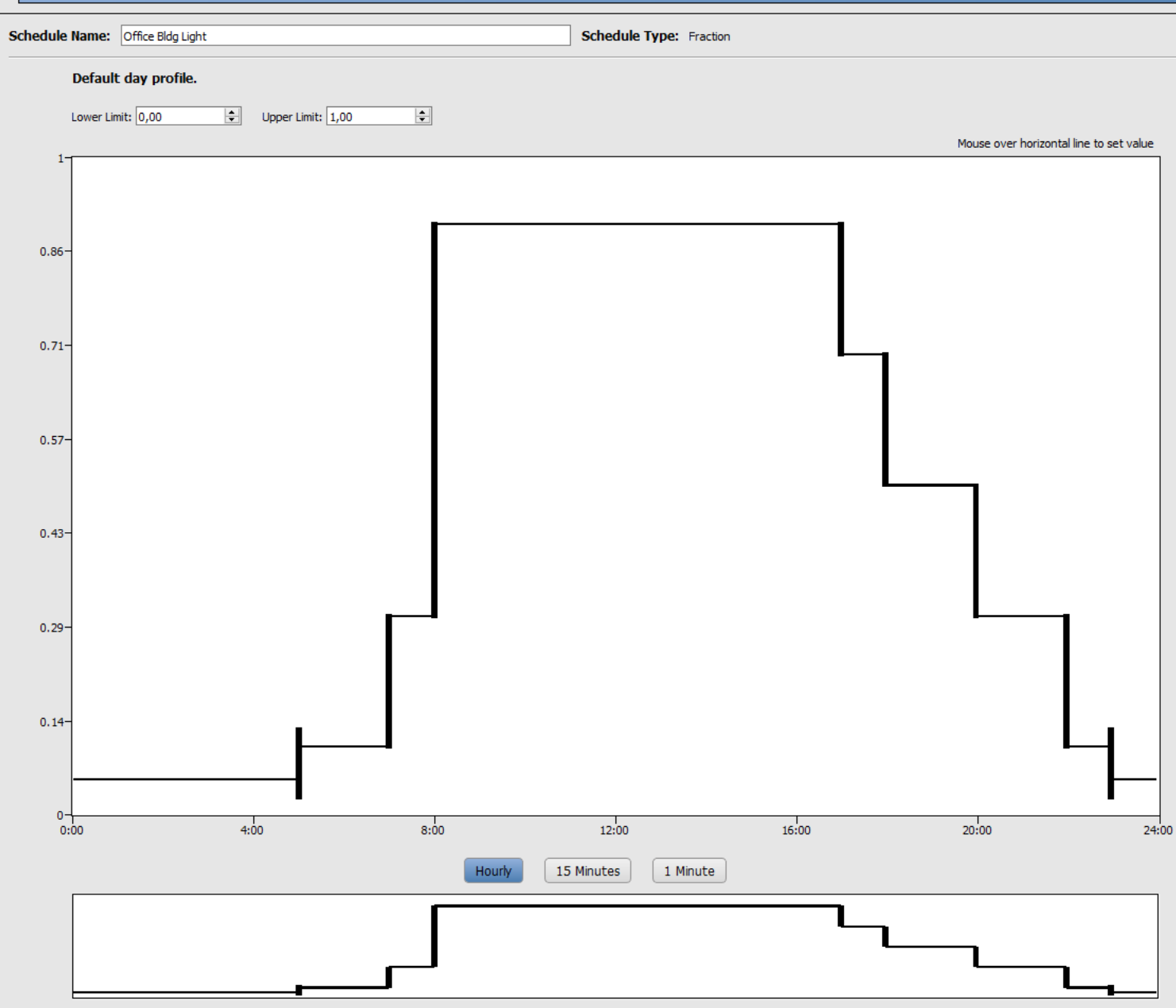
Drag From Library

+

x2

x

+



Jan						
l	m	m	j	v	s	d
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Feb						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

Mar						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Apr						
l	m	m	j	v	s	d
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May						
l	m	m	j	v	s	d
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Jun						
l	m	m	j	v	s	d

