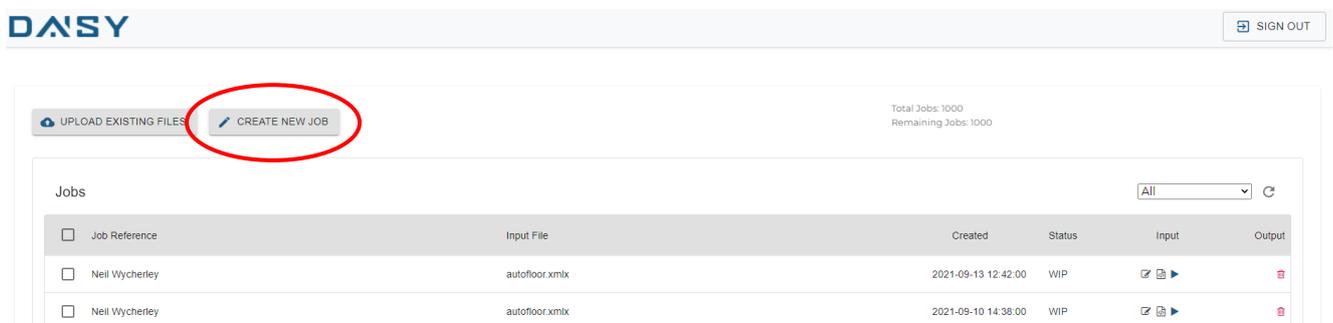


DAISYCAD™ Quick Start User Guide

This document will explain how to start using DAISYCAD™ as an input facility to feed DAISY™ which in turn will ensure you get your joists laid out and designed within your floor. Once you have DAISY™ installed you will be able to get a bespoke floor design done to your relevant Design Standard, using either solid lumber, I-joist or engineered wood product joists and beams commonly available in the market.

DAISY™ Dashboard

Once you have registered to become a DAISY™ user and Logged In the following Dashboard (<https://app.daisy.ai/login>) will be available and visible on your screen.



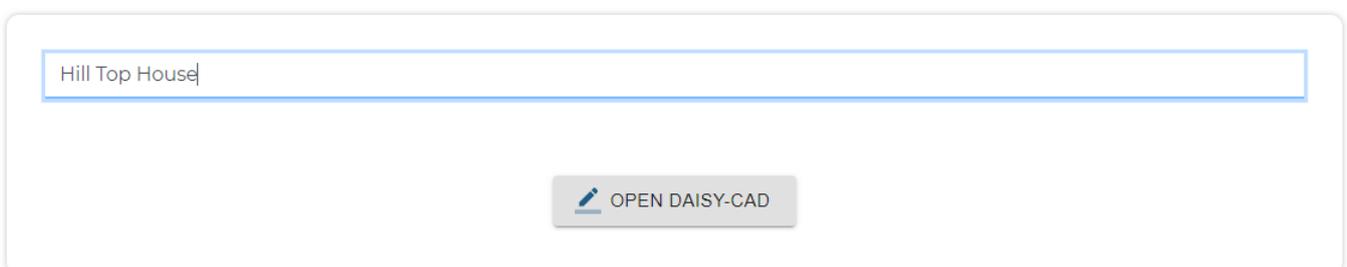
The screenshot shows the DAISY dashboard interface. At the top left is the DAISY logo. At the top right is a 'SIGN OUT' button. Below the header, there are two buttons: 'UPLOAD EXISTING FILES' and 'CREATE NEW JOB'. The 'CREATE NEW JOB' button is circled in red. To the right of these buttons, it says 'Total Jobs: 1000' and 'Remaining Jobs: 1000'. Below this is a table with the following columns: Job Reference, Input File, Created, Status, Input, and Output. The table contains two rows of job data.

| Job Reference | Input File | Created | Status | Input | Output |
|---|----------------|---------------------|--------|-------|--------|
| <input type="checkbox"/> Neil Wycherley | autofloor.xmlx | 2021-09-13 12:42:00 | WIP | | |
| <input type="checkbox"/> Neil Wycherley | autofloor.xmlx | 2021-09-10 14:38:00 | WIP | | |

Now click on the 'Create New Job' button as highlighted in red above and you will be asked to create a new design. You will need to fill in a name for this new job, see below where this has already been done. Once this has been filled in you will need to click on 'Open Daisy-CAD' after which you will be taken to DAISY-CAD™ where you will be able to start drawing your job in CAD which will ultimately allow our DAISY™ software to design the floor for you.

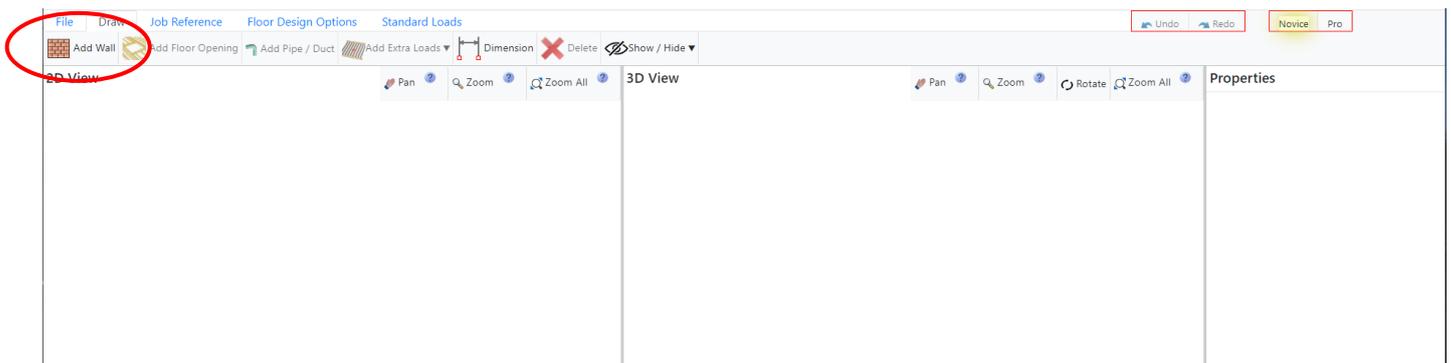
1. CREATING A NEW DESIGN

Create a new design



The screenshot shows a form titled 'Create a new design'. At the top right is a 'BACK' button. The main form area has a large text input field containing the text 'Hill Top House'. Below the input field is a button labeled 'OPEN DAISY-CAD'.

