

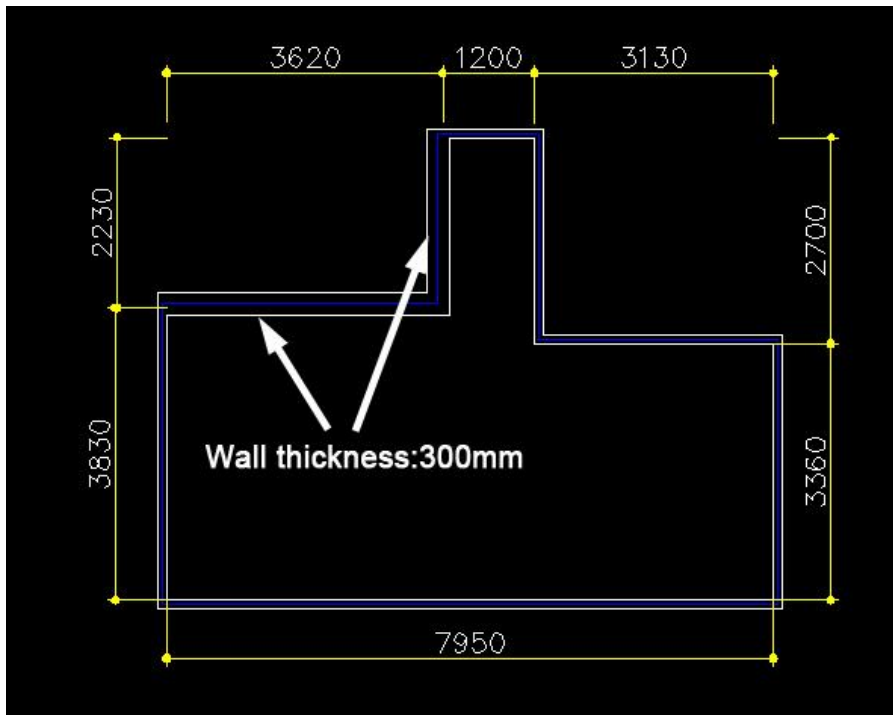
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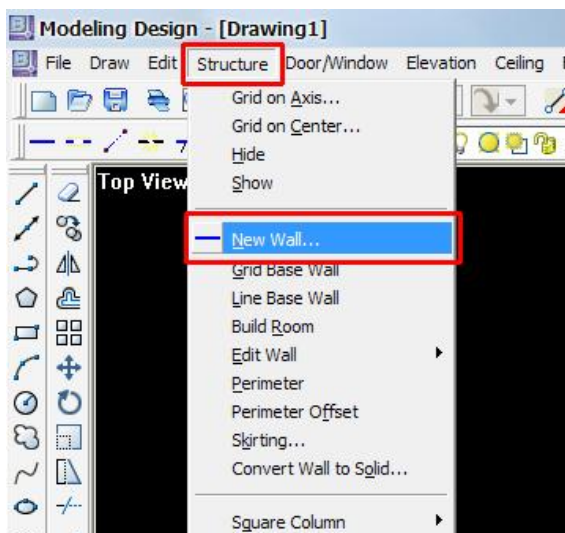
## Step 1: Wall

Floor Plan

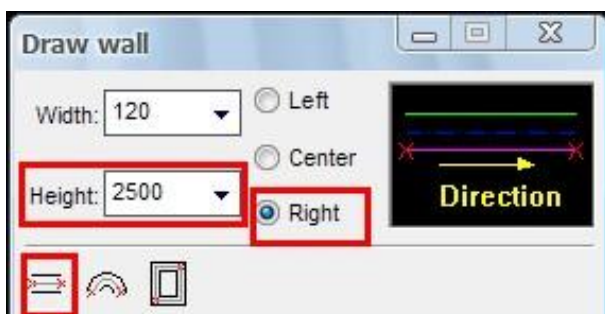


### 1.1 Draw the wall

#### 1.1.1 Structure->new wall

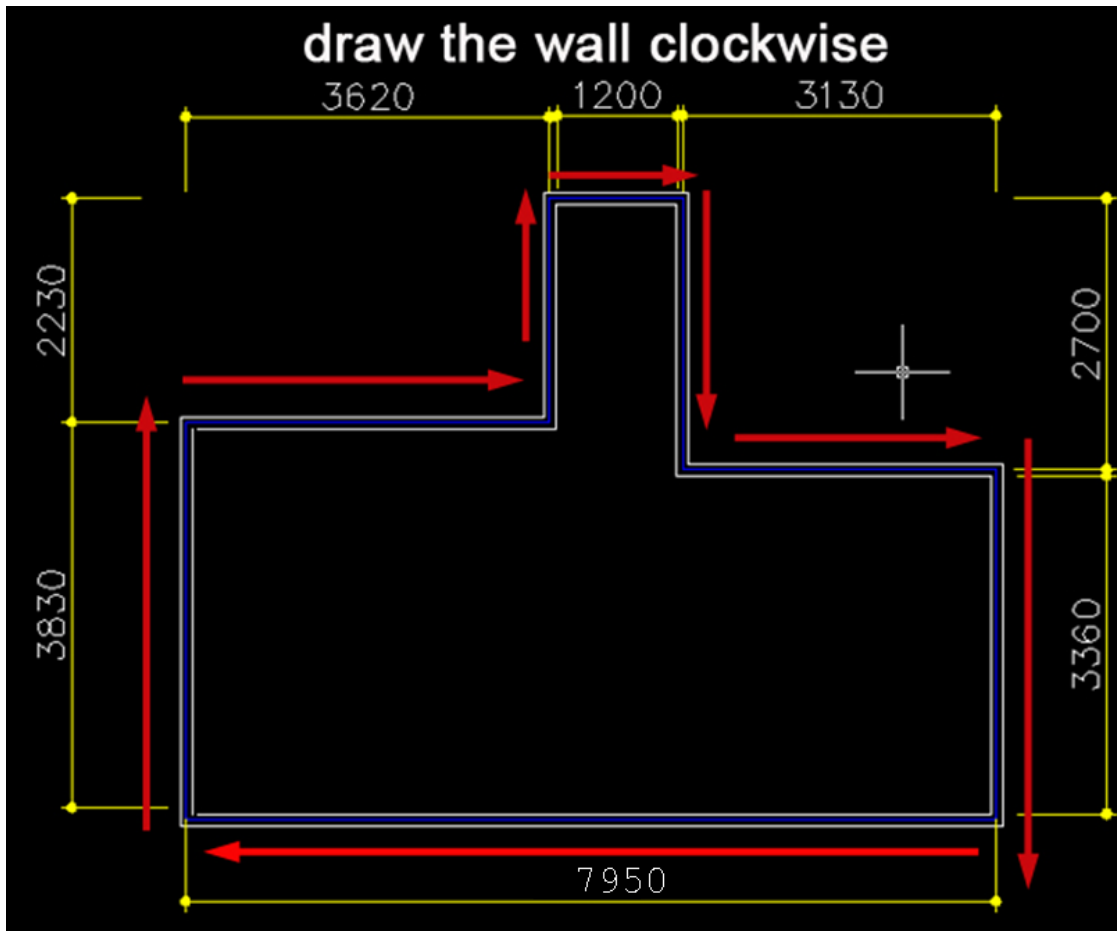


#### 1.1.2 Wall parameter



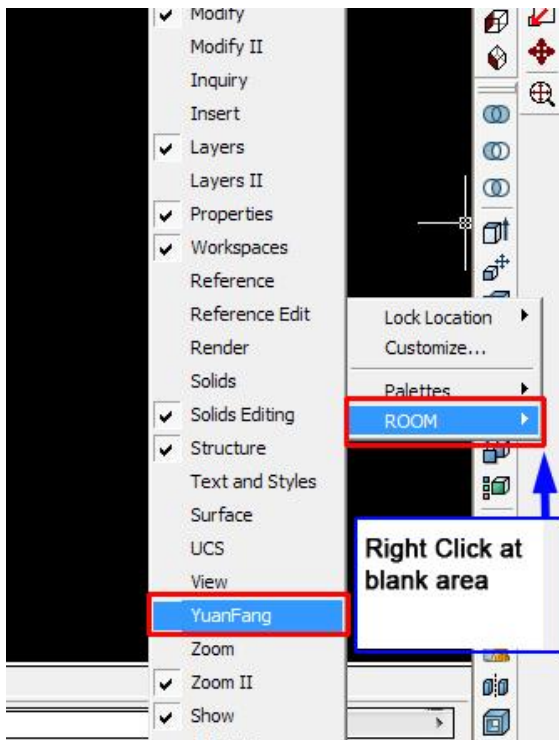
### 1.1.3 Draw the wall clockwise

Draw the wall according to the dimensions as the picture below.



## 1.2.Edit wall thickness.

### 1.2.1 Show YuanFang panel



### 1.2.2 Set the first wall thickness

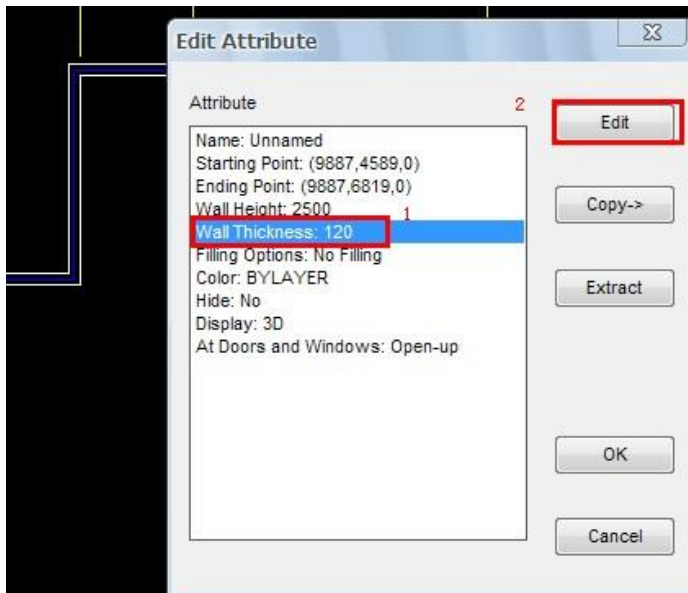
After click the YuanFang tab, the following function bar will pop up.

a.Click the first tab *Attribute Edit*



b.select the wall.

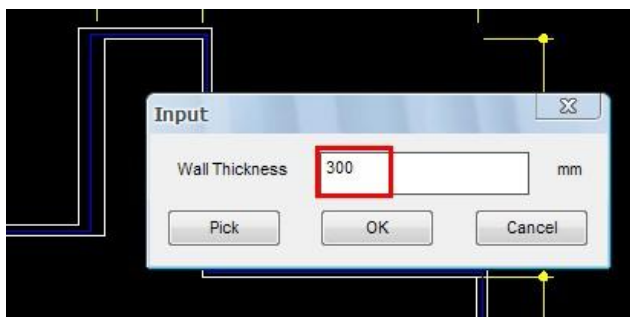
This dialog box will pop up.



c.click wall thickness,

d.click Edit.

