

If you plan on creating whole floors of your house with Tile Builder Rooms this guide is for you. Believe me, I have tried multiple approaches, and this is the best. Follow this guide and you will have a background image that fully aligns with your Tile Builder Rooms.

## Starting Point

You have configured a Dashboard, installed the TB Rooms CSS and configured column width and row height to something more reasonable. I use 40 x 40 in this example.

## Phase 1 – General Layout

### 1. Place Tiles on the Dashboard

Here we are just going to get the general proportions of the house. These don't need to be Rooms tiles, any tile will do. Add however many you need of the same tile to represent the rooms in your house.

### 2. Make Edges Visible

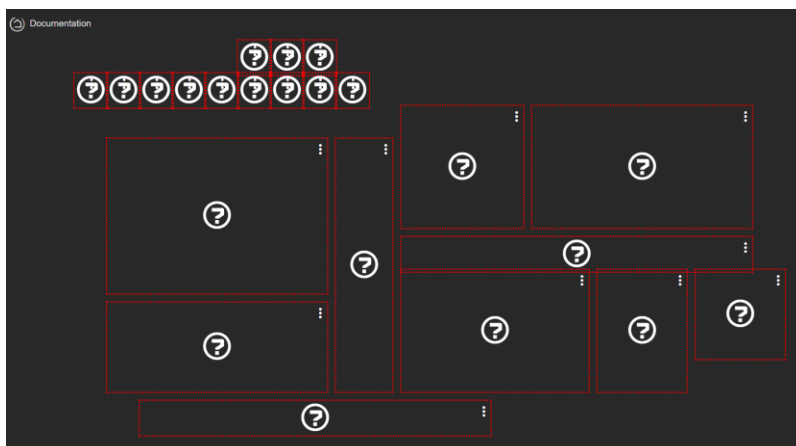
Now, we must make the edges of the tiles visible because the default CSS hides this. Add this line at the top of your CSS: `[class*='tile-contents']{border: 2px dotted red}` You should have something like this:



Don't worry if the tiles appear to overlap. We will fix that later if necessary.

### 3. Layout Tiles to Represent Rooms

Now we can layout the house in general proportions using these tiles to get the basic proportions. Take your time on this step as it is foundational to the rest of the work. Make sure it displays correctly on whatever device you plan to use. It will work on all your devices, but may require scrolling on devices with different sizes or proportions. You will have something that looks like this.



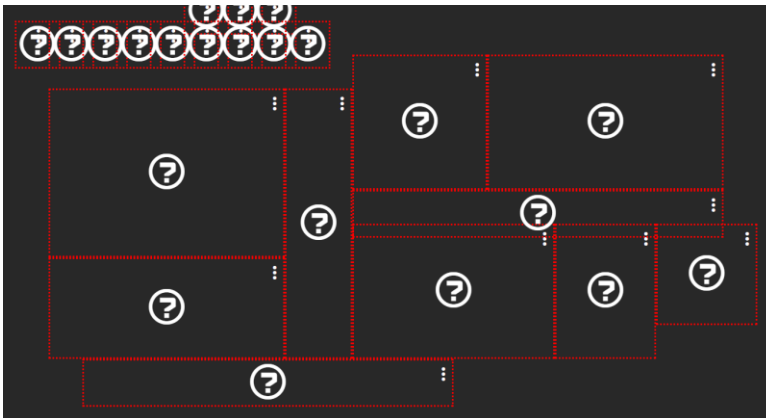
#### 4. Set Grid Gap and Icon Size

You can see that the lines are not properly adjacent. There are two things that cause that: A) The Gridgap is not set to zero and/or B) The Icon Size is too big to fit within the smallest of the rooms.

Set the Gridgap to 0 using Settings\Advanced\Layout as shown below.