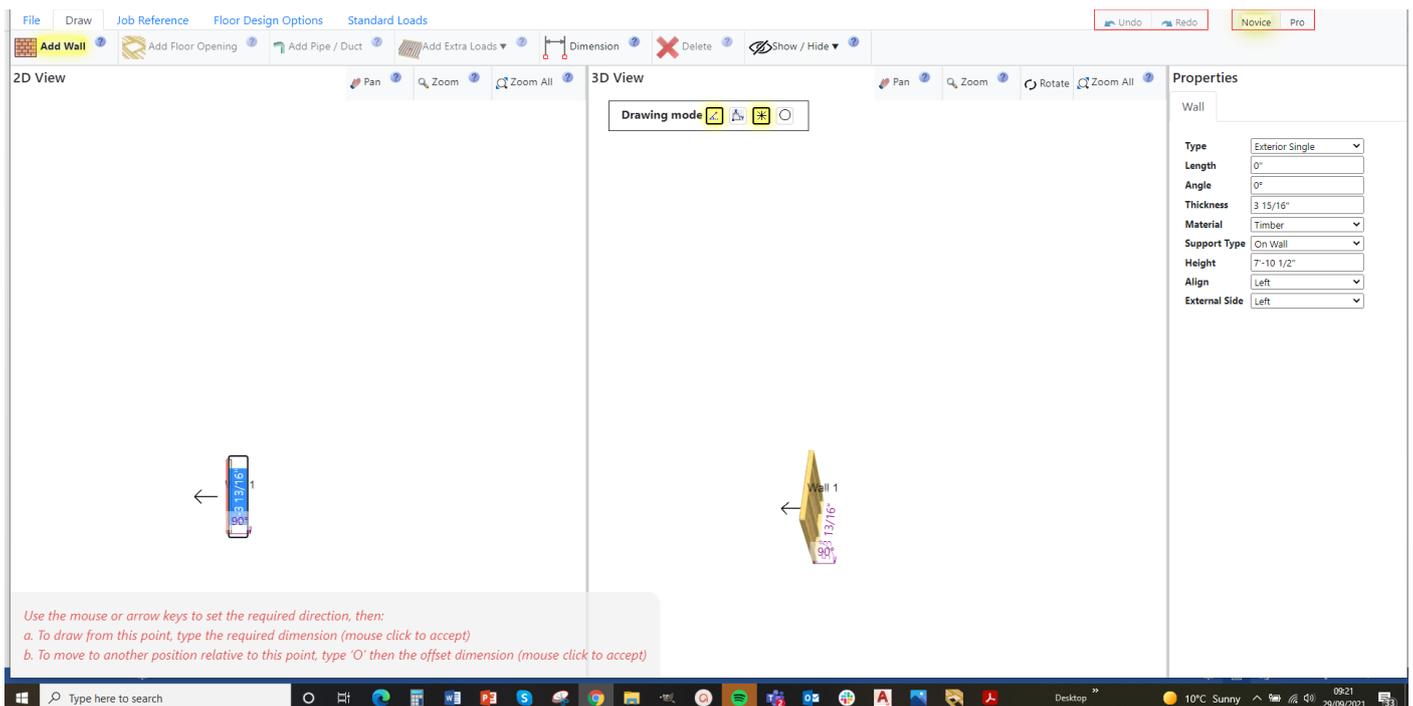
You will now be in DAISY-CAD™ with the following screen showing



2. ADDING NEW WALLS

Now for how to get started with the drawing. In order to start click on the 'Add Wall' button as highlighted above.

Once you have clicked the 'Add Wall' button you are ready to start drawing.



Click on the open area to the left; this is the 2 dimensional drawing area. You will see once you have clicked here that the wall properties are now visible on the right hand side and a 3 dimensional view of what you are drawing also becomes visible on the drawing area to the right of the 2D area.

You will note in the 'Properties' pane that there are various options and parameters that you are able to set to suit your job. The wall type allows for Exterior Single, Interior Single and Party Single. The option you select will determine the Timber Frame detail DAISY-CAD™ returns, for example – exterior single will put a Rim board around the exterior. If party single is selected Rim board will be placed around the exterior but additionally solid blocking and joist web fillers will be put along the interior edge of the wall creating a fire break detail on the Party Wall.

You can also set the wall thickness, height, support type (which allows for 'on wall' or 'on hangers'), wall material which allows for a timber frame option or a masonry option.

Finally the alignment for the wall, this is the side of the wall you are drawing along, left – centre – right and then the external side, either left or right. You will notice the side you have selected is shown with a red line on screen to help you visualise the side you have selected. Please be aware that if you have chosen the outside face of the wall you will be drawing around the outside face of your building's external walls. If you were drawing clockwise around your building you would set your walls as follows – Align Left, External Left. If you wish to draw around the outside anti clockwise set your wall properties as follows – Align Right, External Right. If you wish to draw along the internal face of your building clockwise, set the walls to Align Right, External Left and so on. You can experiment with these settings as you get more familiar with the software.

Properties

| | |
|---------------|-----------------|
| Wall | |
| Type | Exterior Single |
| Length | 13'-9 11/16" |
| Angle | 90° |
| Thickness | 3 15/16" |
| Material | Timber |
| Support Type | On Wall |
| Height | 7'-10 1/2" |
| Align | Left |
| External Side | Left |



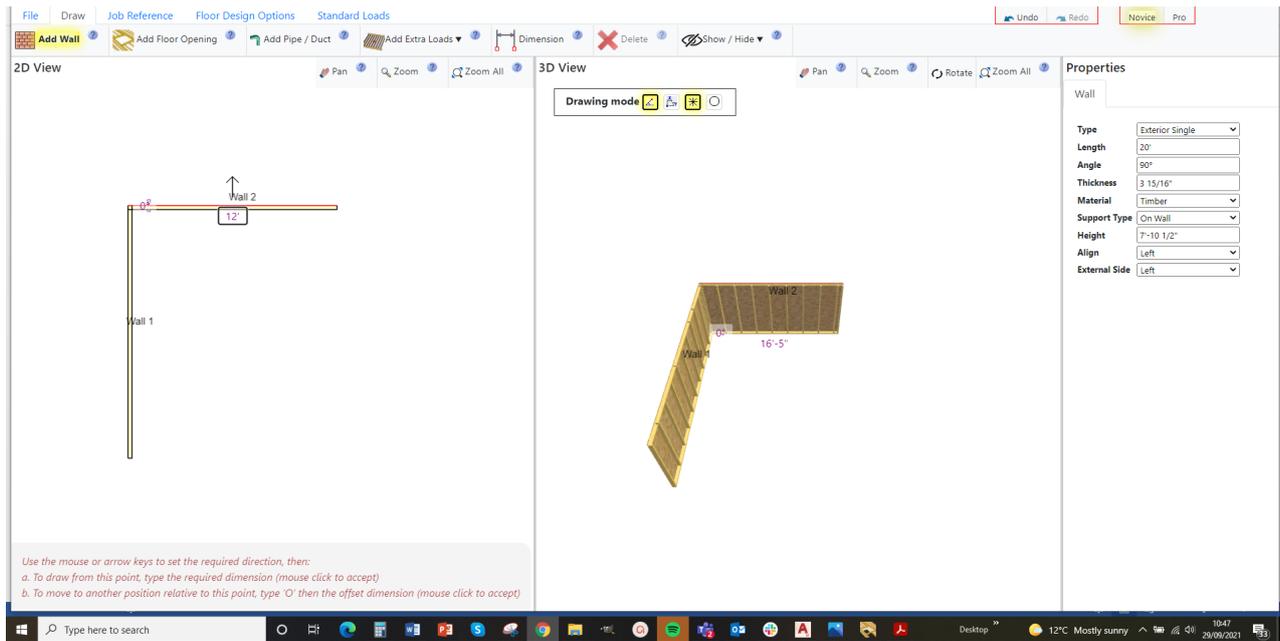
Please note the wall settings above, you will also notice there is an arrow pointing at 90 Deg to the wall. This also points away from the wall to the outside of where you are drawing.