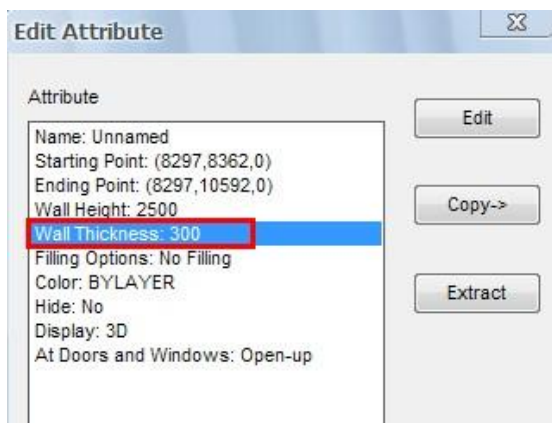
e.enter 300 in the following dialog box.



f.click OK to confirm

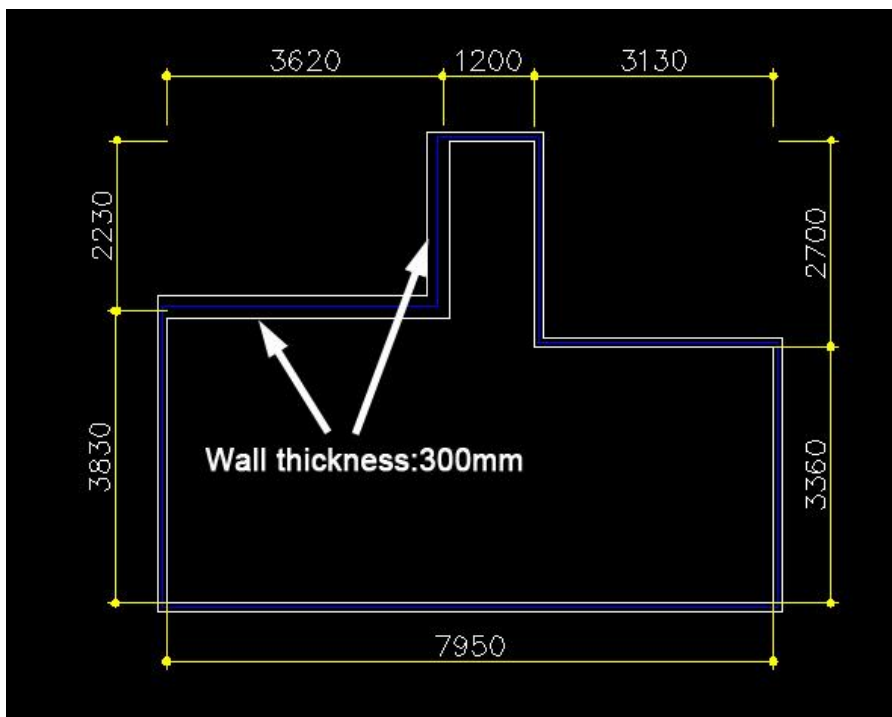
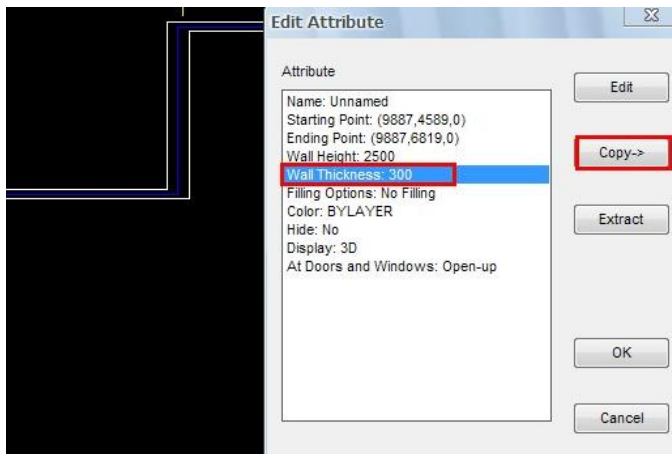
### 1.2.3 set the thickness of another wall

a.Click the wall thickness 300



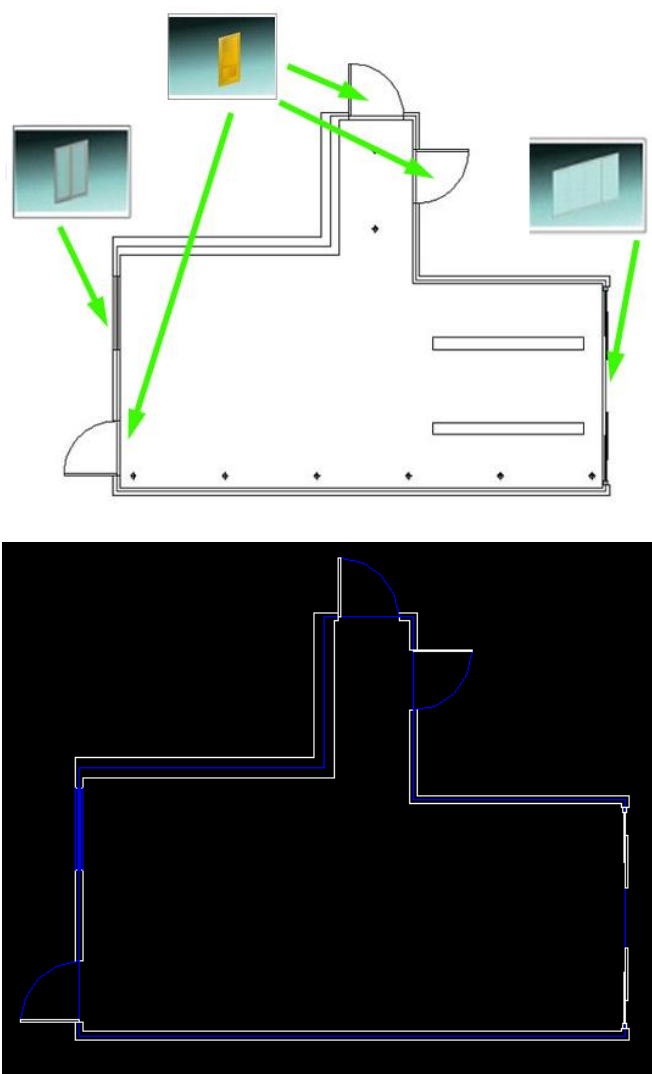
b.click copy

c.select another wall.