My Model Library Edit

OS:Schedule:Day

Name

Office Bldg Light Default Schedule

Schedule Type Limits Name

Fraction

Interpolate to Timestep

No

Hour

5

Minute

0

Value Until Time

0.05

Hour

7

Minute

0

Value Until Time

0.1

Hour

8

Minute

0

Value Until Time

0.3

Hour

17

Minute

0

Value Until Time

0.9

Hour

**Define schedule for
equipements**

Medium Office Bldg Occ

Medium Office ClgSetp

Medium Office HtgSetp

Medium Office Infil Quarter On

mycustomoffice

Office Activity

Office Bldg Equip

Design Day Profiles

Summer

Winter

Run Period Profiles

Priority 1

Priority 2

Default

Office Bldg Light

Office Infil Quarter On

Office Misc Occ

Office Work Occ

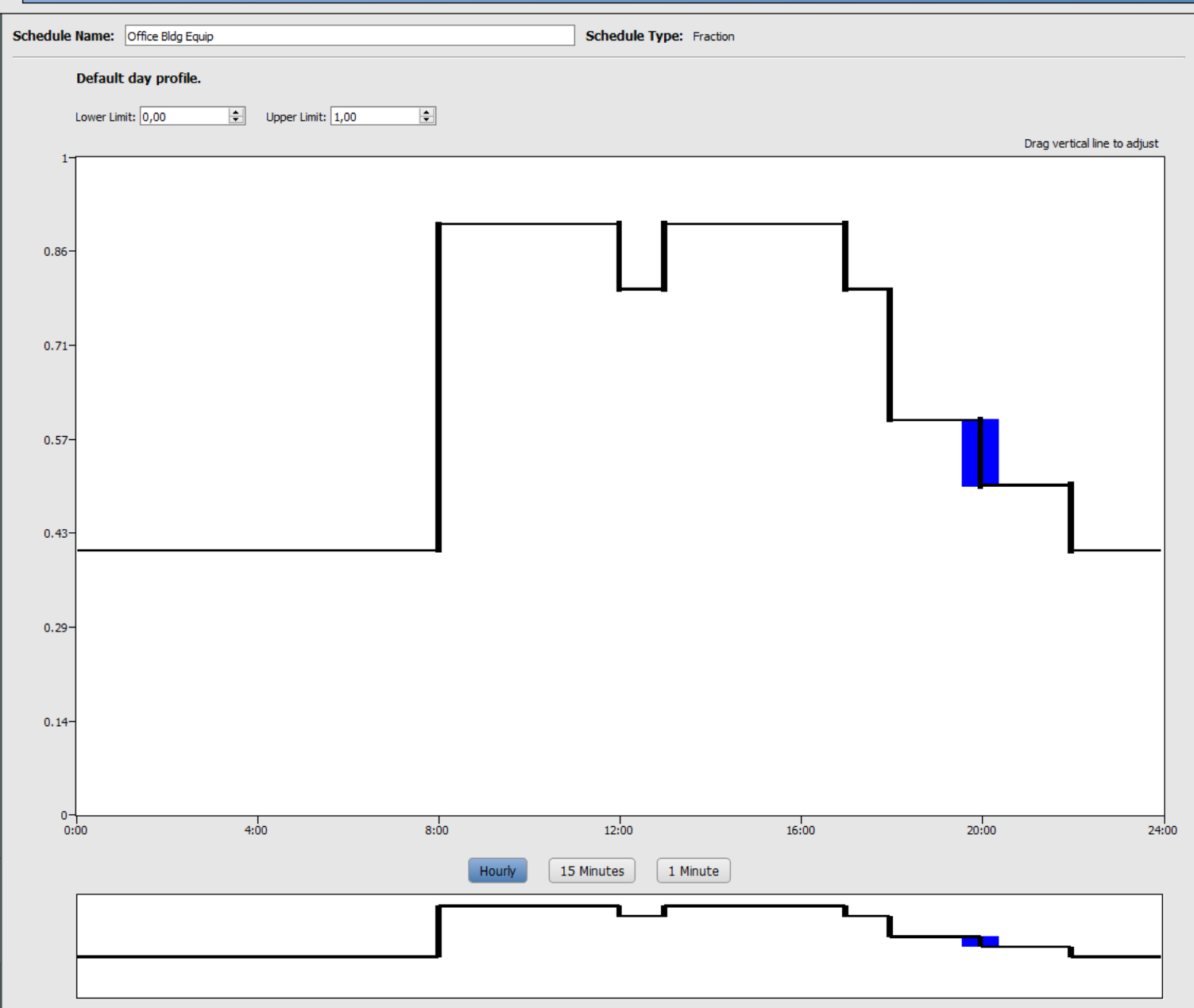
Drag From Library

+

x2

x

↺



Jan						
l	m	m	j	v	s	d
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
Feb						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					
Mar						
l	m	m	j	v	s	d
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		
Apr						
l	m	m	j	v	s	d
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
May						
l	m	m	j	v	s	d
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				
Jun						
l	m	m	j	v	s	d