To start a live layout let's start with a small rectangular box to get a feel for the input so far.

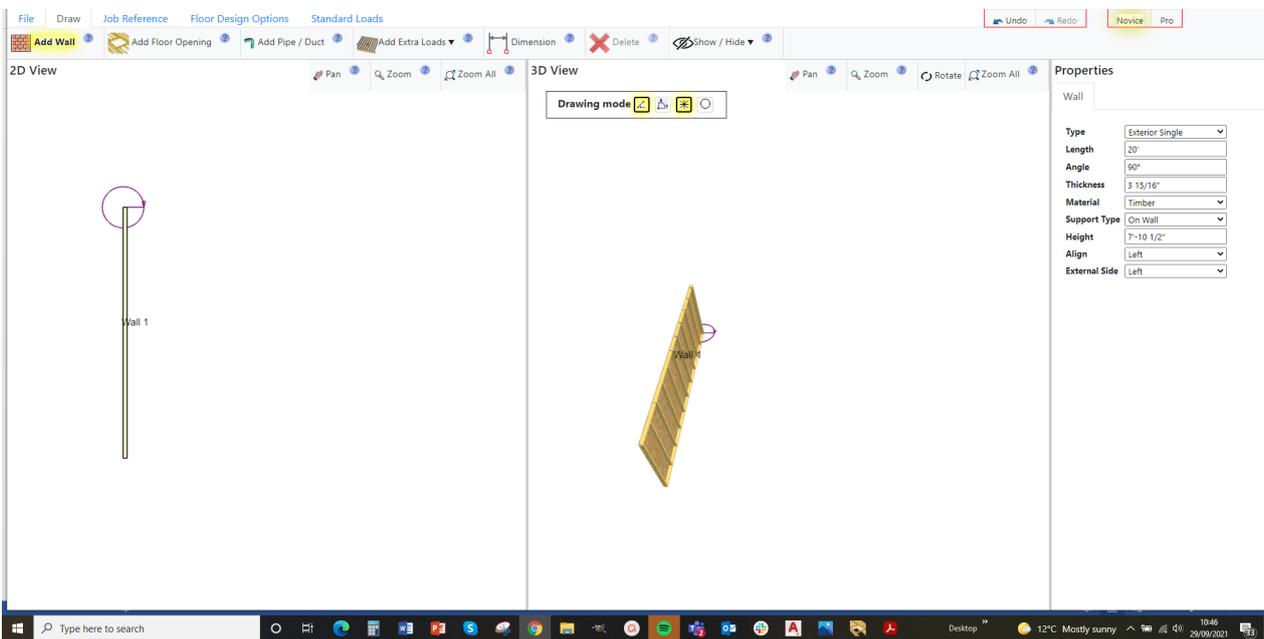
The options to draw are:

Using the mouse, we are going to draw clockwise along the external perimeter of the Timber Frame. Click a start point, check the Alignment is set to Left and the External side is set to Left, now hold your mouse pointer in the direction you wish to draw your wall, in this case 90 deg above your start position, enter the wall length and click enter. You will see the wall has been drawn vertical up the screen to this length and your pointer is now at the end of the wall waiting for you to enter another wall.

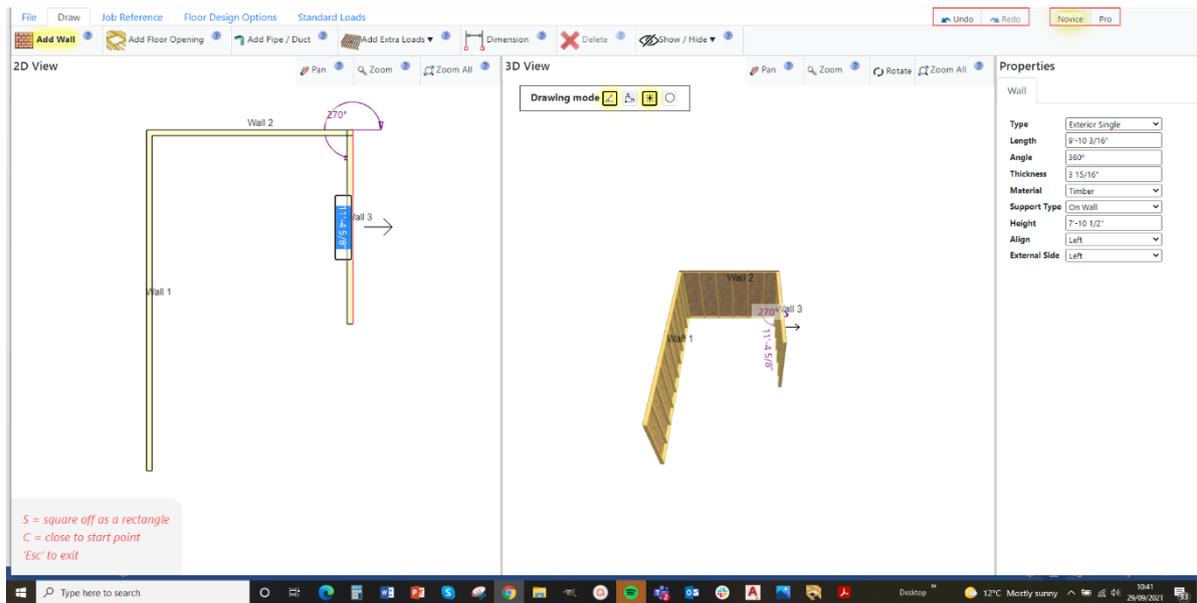
Without clicking or doing anything else now hold your mouse 90 Deg to the right, you will see the wall follows this direction, enter your distance and click enter. You will now have the wall extend across the screen by this dimension.