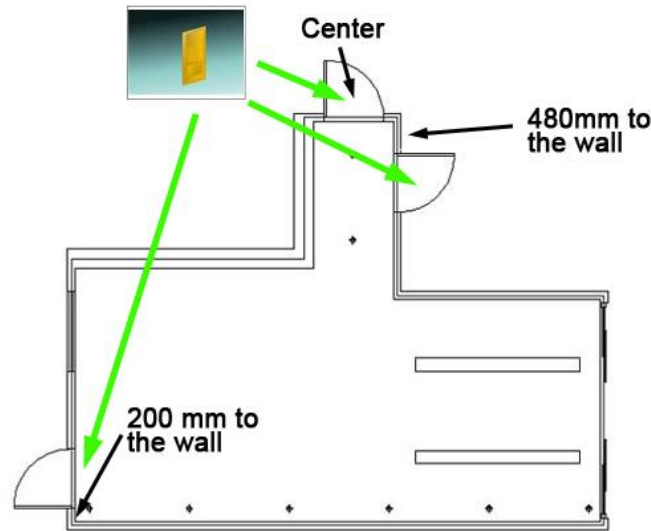
**Step 2: Door and window**

Door and window position



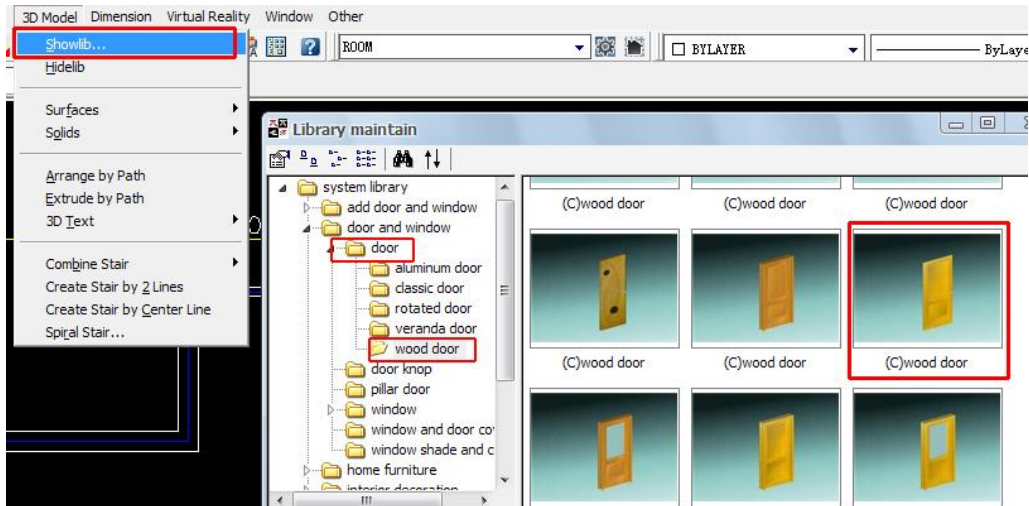
**2.1 Wood door**

Window installation position





### 2.1.1 Door->wood door

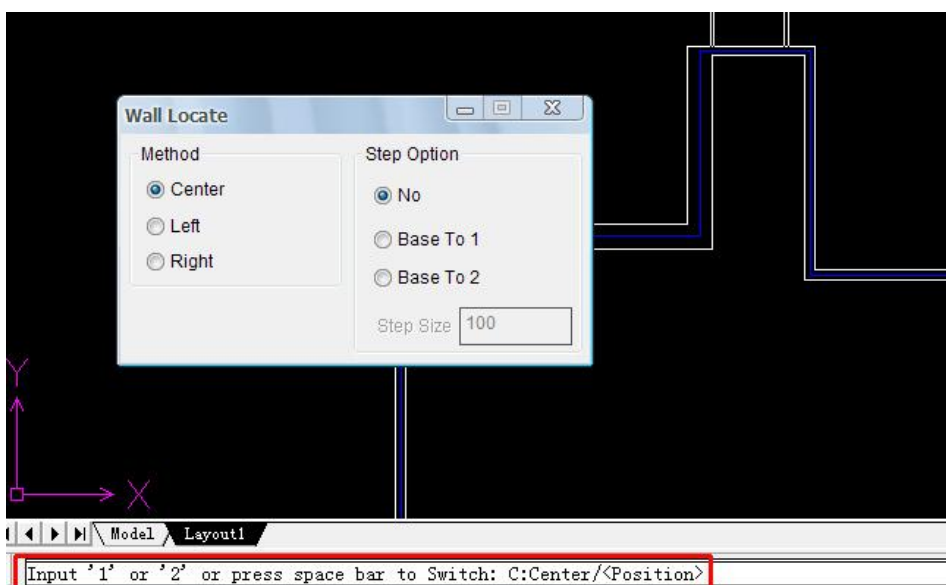


### 2.1.2 Door parameters

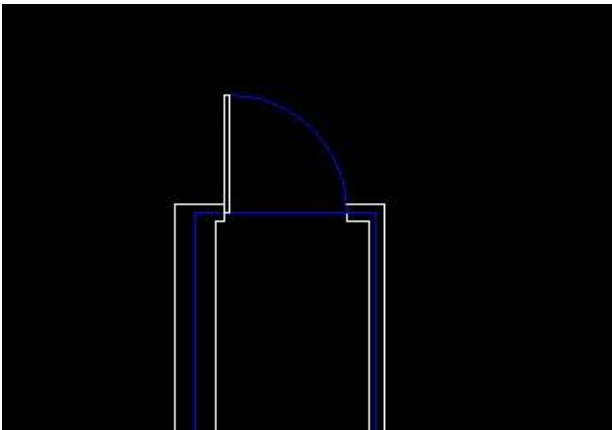
a.Width 900、 height 2200、 Raise 0



b.click on the wall on which installed the door



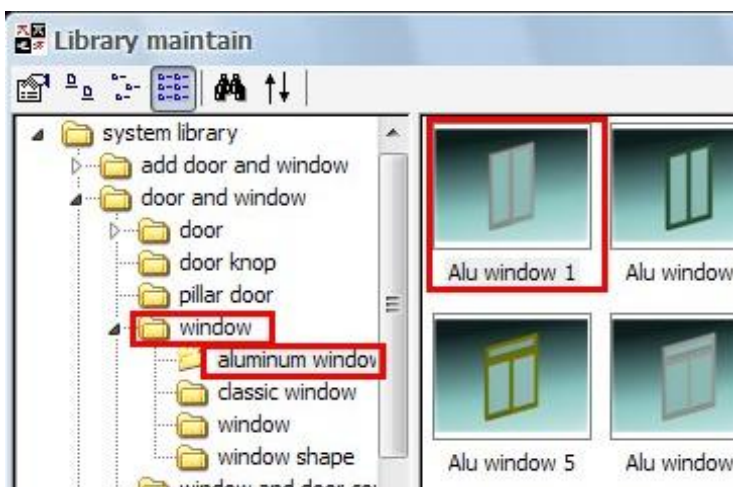
C. Enter **C** , then **Enter** twice



2.1.3 Install the other two doors in the same way

## 2.2 Window

### 2.2.1 Window> aluminum > Alu window 1

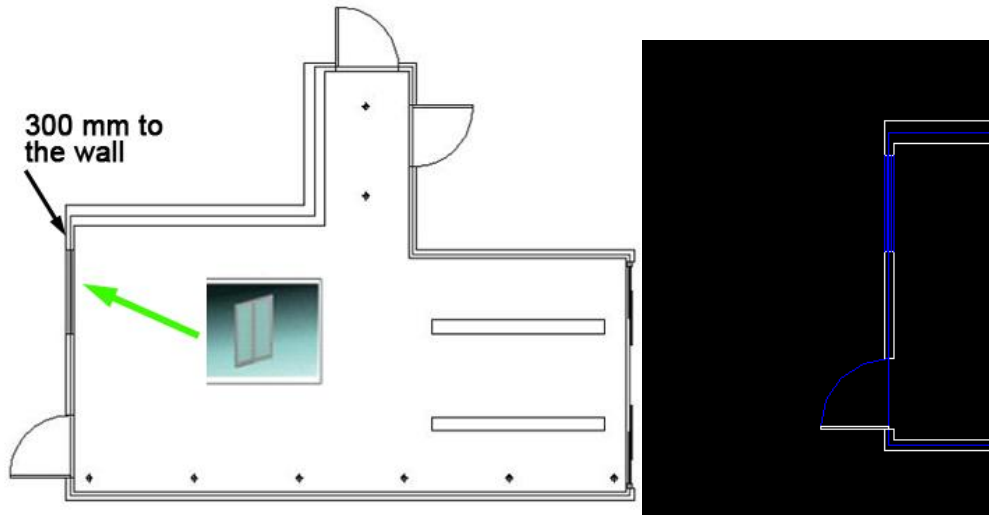


### 2.2.2 Window parameters

Width 1200、height 1400、raise 800

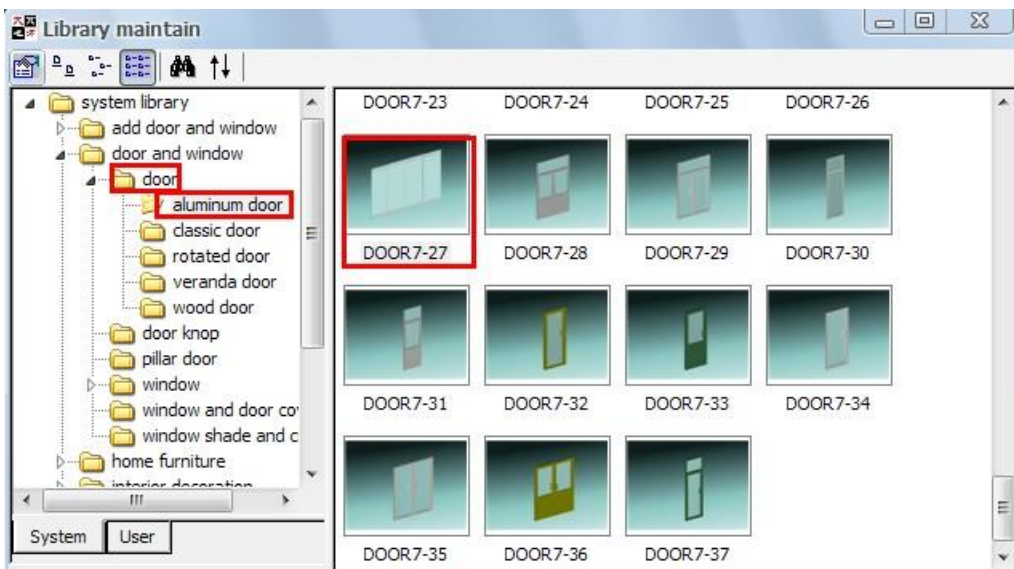


### 2.2.3 window position



## 2.3.Balcony door

### 2.3.1 Door->aluminum door

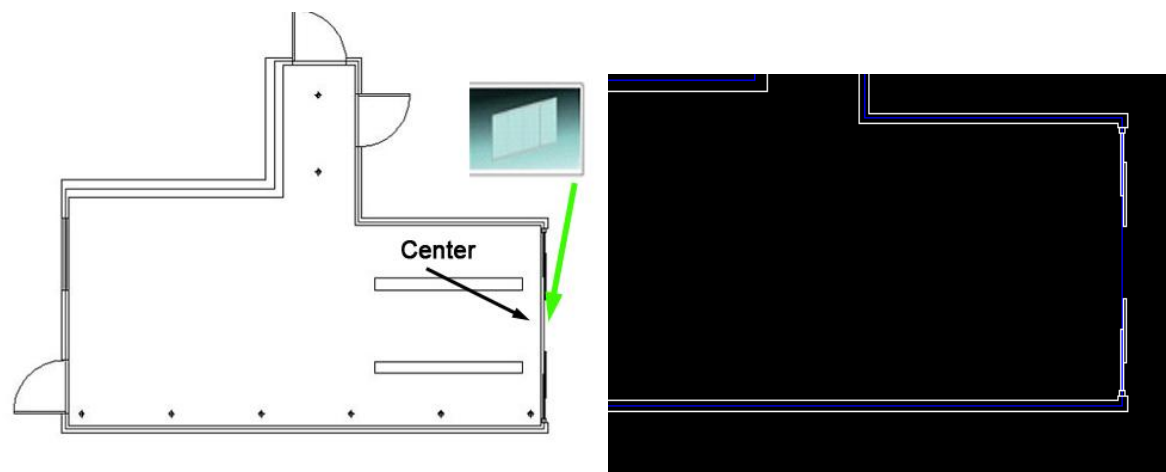


### 2.3.2 Door parameters

with 3260、height 2500、raise0

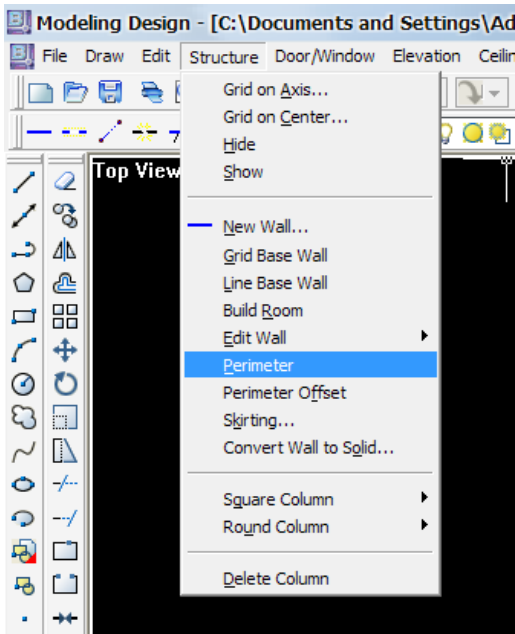


2.3.3 balcony door position



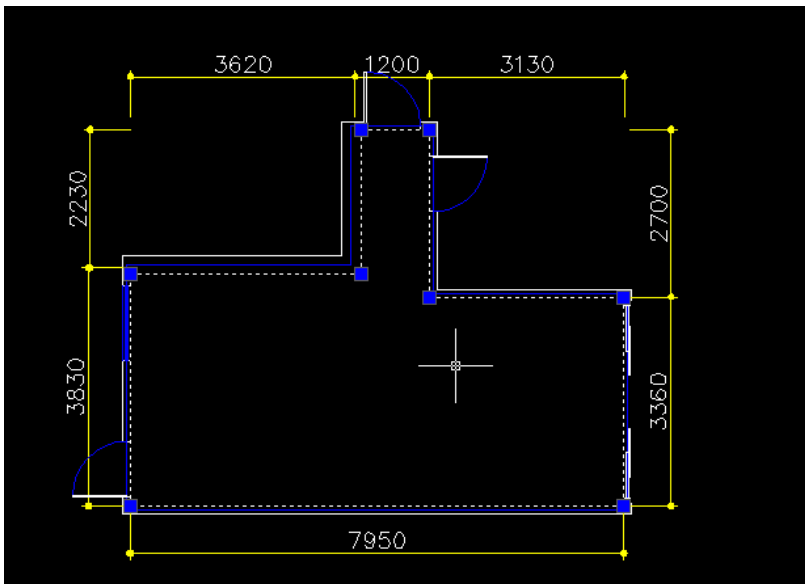
### Step 3: Floor

a. Structure-> Perimeter.

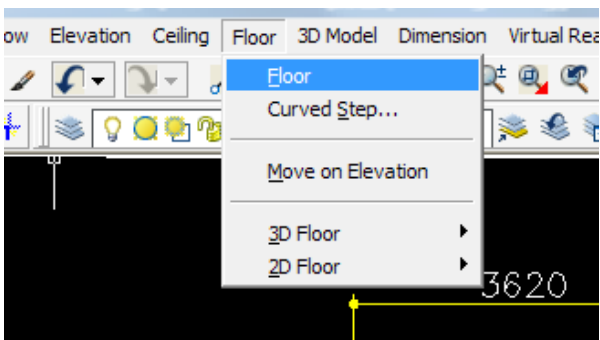


b. One click in the room area.

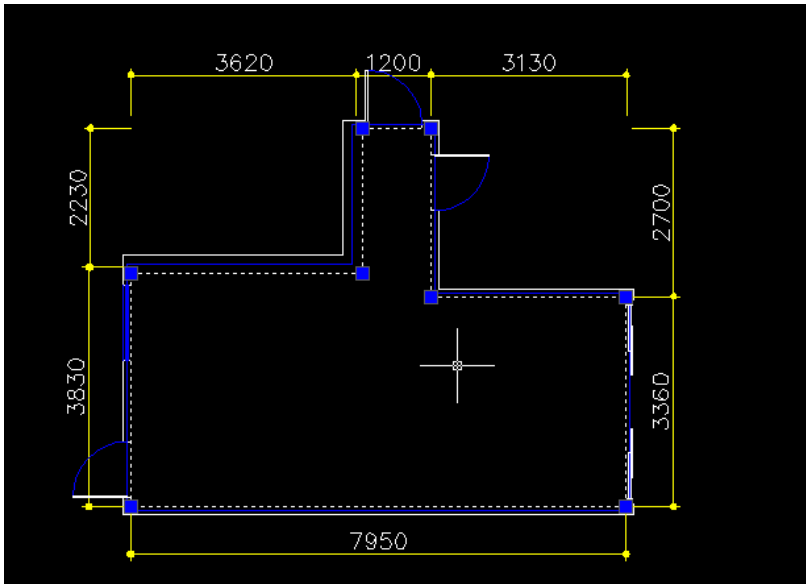
It will generate inner wall line automatically, as the dotted line in the following below.



c. click Floor->Floor.



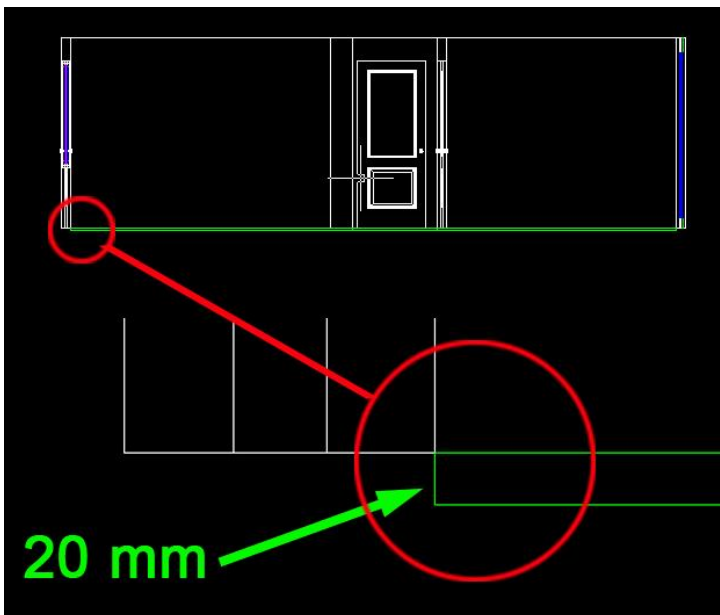
d. Select the inner wall line.



e. One click inner room area

f. Enter -20. Enter again.

The floor will be created.