My ModelLibraryEdit

OS:Schedule:Day

Name

Office Bldg Equip Default Schedule

Schedule Type Limits Name

Fraction

Interpolate to Timestep

No

Hour

8

Minute

0

Value Until Time

0.4

Hour

12

Minute

0

Value Until Time

0.9

Hour

13

Minute

0

Value Until Time

0.8

Hour

17

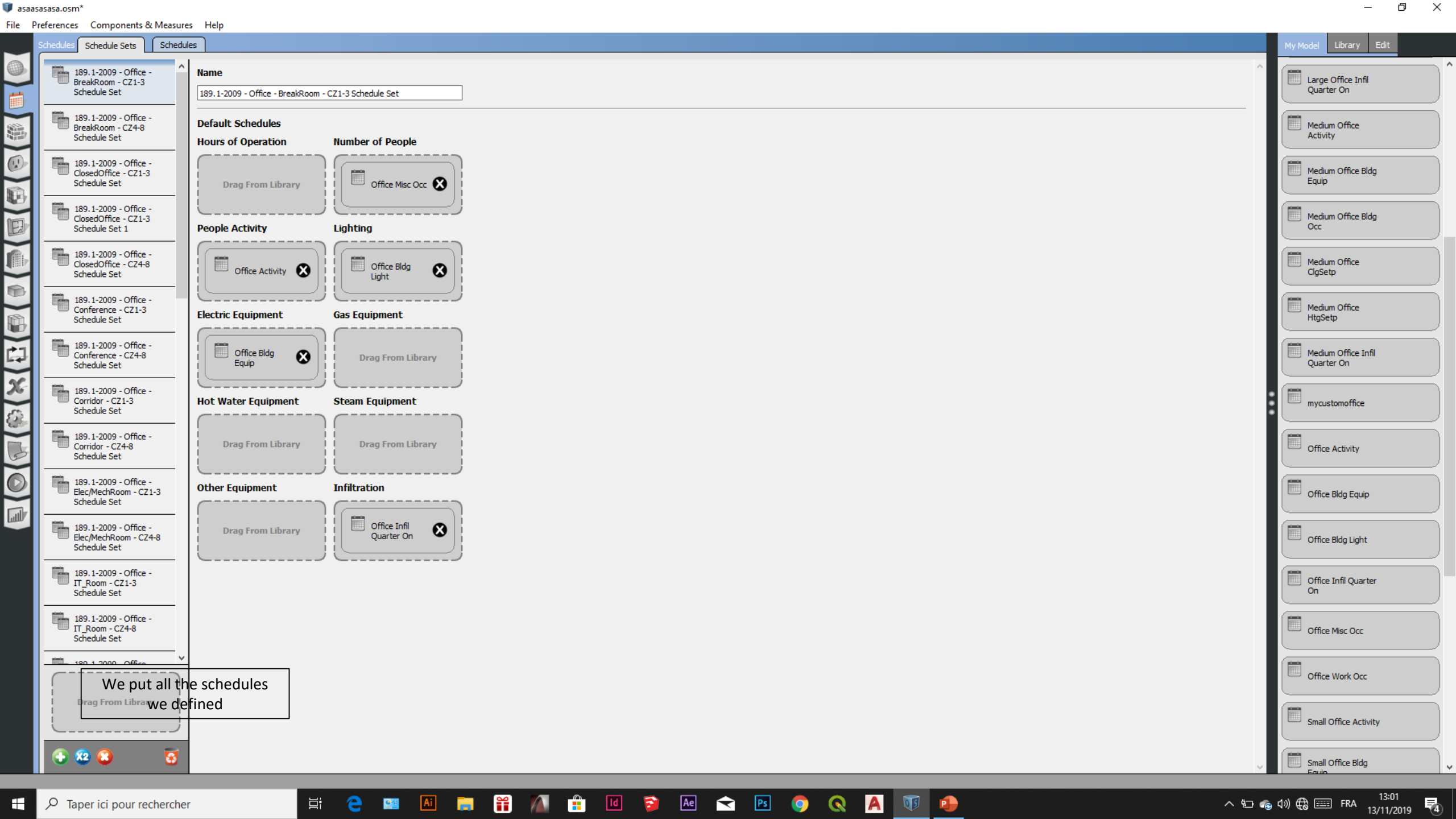
Minute

0

Value Until Time

0.9

Hour



We put all the schedules we defined

Filters: Story Thermal Zone Space Type

Space Name	All	Story	Thermal Zone	Space Type	Default Construction Set	Default Schedule Set	Part of Total Floor Area
	<input type="checkbox"/>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>	<div>Apply to Selected</div>
<div>Space 101</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 102</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 103</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 104</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 2</div>	<div>189.1-2009 - Office - BreakRoom</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 105</div>	<input type="checkbox"/>	<div>Building Story 1</div>	<div>Thermal Zone 1</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 201</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 202</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 203</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 204</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 4</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 205</div>	<input type="checkbox"/>	<div>Building Story 2</div>	<div>Thermal Zone 3</div>	<div>189.1-2009 - Office - OpenOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 301</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 302</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 303</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 304</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 6</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>
<div>Space 305</div>	<input type="checkbox"/>	<div>Building Story 3</div>	<div>Thermal Zone 5</div>	<div>189.1-2009 - Office - ClosedOffice</div>	<div>mycustomconstructionset</div>	<div></div>	<input checked="" type="checkbox"/>

Define the loads