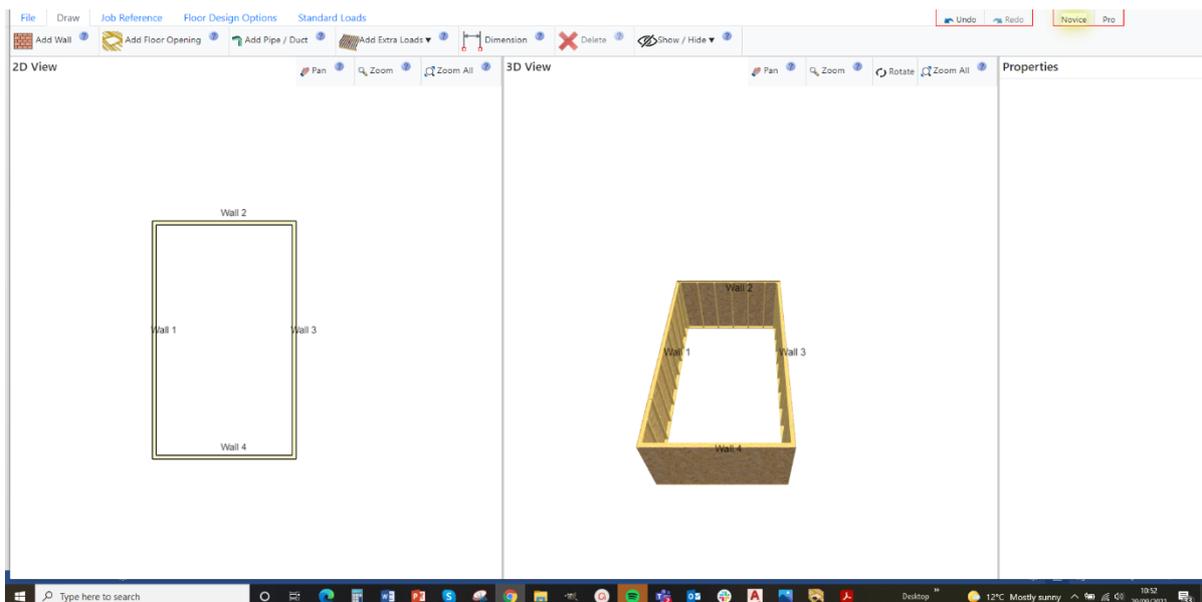
Now hold your mouse pointer down the page without clicking anything else for now. You now have the option to continue entering the walls as just done till you get to the start point where the walls will close to form a 'box' or looking to the bottom right you will see some text in red now showing.



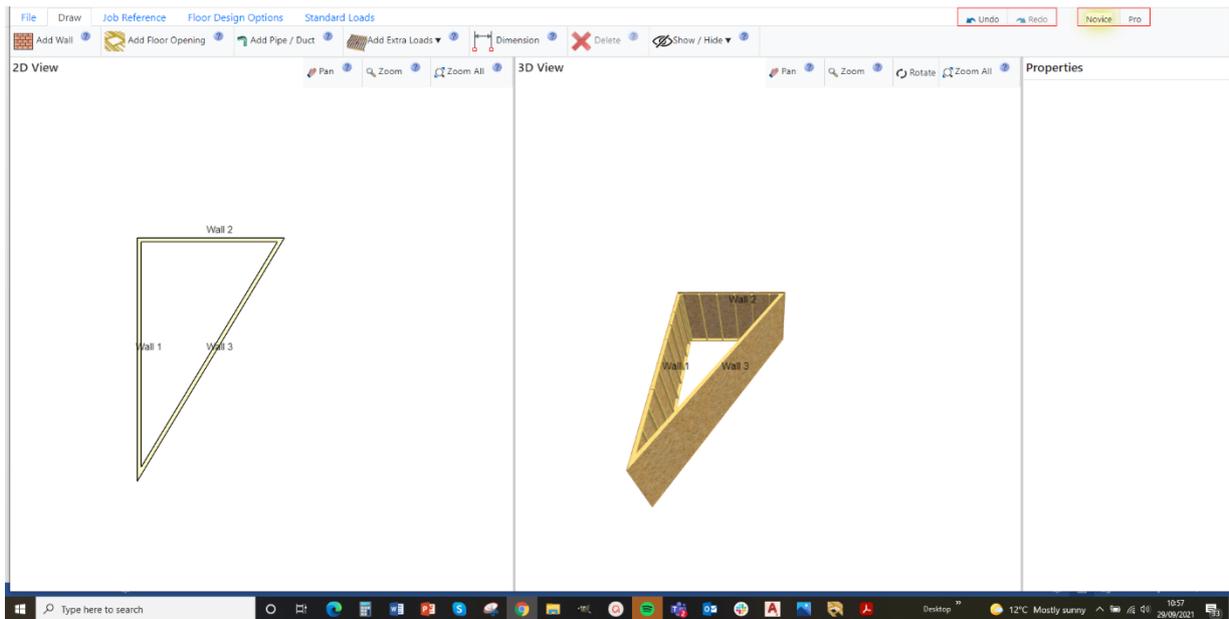
S = square off as a rectangle
C = close to start point
'Esc' to exit



If you wish to finish the box click the 'S' on your keyboard. This will complete the rectangle you are drawing closing this off by attaching to your start position.

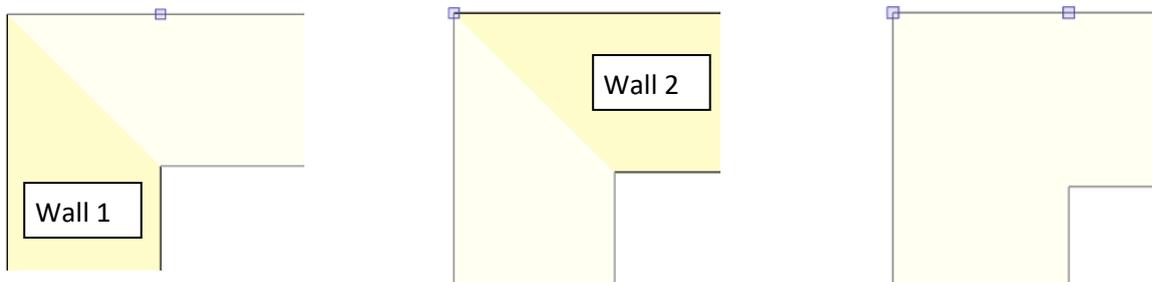


You could also have drawn the right hand wall as per the first 2 walls and the on the final wall input you can click on the 'C' on your keyboard, which would close the wall by attaching to the start point of the first wall that you input. If you are not on the final leg of your drawing and you click on the 'C' the wall will automatically go to the start point from where ever you are within your input, see below. Remember if you make a mistake you can always press the Undo command, or Delete if you wish to remove an incorrect object that was input earlier.



You can also do the same exercise as above but instead of using your mouse use the up, down, left and right arrows for the direction you want to draw, input the length of wall and then hit enter. This will produce the same result as holding the mouse in the direction you wish to draw, inputting the length of wall and hitting enter.