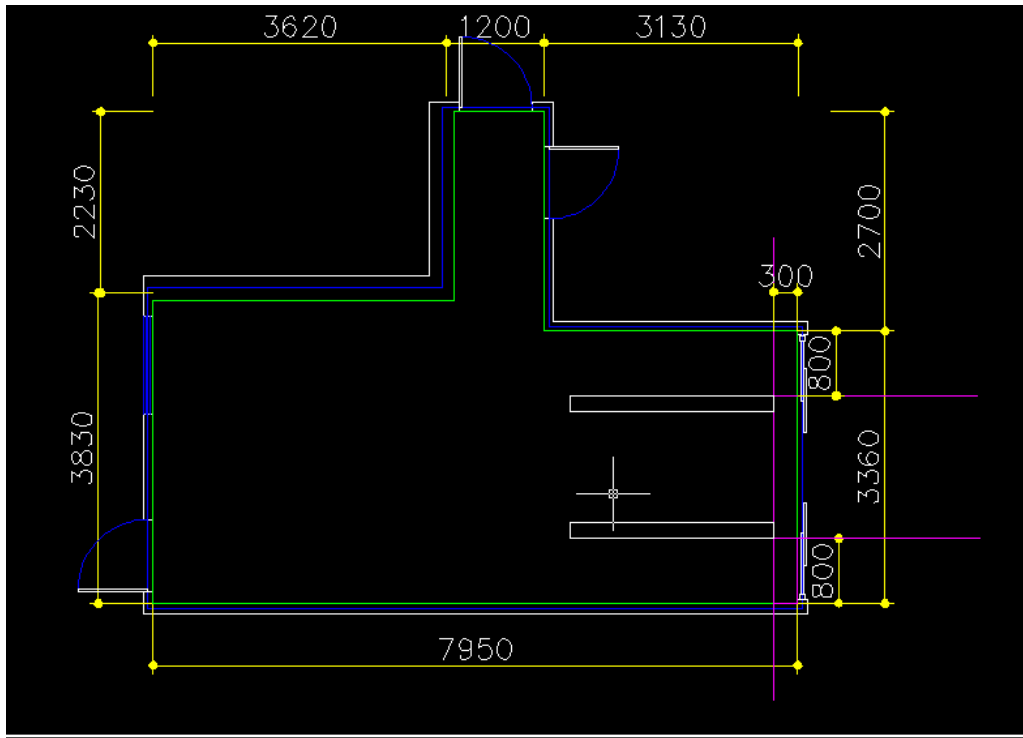


## Step 4: Ceiling

### 4.1. Draw layered ceiling shape

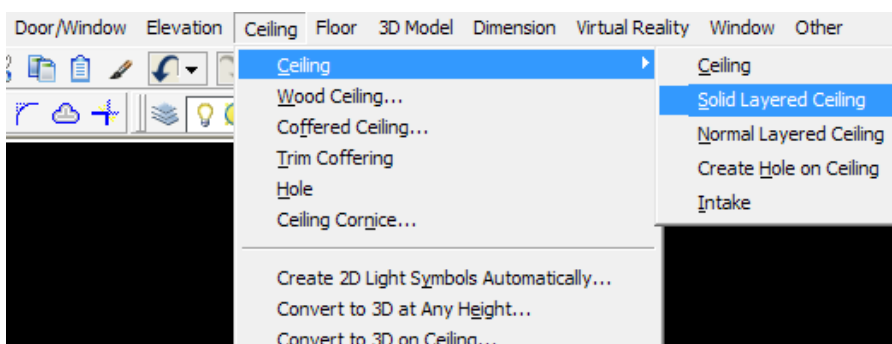
Draw two rectangles 2500\*200 on the floor.

The pink lines are auxiliary lines used for pinpointing the position of the rectangles.

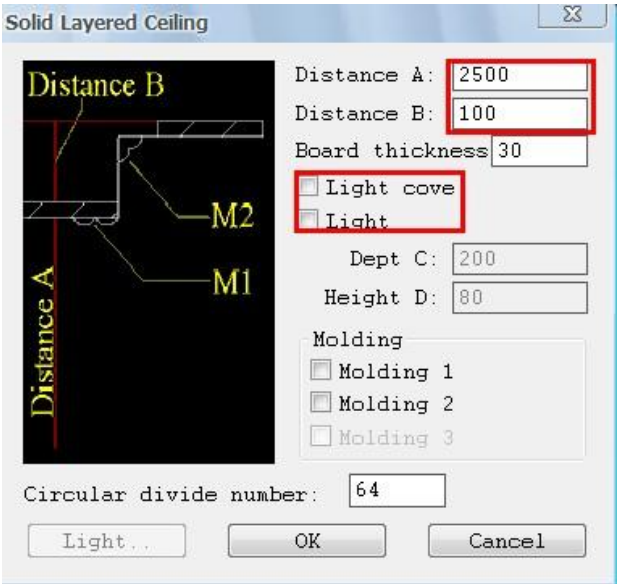


### 4.2. Create solid layered ceiling

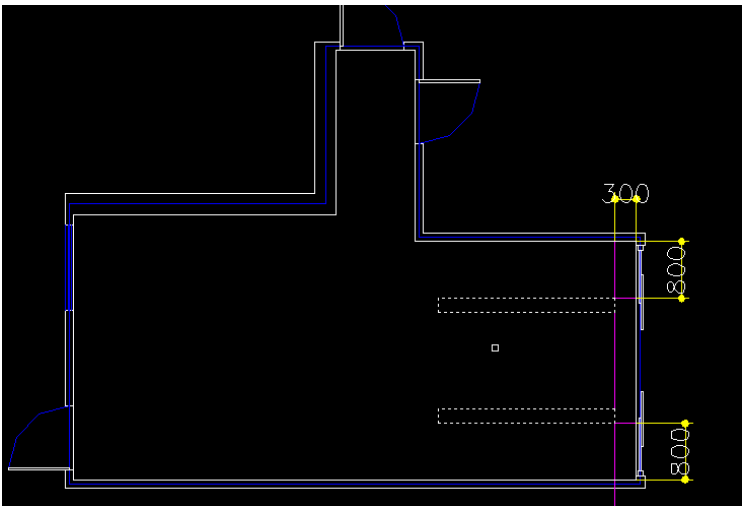
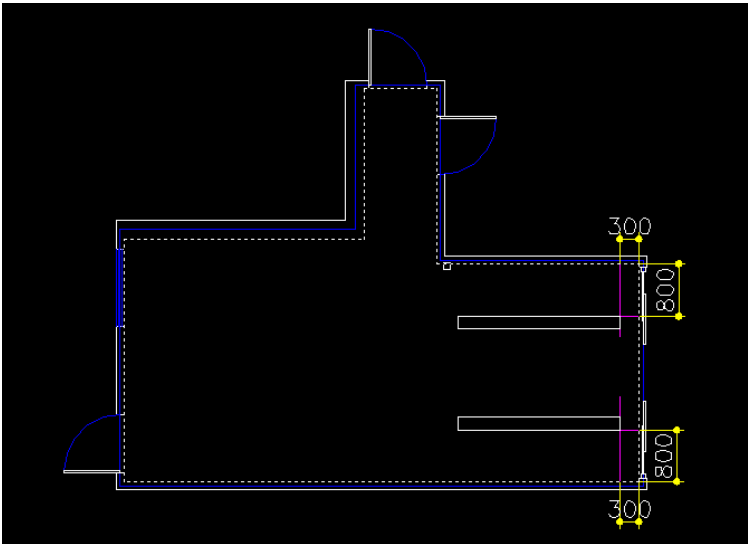
a. Ceiling->Solid Layered Ceiling



b.Ceiling parameters

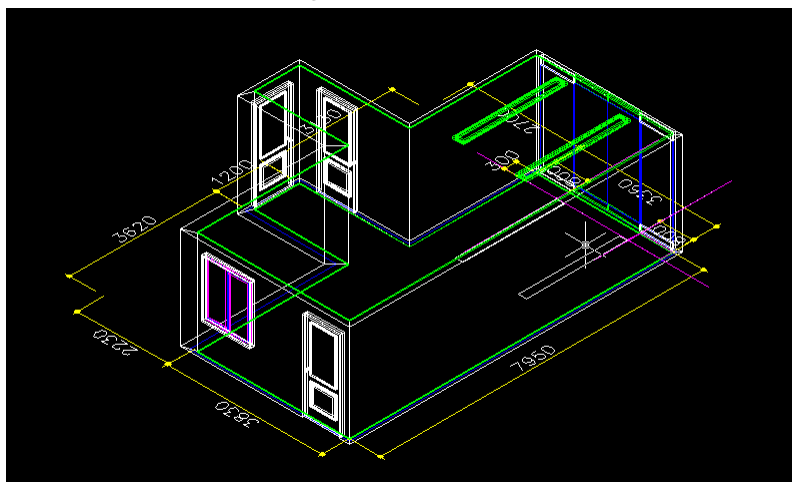


c. Select the inner wall line, right click to confirm.



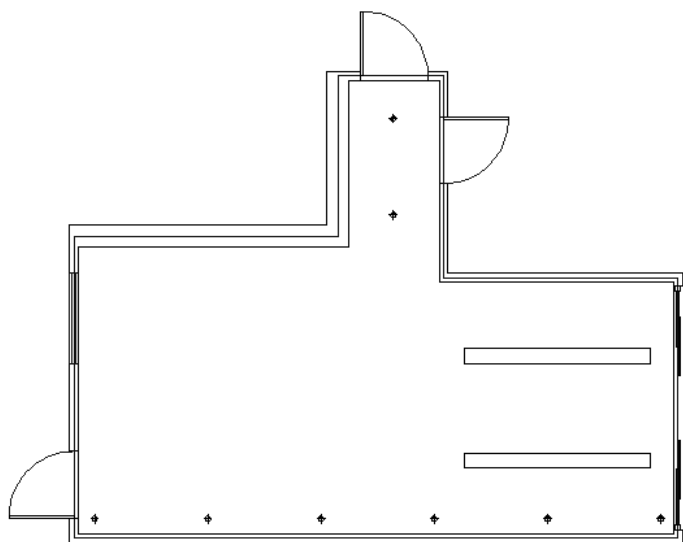


Then solid layered ceiling will be created.