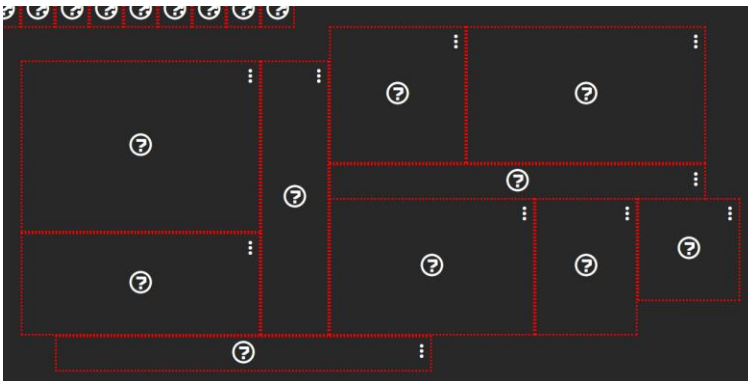
```
"customColors": [],  
"colWidth": 40,  
"cloudRefresh": 5,  
"hsmPin": "",  
"hide3dot": false,  
"gridGap": "0",  
"clockMode": true,  
"tiles": [  
  {
```

You can set Gridgap with the UI but in my experience, it sometimes reverts to the prior setting when you try and set it to 0.



Looks better but there is still some overlap. This is caused by the Icon Size. I had to reduce my Icon Size to 26 to get the edges to be properly aligned. This setting will affect any regular controls you place on the page, but the Rooms themselves do not use this setting.

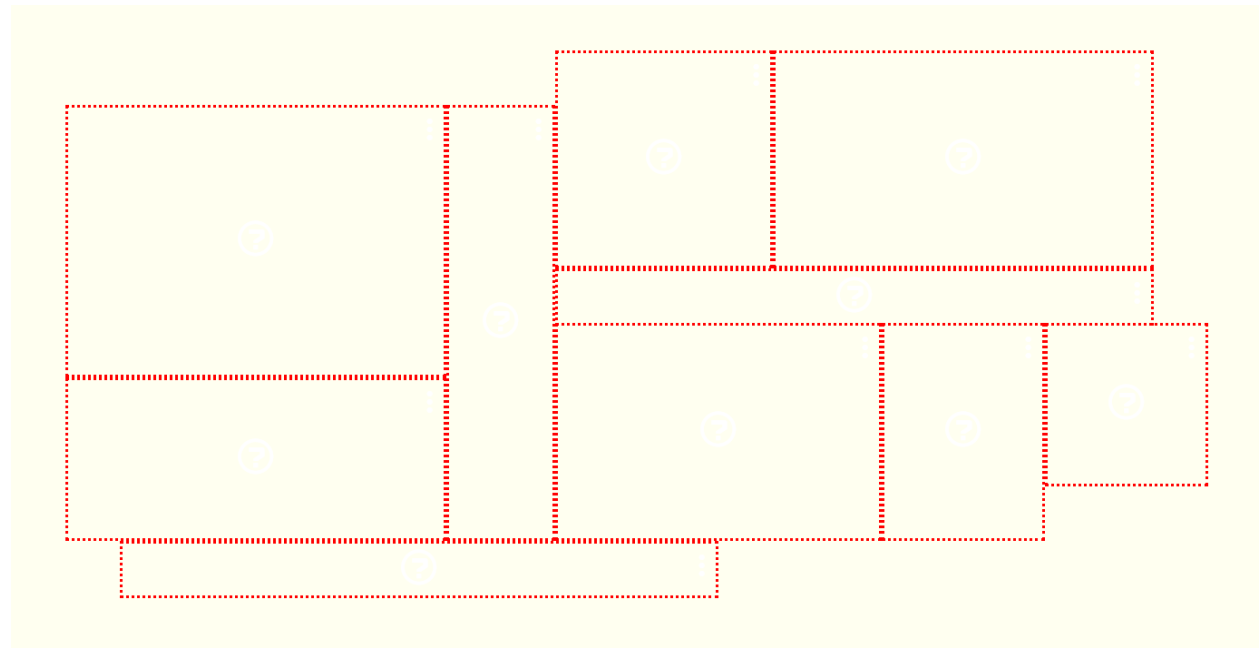
After setting the Icon Size appropriately it looks like this.