Once you have completed the wall input you may in future have a layout which fails to design. A quick check to ensure you have input the house type correctly is always a worthwhile investment. A common issue is corners of the layout not closing properly. DAIST™ relies on the corner locations to accurately attach to one another. If you have amended anything in your drawing a good check will be to ensure the external side is the same for all walls and the corners are correctly joined. Please see the following example which looks like walls 1 & 2 are joined when in fact they are not.



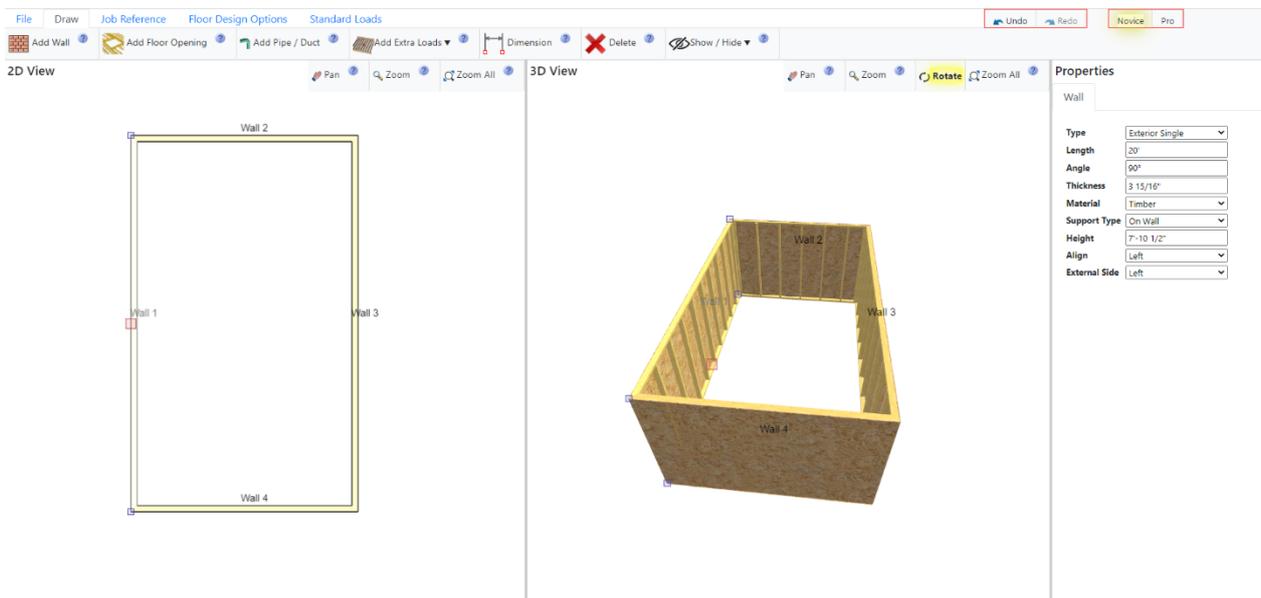
Note wall 1 end point, and wall 2 end points do not coincide, both highlighted and shown on 2D or 3D. Although the walls seem to attach, as the wall end points are not on top of each other DAISY™ will see a gap in the walls and reject the design.



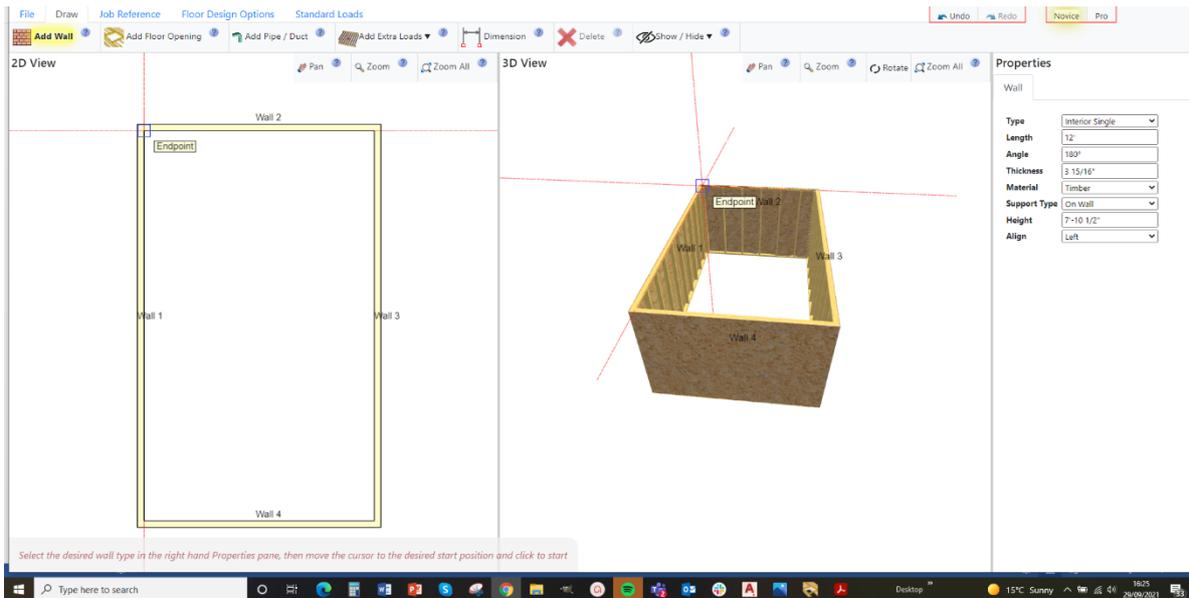


The above example is what you should see. Both start and end locations for the top and left walls are in the same location. It may be prudent to zoom in to the location to see this is the case at each of the wall junctions.