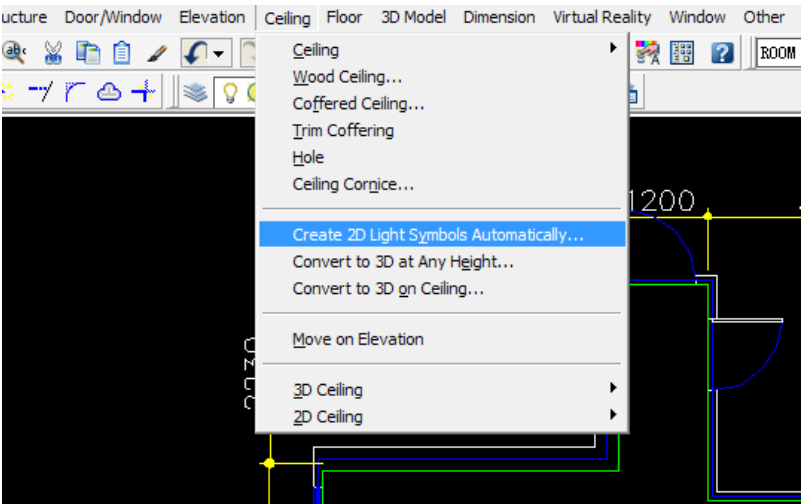
# Step 5: Ceiling light

Ceiling light layout

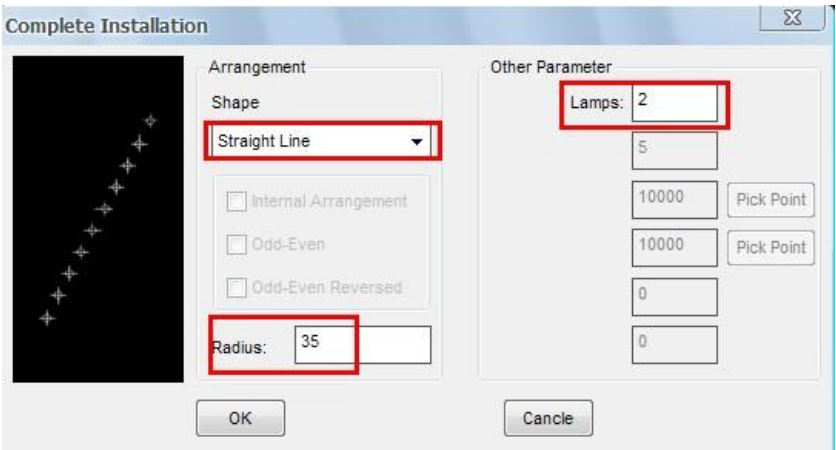


## 5.1 Create lights in corridor

### 5.1.1 Ceiling->create 2D Light symbols automatically

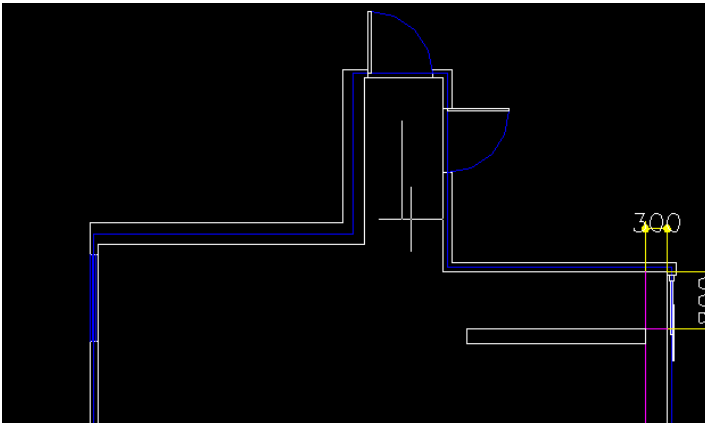


### 5.1.2 Light parameters

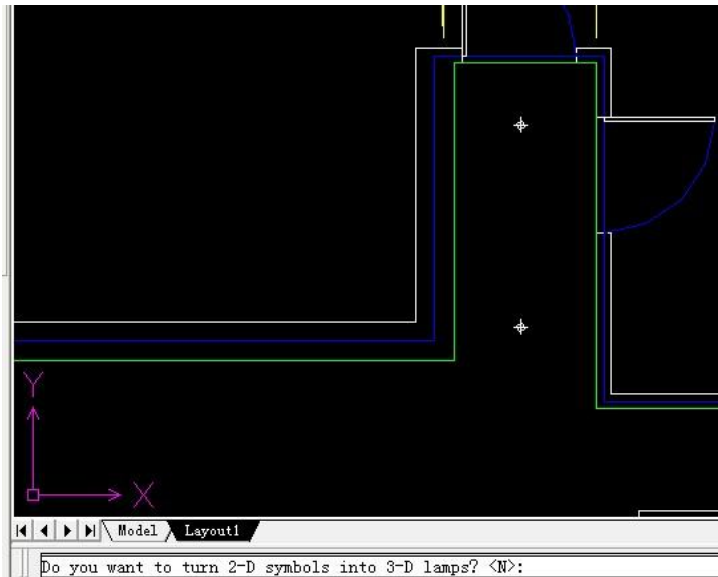


### 5.1.3 Install light

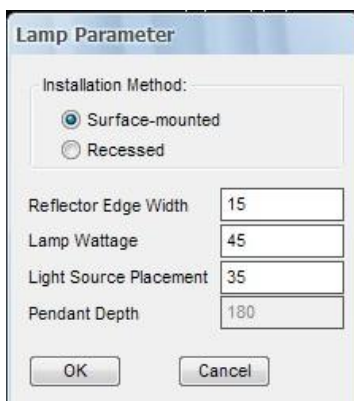
a. Click one point and then click second point.



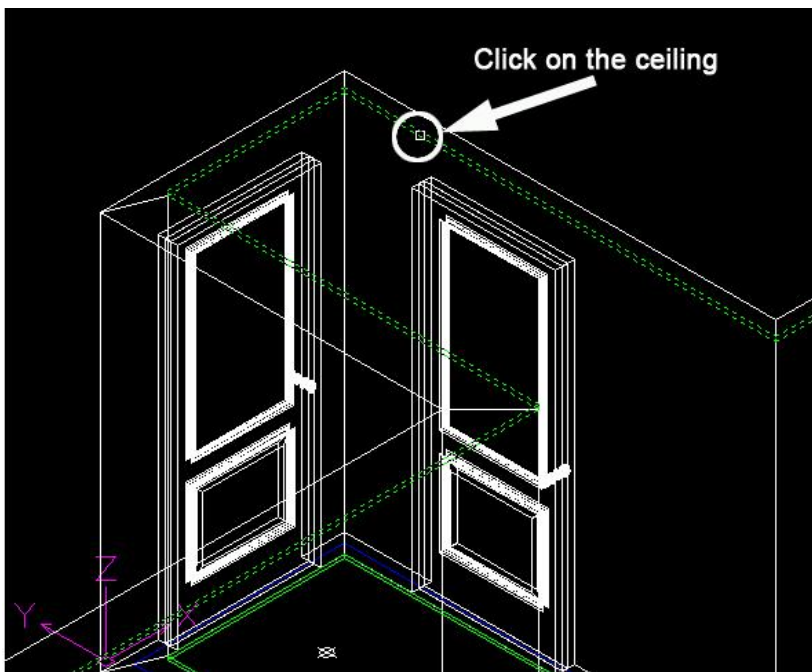
b. Right click to confirm. Then enter **Y**



This dialog box will pop up. Then click OK

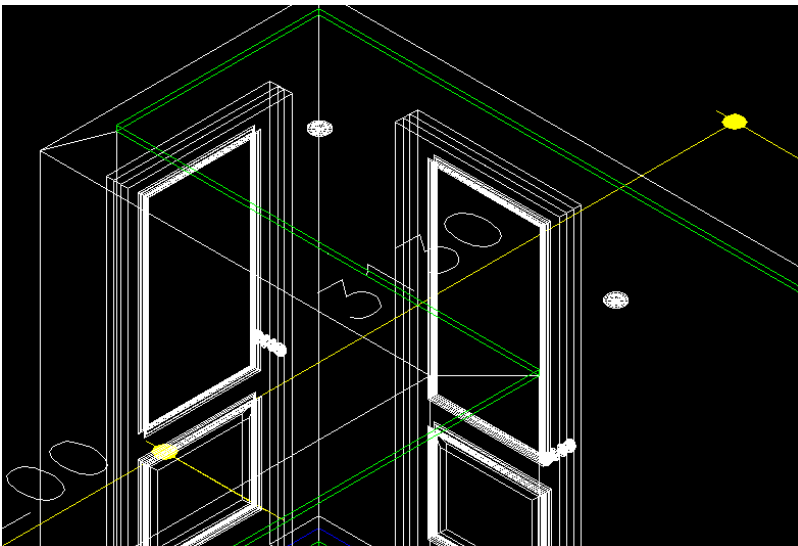


c. Click on the entity ceiling.



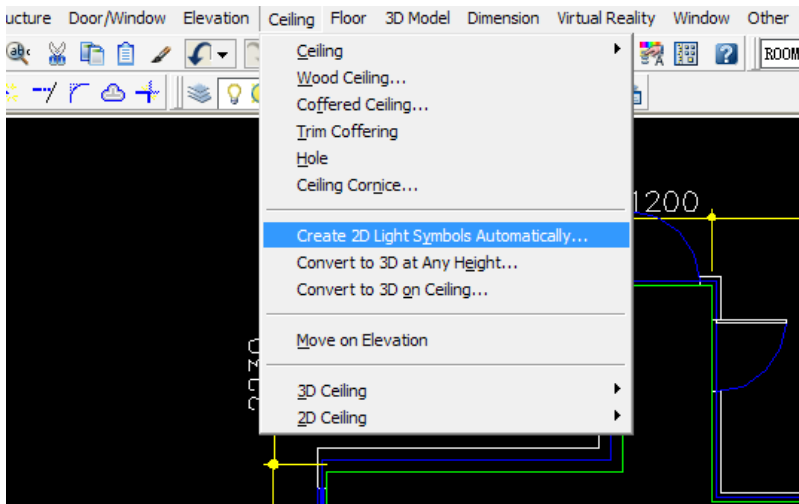
d.Right click to confirm.

Then the lights will raise to the ceiling.

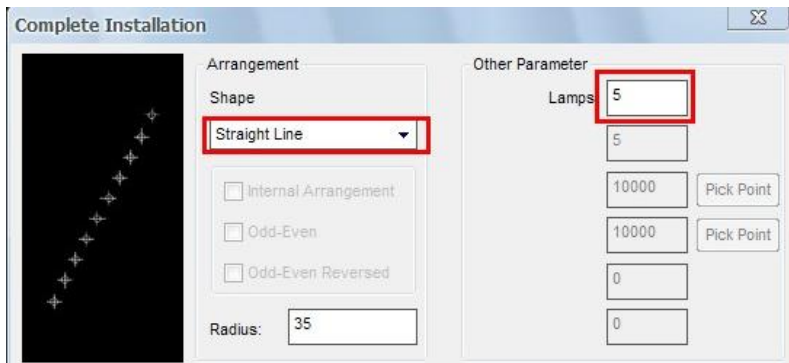


## 5.2 Create lights beside back wall

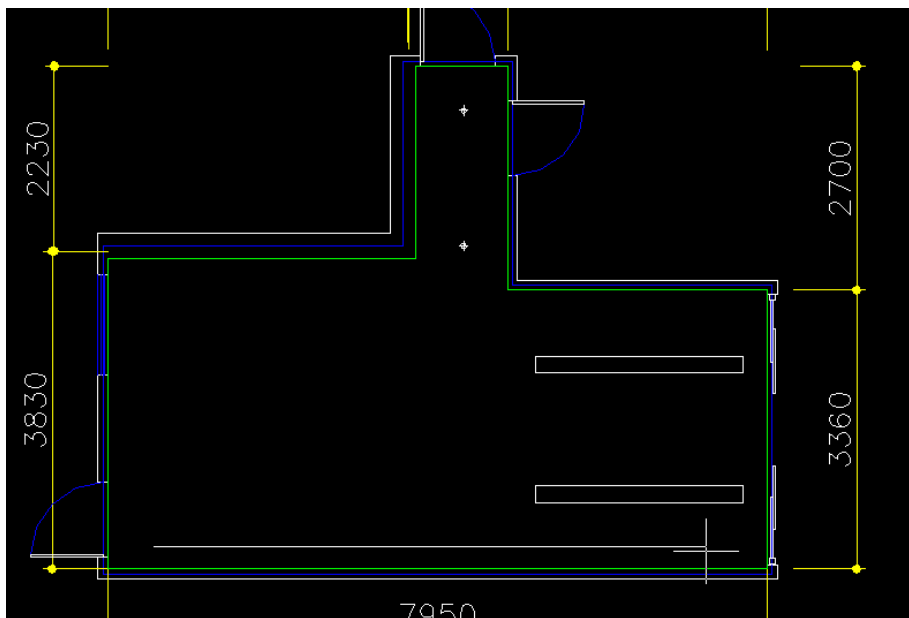
### 5.2.1 Ceiling->create 2D Light symbols automatically



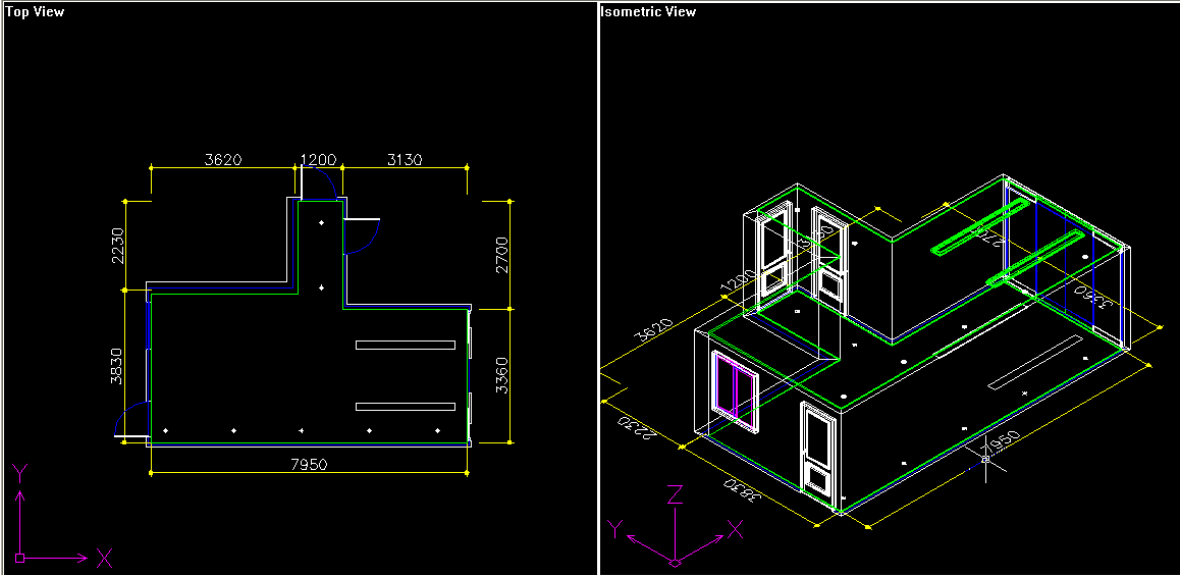
### 5.2.2 Light parameters



### 5.2.3 Draw a line near the bottom side of the room



The following operation is the same as the one before.

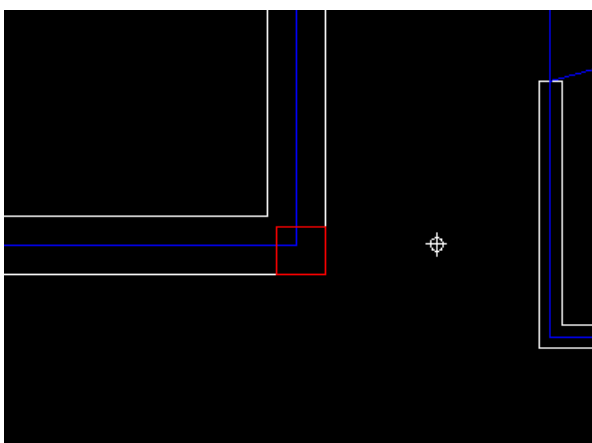


## Step 7: Wall hole



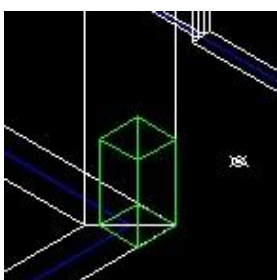
### 7.1 Create the first cuboid

a. Draw a 250\*250 rectangle on the floor.