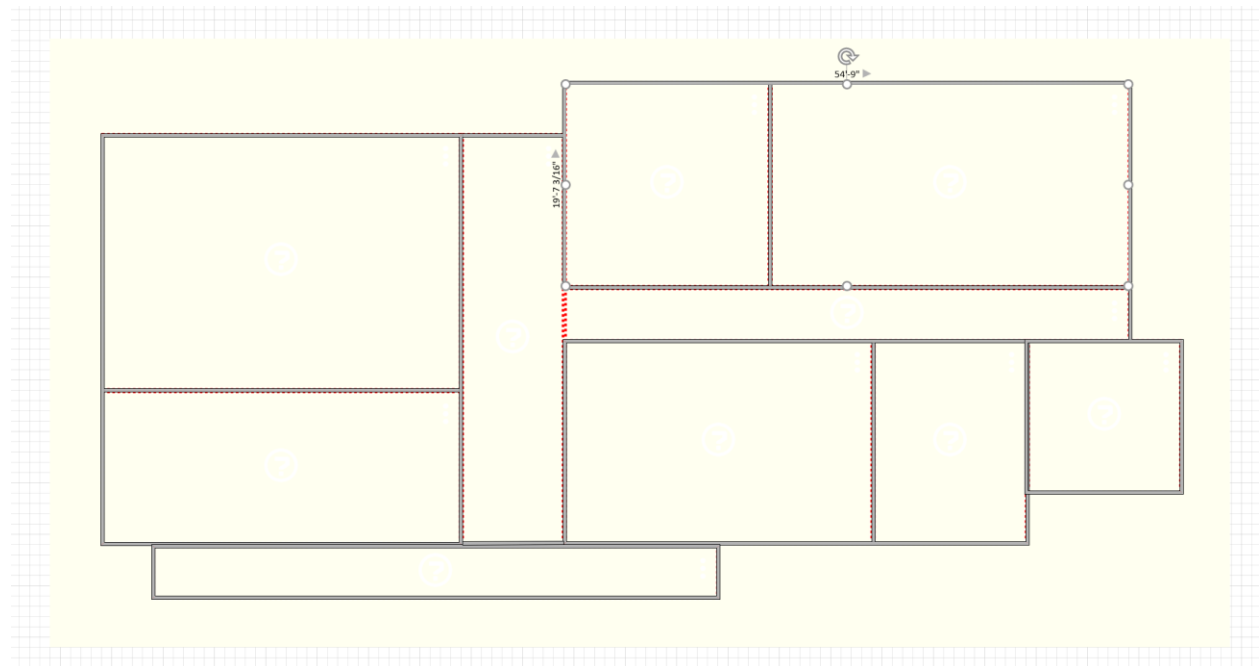
Now you are ready to go to the next phase.