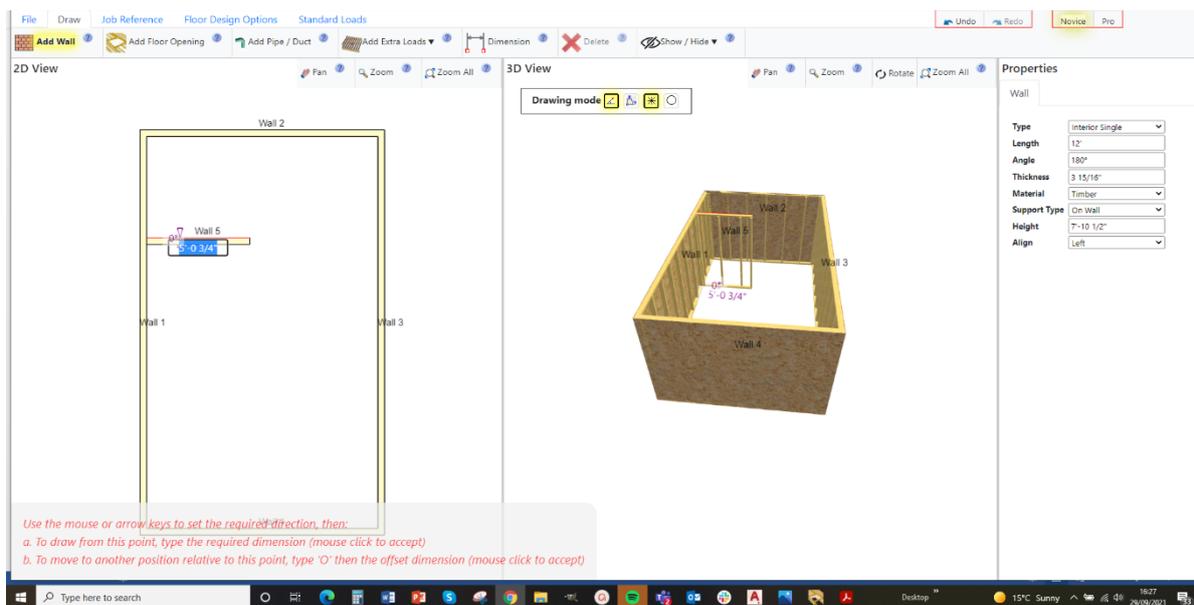
Should you wish to alter any detail on a specific wall, click on the wall which you will notice has now become highlighted and then in the wall properties box on the right make your change.



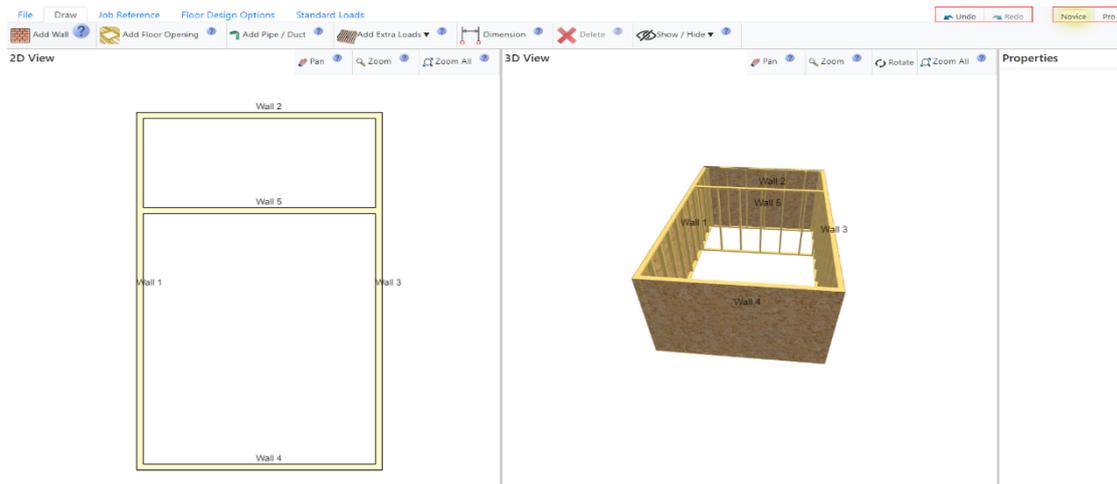
To insert an internal wall hover over the point you wish to use as a known point from which to offset to your wall start position. You will see a red crosshair appear over the endpoint as shown below. This is now setting you up to offset from this point. While you are hovering over this point click on the 'R' on your keyboard and then type in the distance you wish to start drawing you opening from. Use arrow keys or mouse as with wall input to set the direction you wish to move.



You will now see that the insertion point for your wall has moved to the distance and on the direction you set.



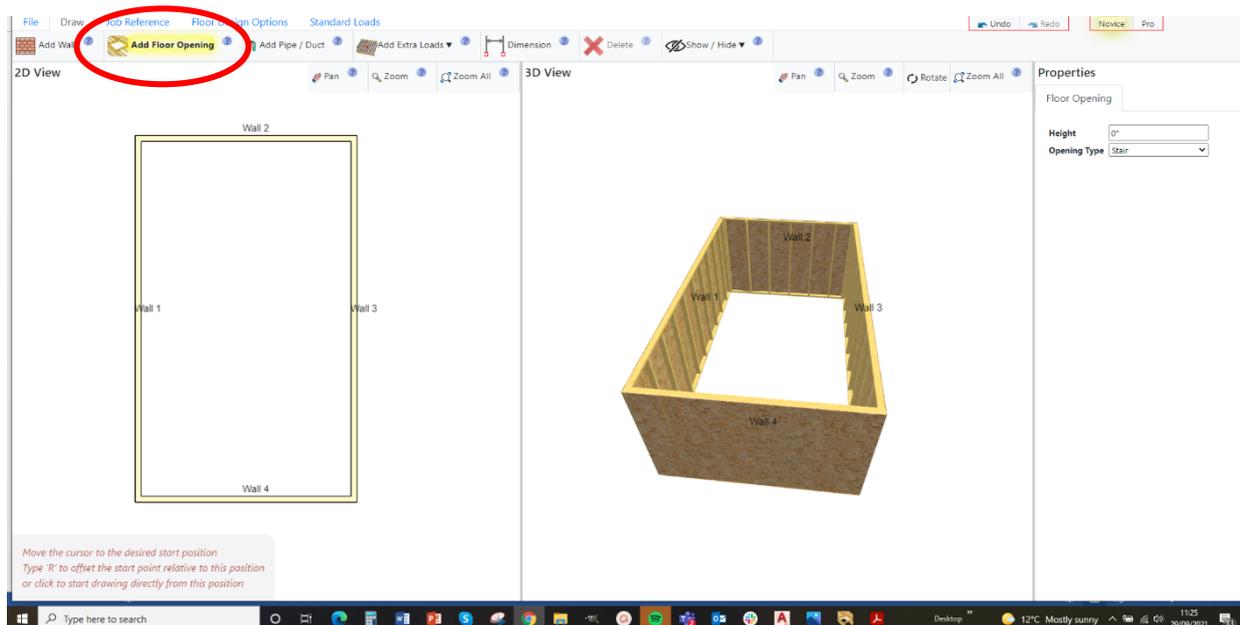
Now you have your start point use your mouse / arrow keys to draw the wall. If the wall is to be drawn across the unit and snap to the opposite wall.



These are basic input principals which should, with a little practise, get you started on putting your walls into your project.