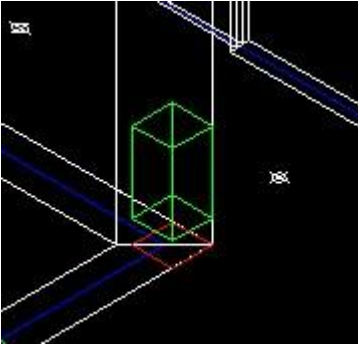


b. Use wood panel to extrude the shape.

The thickness is 500mm

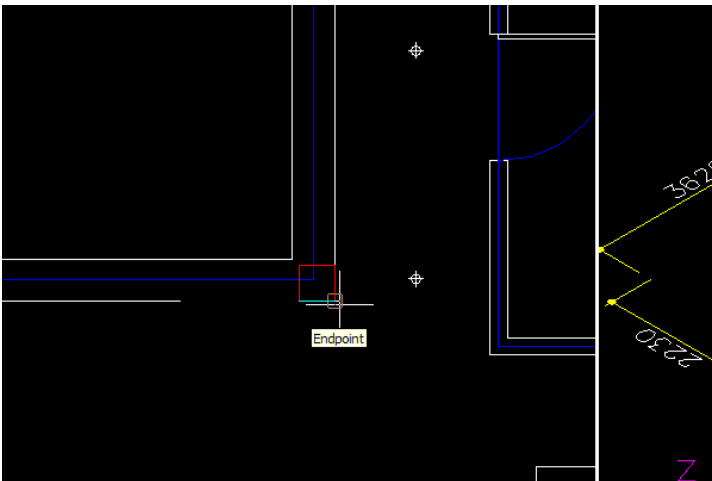


c. Move it up to 150mm above floor

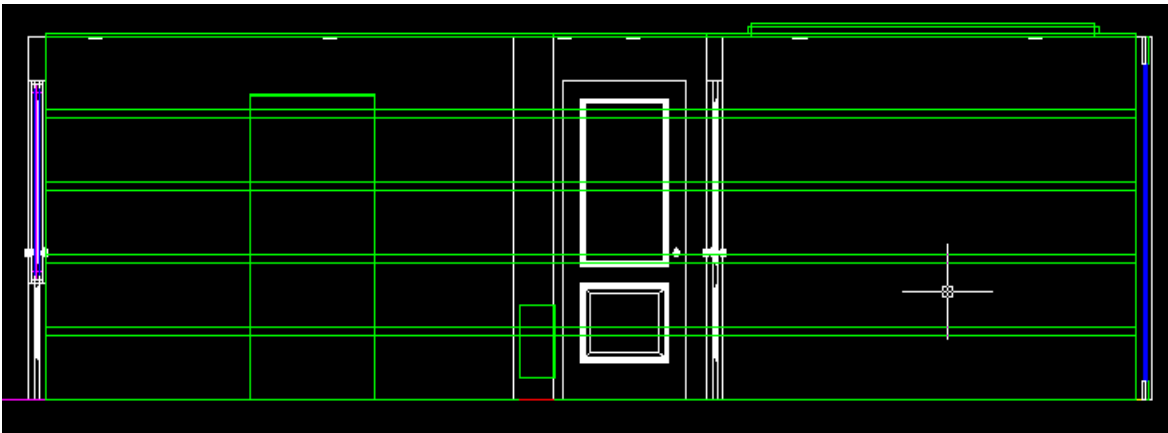


## 7.2 Use array function to copy the cuboid along the wall.

a. Before use array function. It needs to set UCS on the wall.

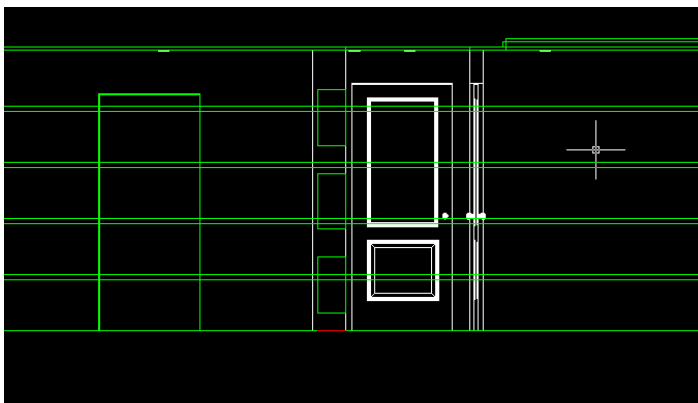
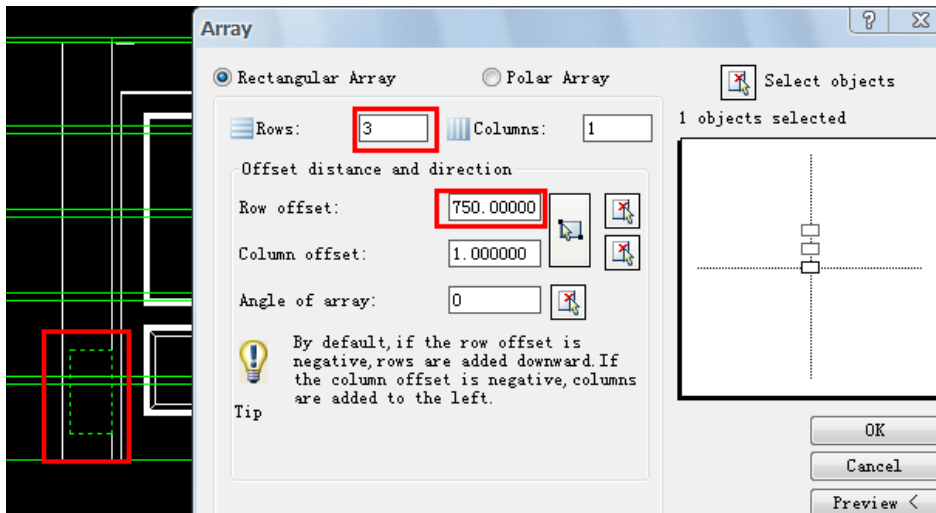


b. Pick the inner room side, and then click in isometric viewpoint.





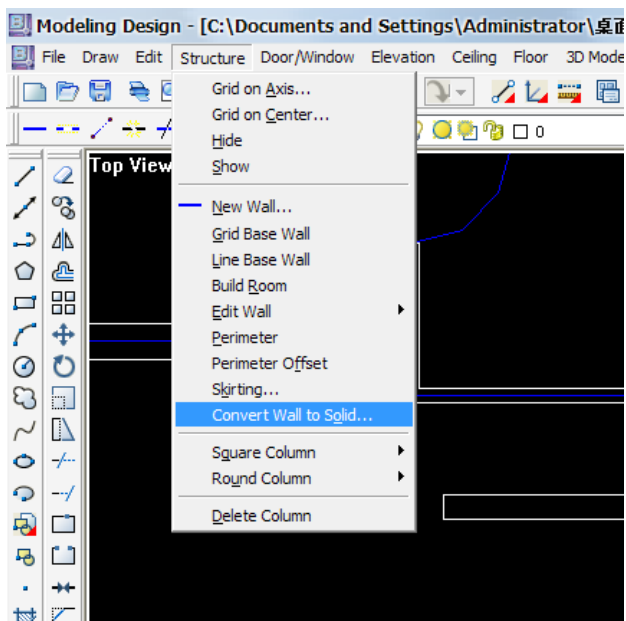
## C.set parameter



## 7.3 Subtract the cuboids from the wall

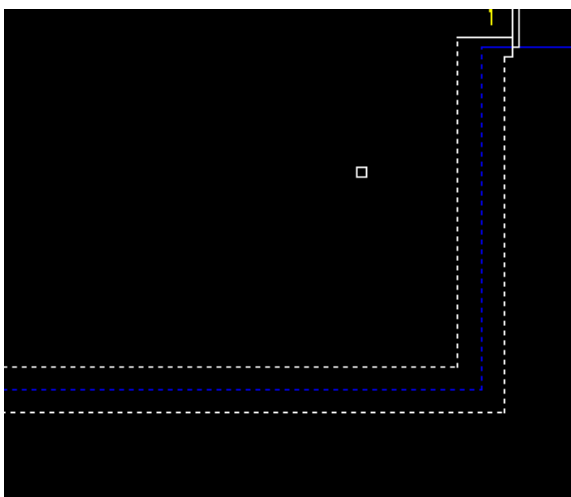
### 7.3.1 Convert wall to Solid

a.structure->convert wall to Solid

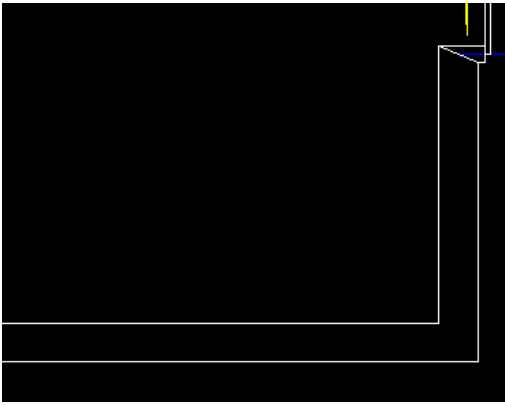


b. Click OK.

select the two thick walls. Right click to confirm



Then you can see it has been changed into solid.



### 7.3.2 use subtract function to subtract the cuboids from the wall

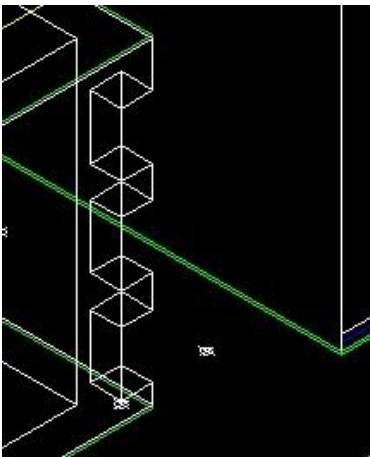
a. Click the second function **subtract** on the bar.



b. select the two walls , enter to confirm.

c. select the three boxes. Then right click.

The three cuboids will be subtracted

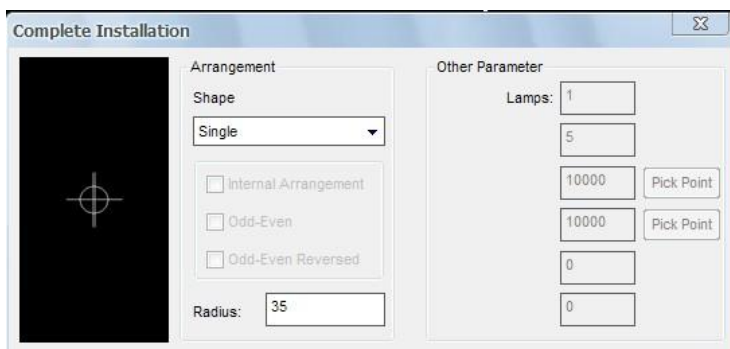
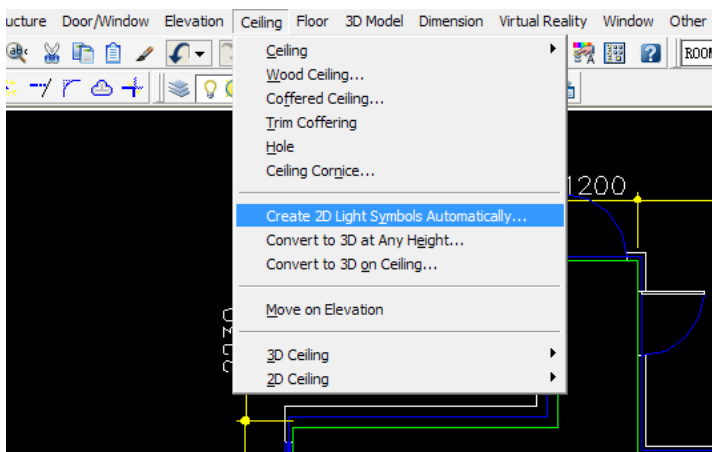