## Phase 2 – Trace Your Layout

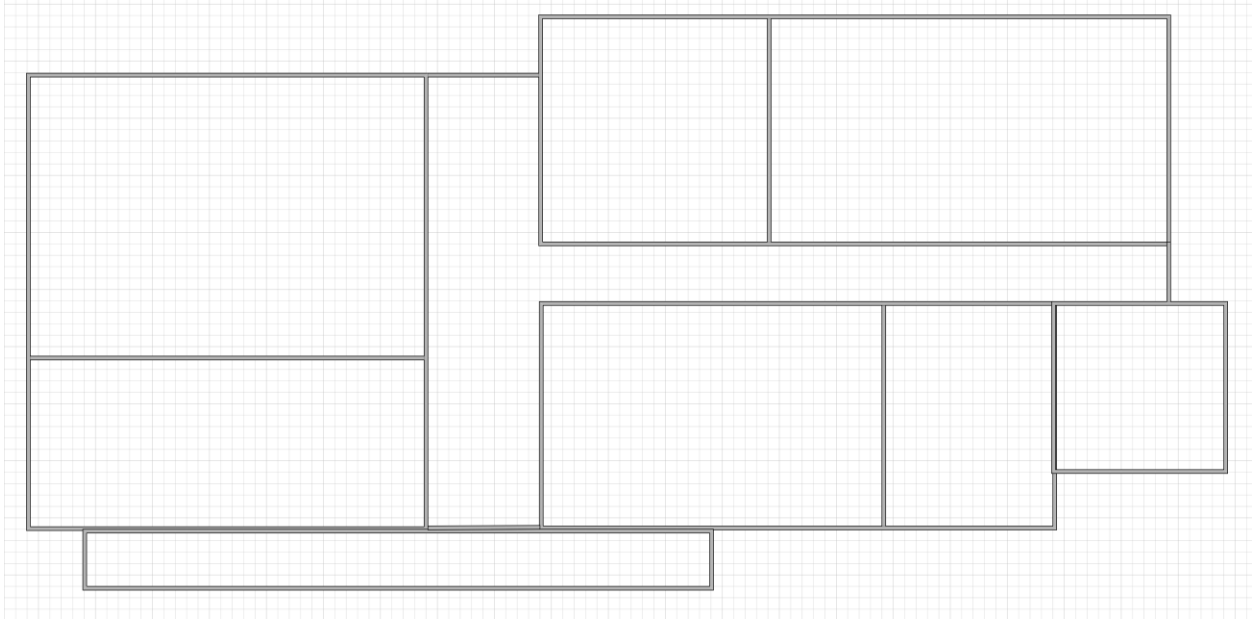
1. Take a screenshot of your dashboard layout and paste it into your drawing program. I changed my background to Ivory to make things easier to see.
2. What you see will vary according to your drawing program. I used Visio but the same general principles can be applied to a variety of programs.



3. Use your drawing program to draw over the lines as shown below.



4. When you are happy with then save a copy of the file with the background image included. Then delete the background image and save it again. It should look like this.

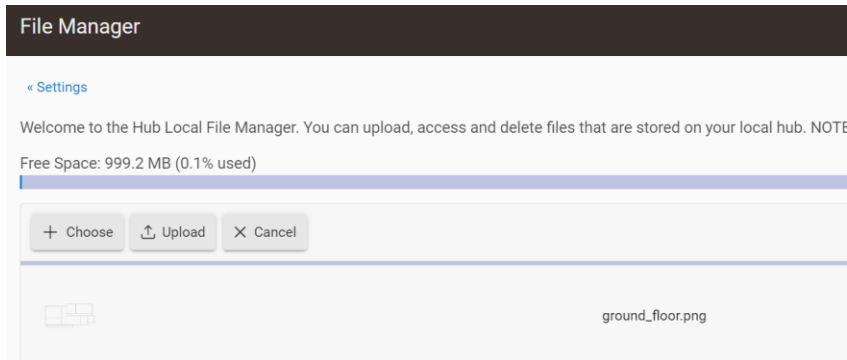


5. Export the image to a PNG file and make sure you set the background to transparent. Let's assume the file you export is called `ground_floor.png`

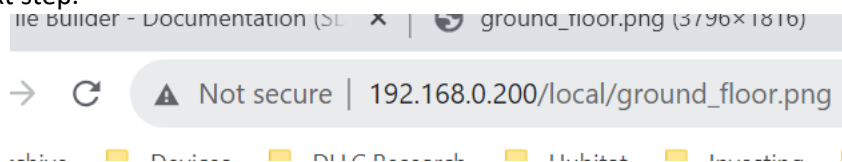
## Phase 3- Setting the Background Image

Now we must set our newly created image as the background for our room layout.