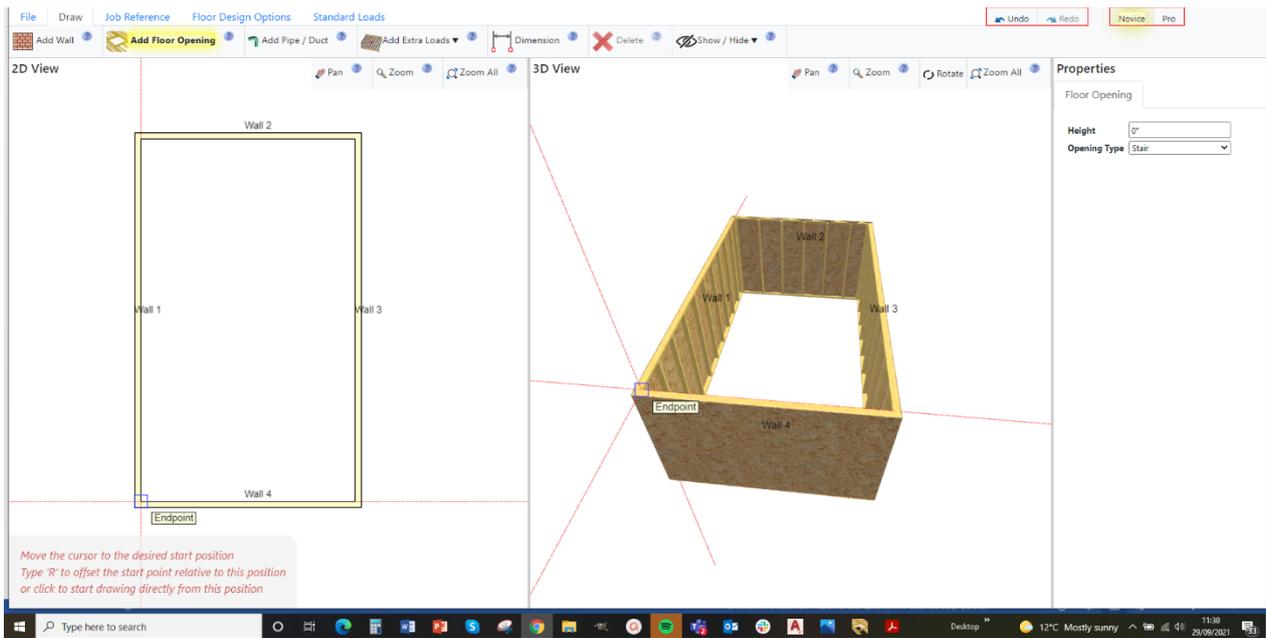
3. ADDING STAIR OPENINGS

Next we need to deal with the input of an opening which will allow you to set out the area needed for your staircase to go. You will need to use the same principals used to insert walls but using the 'Add Floor Opening' tab.

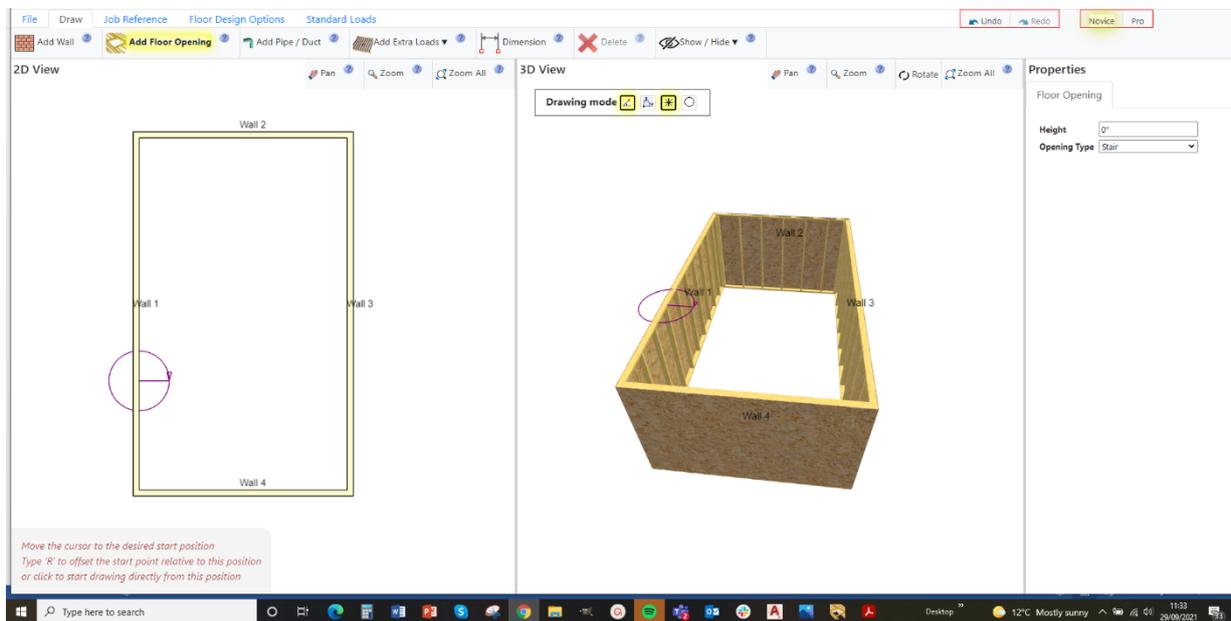


Click on the 'Add Floor Opening' tab as shown highlighted. You will see a tab appear in the bottom left corner with some red writing.