## Step 8: Wall hole light

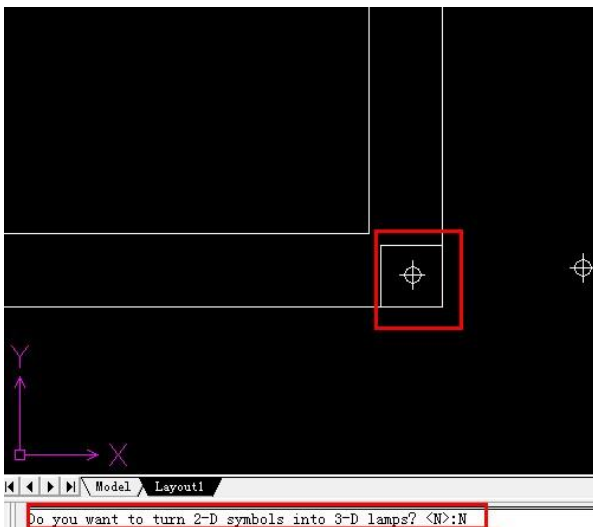


### 8.1 Create the first down light

a. Create 2D light Symbols automatically

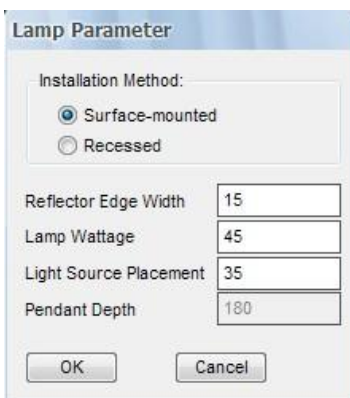
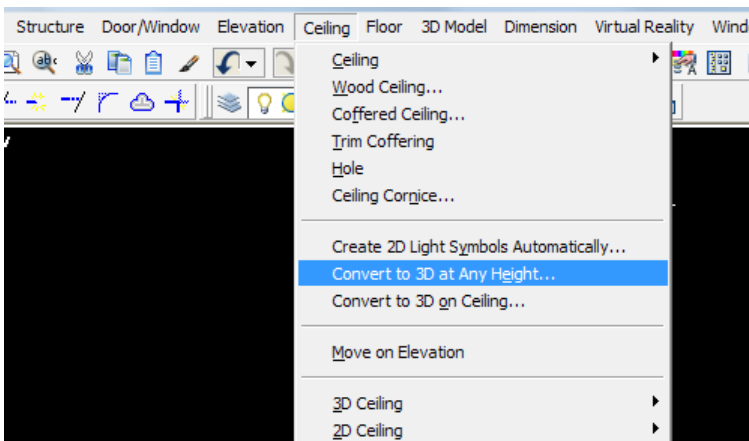


b. one click to install the light, enter N.



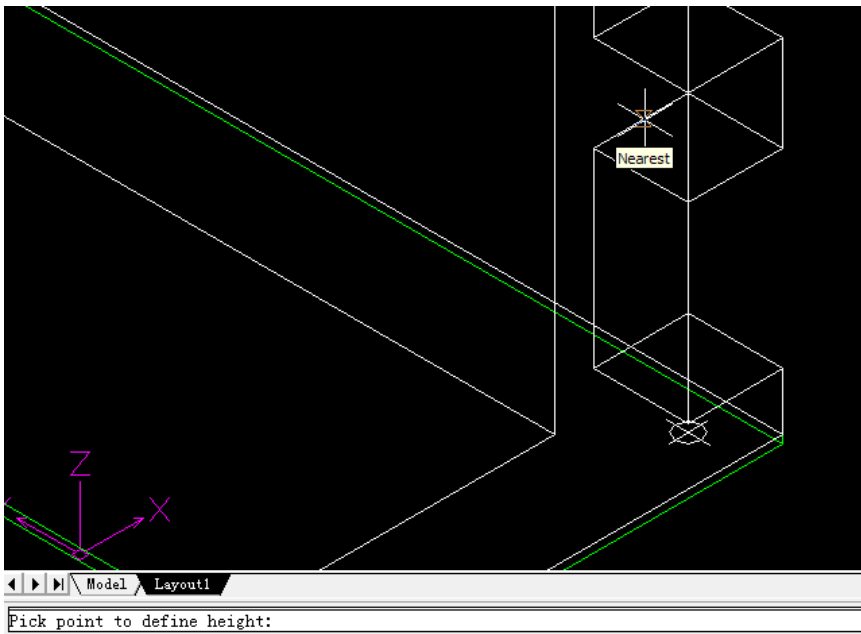
## 8.2 Use Convert to 3D at any height

a. Ceiling-> Convert to 3D at any height



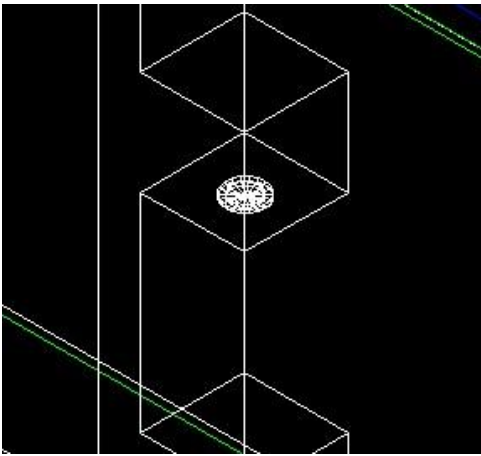
b. Select the position to install the light

Click on the side of the first hole by using **Snap: Nearest to pick the point** ,

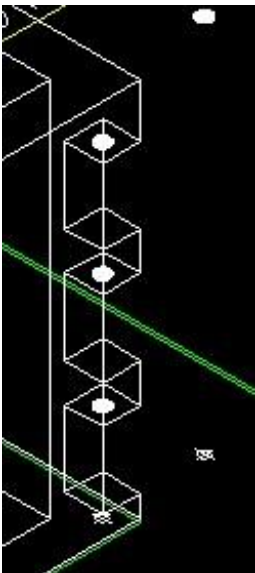


C. select the light.

Then it will generate the light at that height.



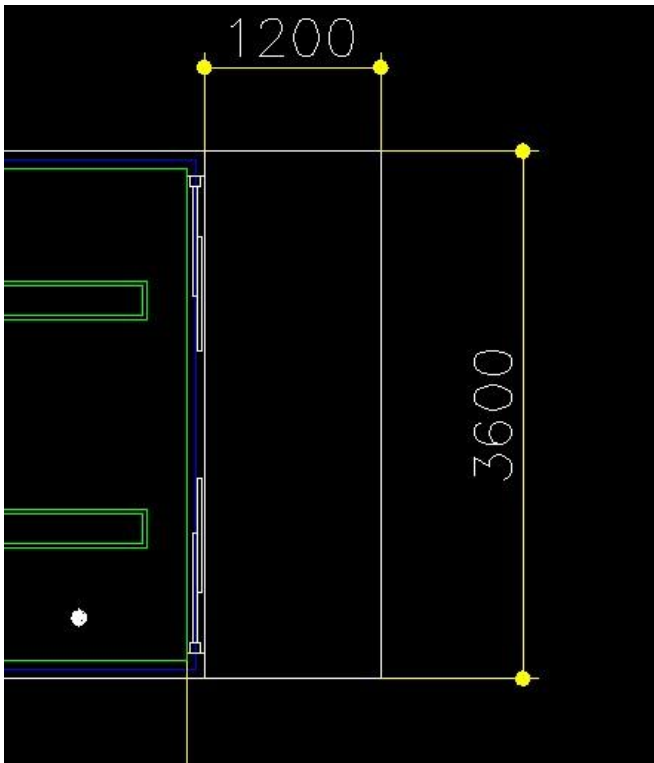
**8.3 Make the other two lights in the same way.**



## Step 9: Balcony

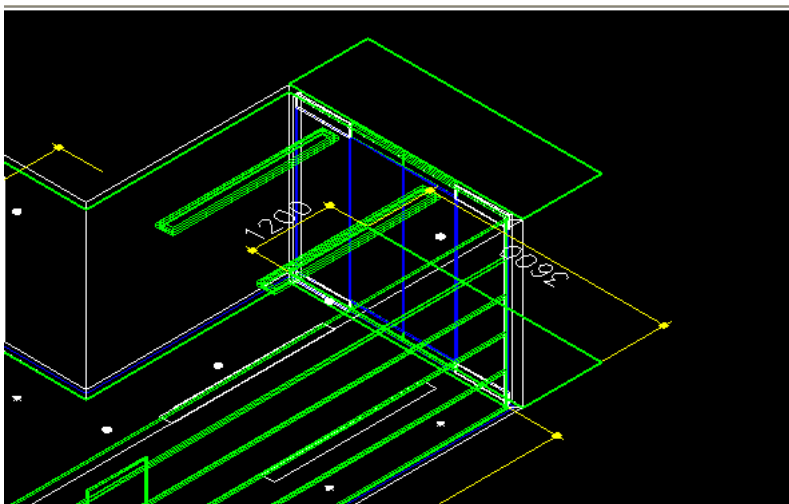
### 9.1 Draw the rectangle shape

a. Build a 1200\*3600 rectangle

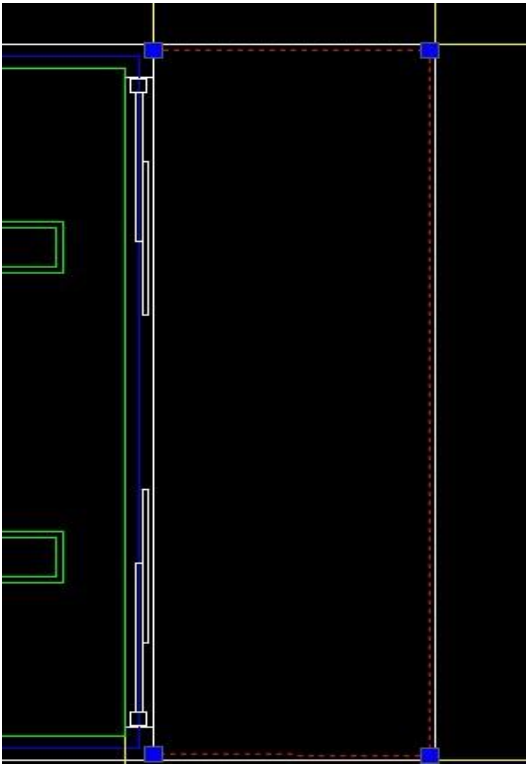


b. Build the balcony floor : Thickness -20mm

c. Create balcony ceiling : Height 2500mm thickness 20 mm

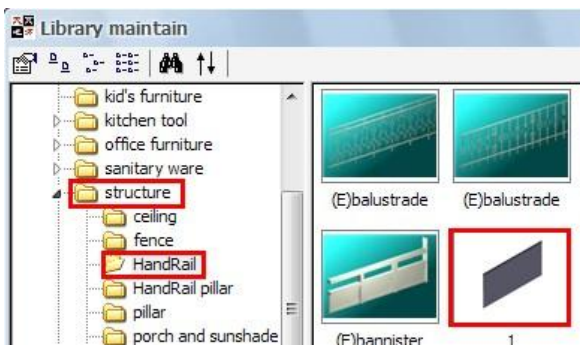


d. Use polyline function to draw a polyline like the red line below.

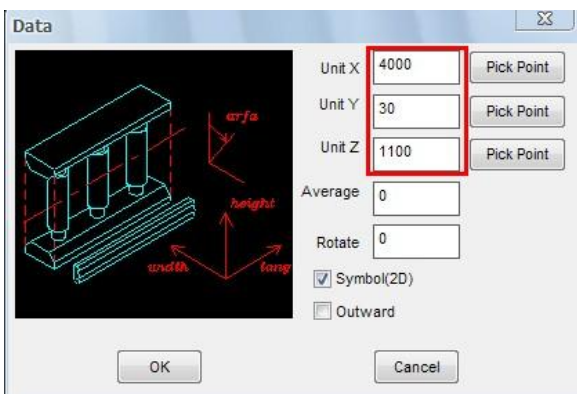


## 9.2 Create the hand rail

A. 3Dmodel-> showlib->Structure ->handrail



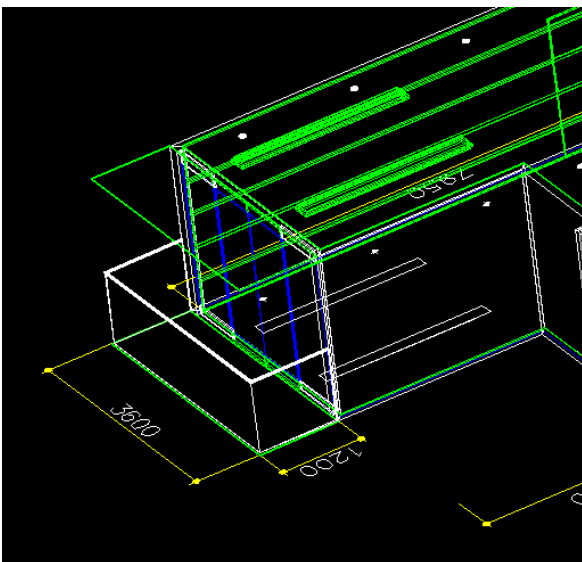
B.set parameter



c.click on the polyline.