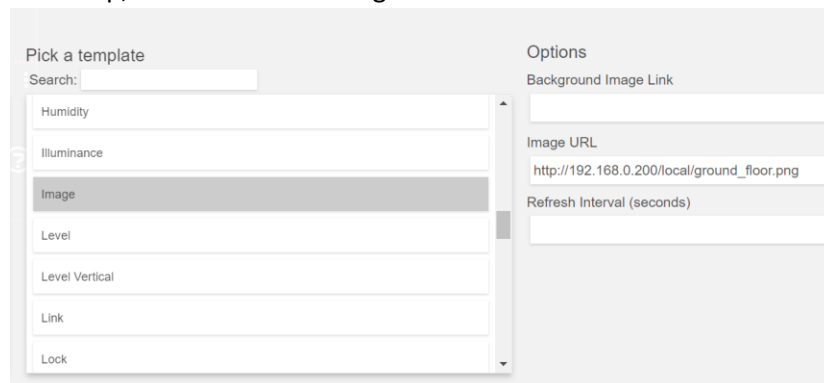
1. Upload the ground\_floor.png to the Hubitat Hub using the File Manager.



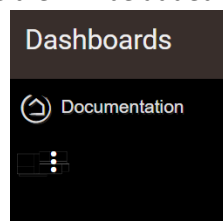
2. Get the path to the newly uploaded image file. You can do this by clicking on the uploaded file in the file manager and the path will show in the address bar. Copy this address as you will use it in the next step.



3. Back on the dashboard add an Image tile and set the Image URL to the address you copied in the previous step, so it looks something like this.



4. The tile will be added but it will be small (40 x 40) and in the upper left corner.



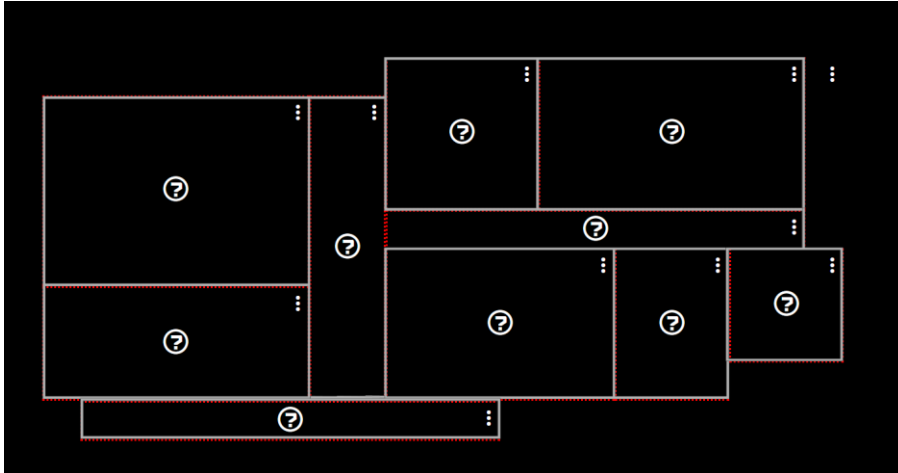
5. **Very Important.** Add the following lines to your CSS. The first line makes the image fill the image tile. The second line puts the image tile in the background.

```
.tile.image .inset-auto img {object-fit: fill}
```

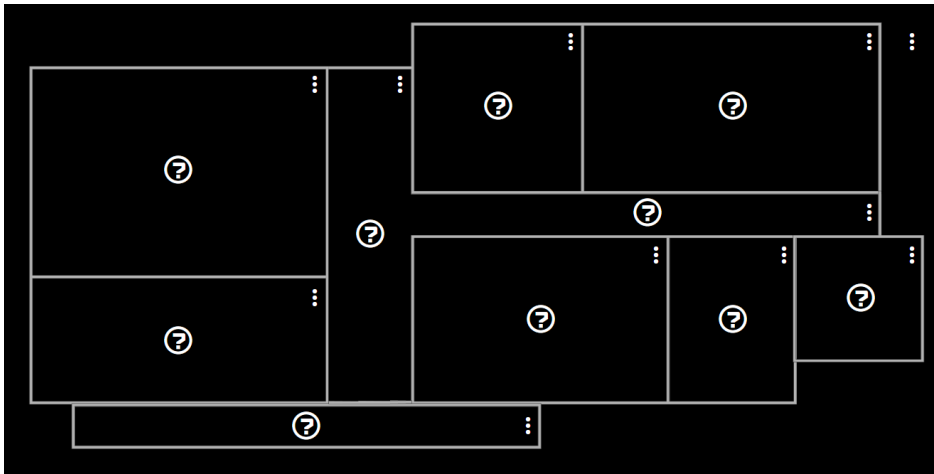
```
#tile-44 {background-color: rgba(128,128,128,0) !important; z-index:-3 !important}
```

These lines will be added standard in future versions of Tile Builder Rooms, but as of the current version 1.0.9 they are not present.