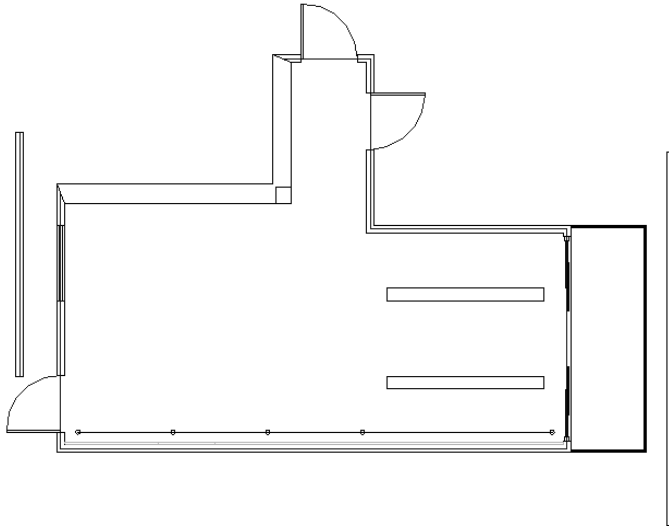
The balcony hand rail will be installed.





## Step 10: Sunlight

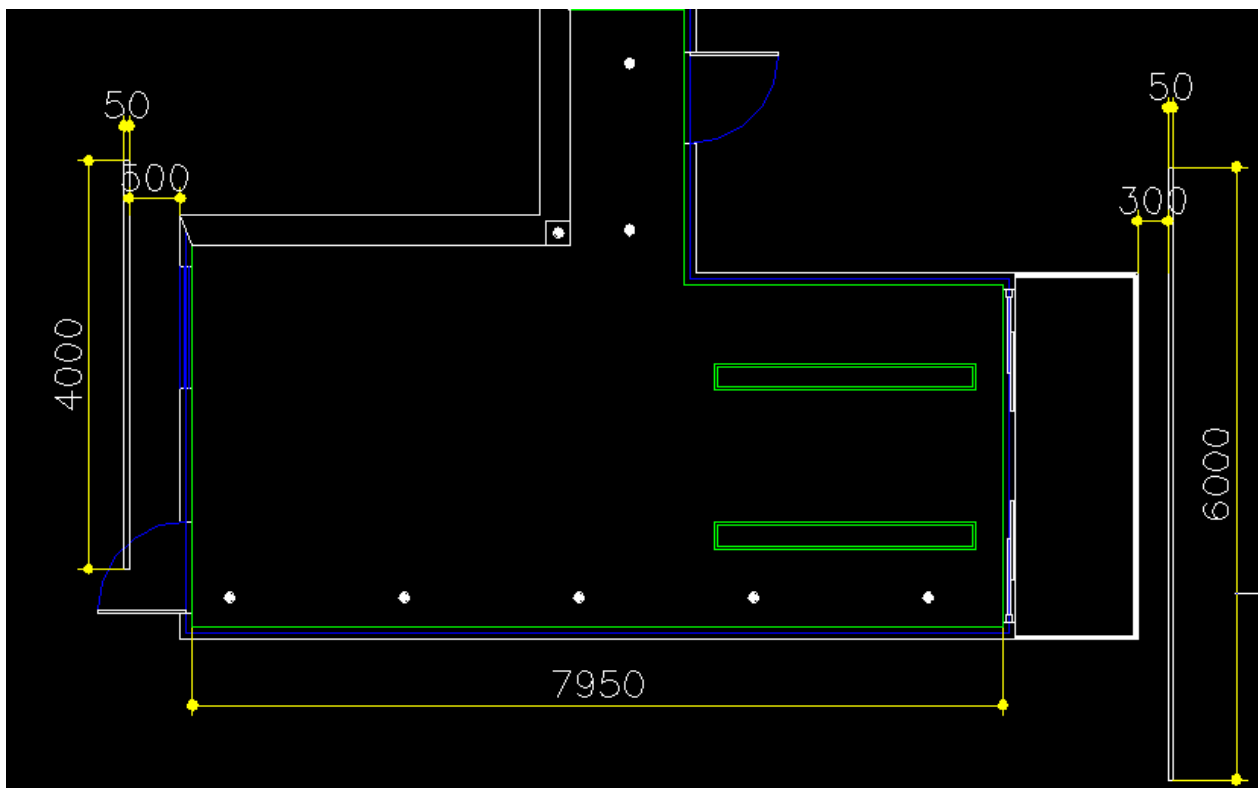
We will use two boards as light source to simulate sunlight



### 10.1 Draw two rectangles as below.

Left side board: 4000\*50 500 to the wall

Right side board: 6000\*50 300 to the balcony



## 10.2 Use command **ext** to extrude the rectangle

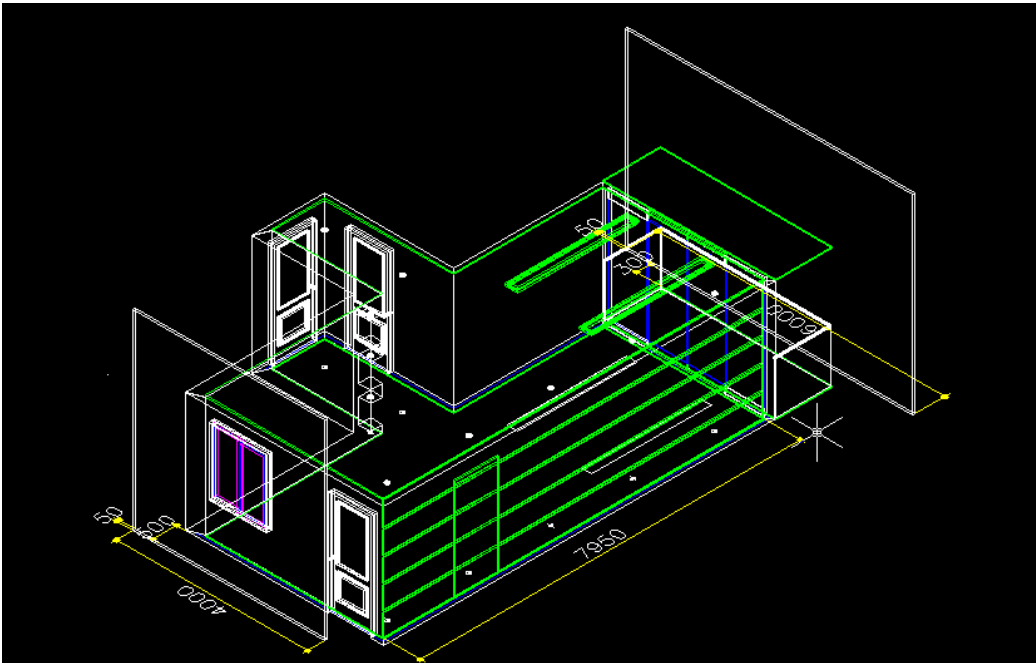
a. Enter ext

b. Click on the rectangle , right click to confirm

c. Enter 4000

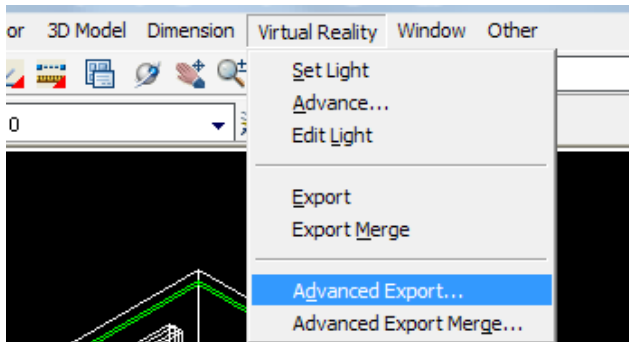
d. enter twice to confirm

Create these two boards in this way.

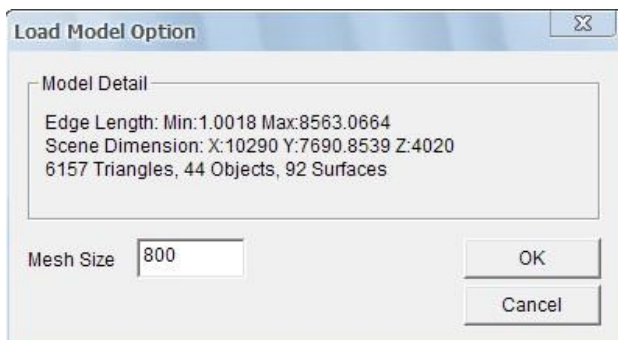
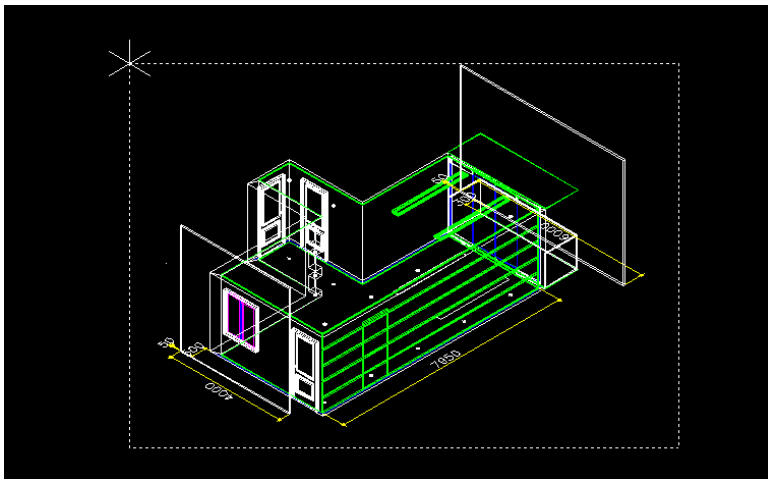


## Step 11: Export to VR

A.virtual reality->advanced export



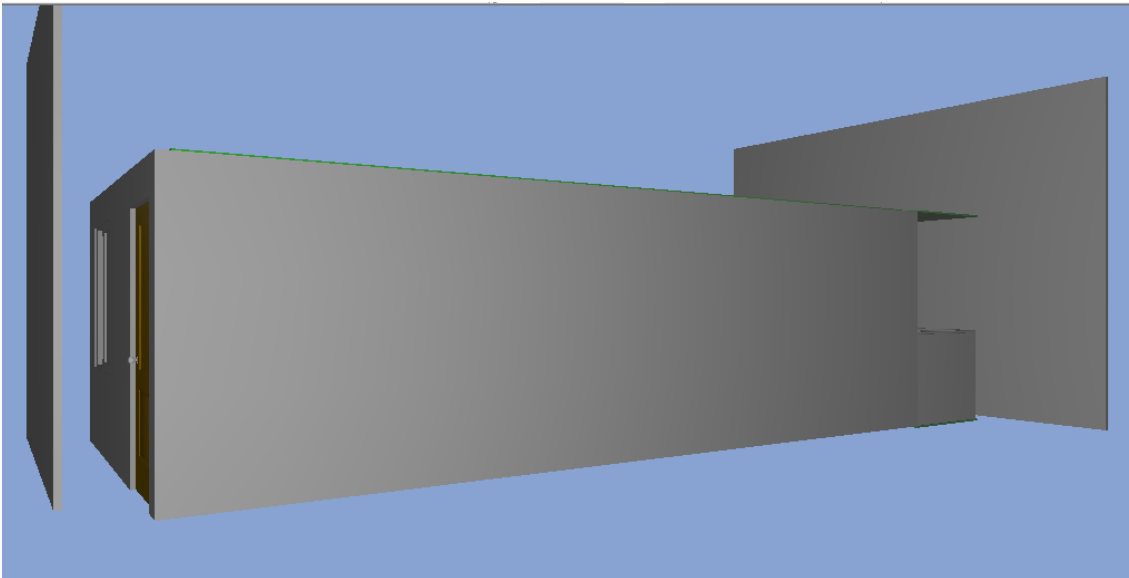
b.Select all the objects in the scene,right click to confirm



c.Click OK.

Modeling will transfer to VR

View from outside of the room



Enter room