6. Now adjust the height, width and position of your image tile so it is properly aligned.

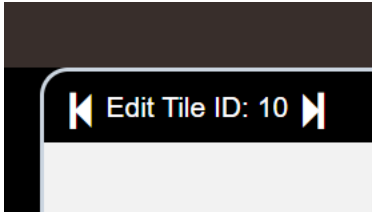


7. Once you are happy with the alignment you can remove this line from your CSS and do a refresh:  
**[class\*='tile-contents']{border: 2px dotted red}**

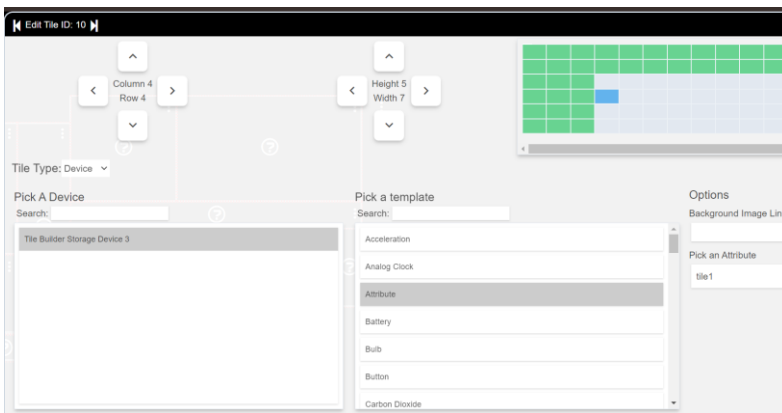


## Phase 4 – Adding Rooms

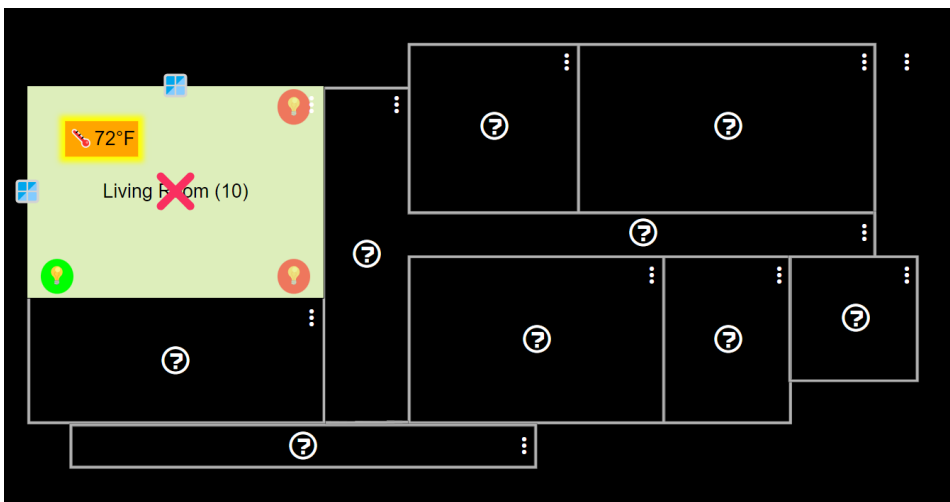
- 1) Load Tile Builder Rooms to create a new room. Remember to set the preview dimensions in TB Rooms to the same proportion as that allocated on the dashboard for a correct preview. Once you have built your room go ahead and publish it. I find it helpful to include the Dashboard Tile ID with the room title. It makes it easier to work with the tiles directly.



- 2) Change the Device\Attribute to point to the recently created room.



- 3) If the dashboard does not update you may need to refresh your browser and it will look something like that shown below.



- 4) Now repeat the process until all your rooms have been placed.