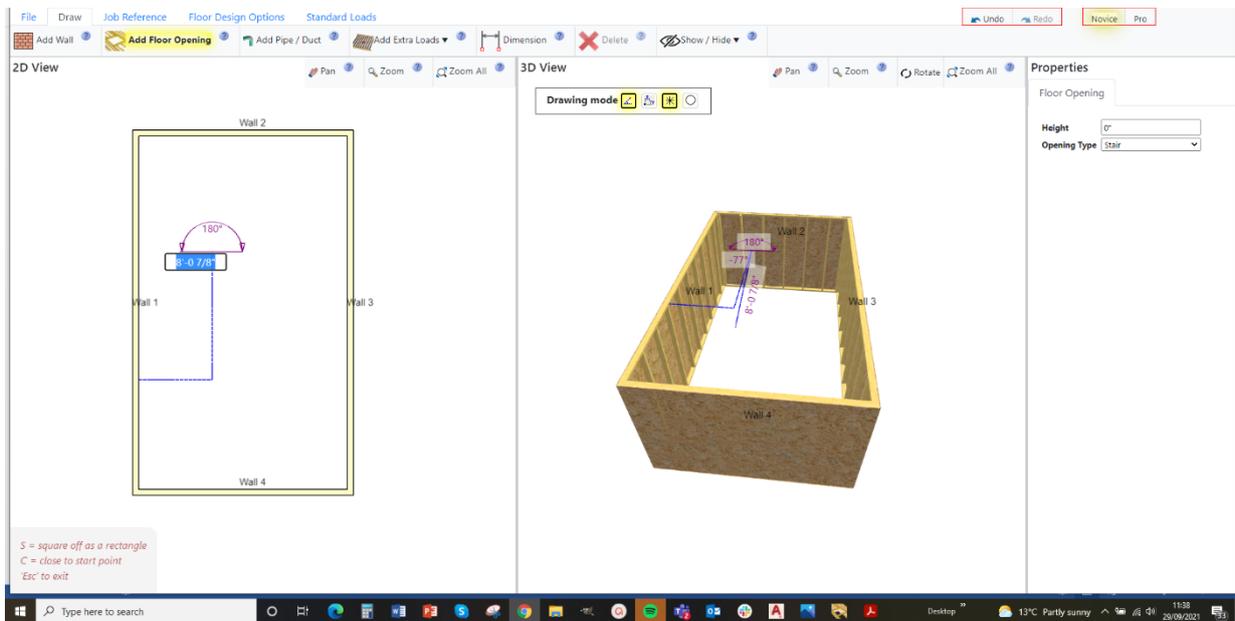
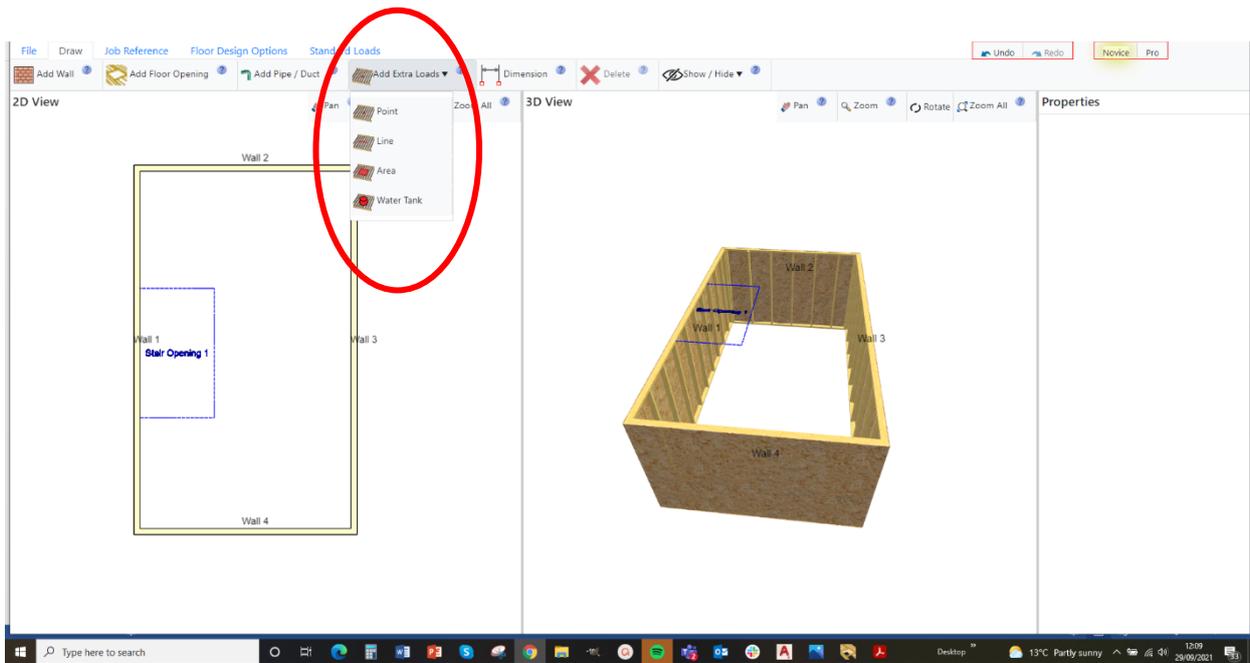
Hover over the point you wish to use as a known point from which to offset to your opening start position. You will see a red crosshair appear over the endpoint as shown below. This is now setting you up to offset from this point. While you are hovering over this point click on the 'R' on your keyboard and then type in the distance you wish to start drawing your opening from. Use arrow keys or mouse as with wall input to set the direction you wish to move.

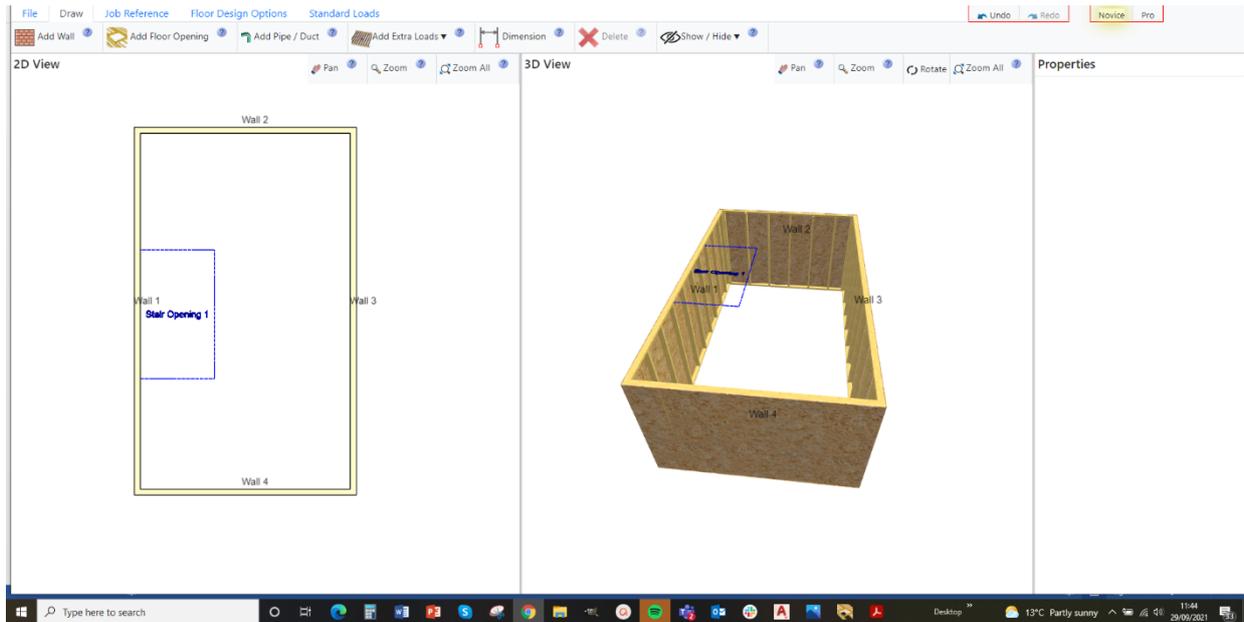


You will now see that the insertion point for your opening has moved to the distance and on the direction you set.



Now you have your start point use your mouse / arrow keys to draw the opening. Set a distance to the right, up a distance and then as per the walls use the 'S' on the keyboard to close off the opening as shown below.





The same type of input works for both pipes and additional loads. Please see below for the types of loads that can be added in to your layout and allowed for in the DAISY™ design.

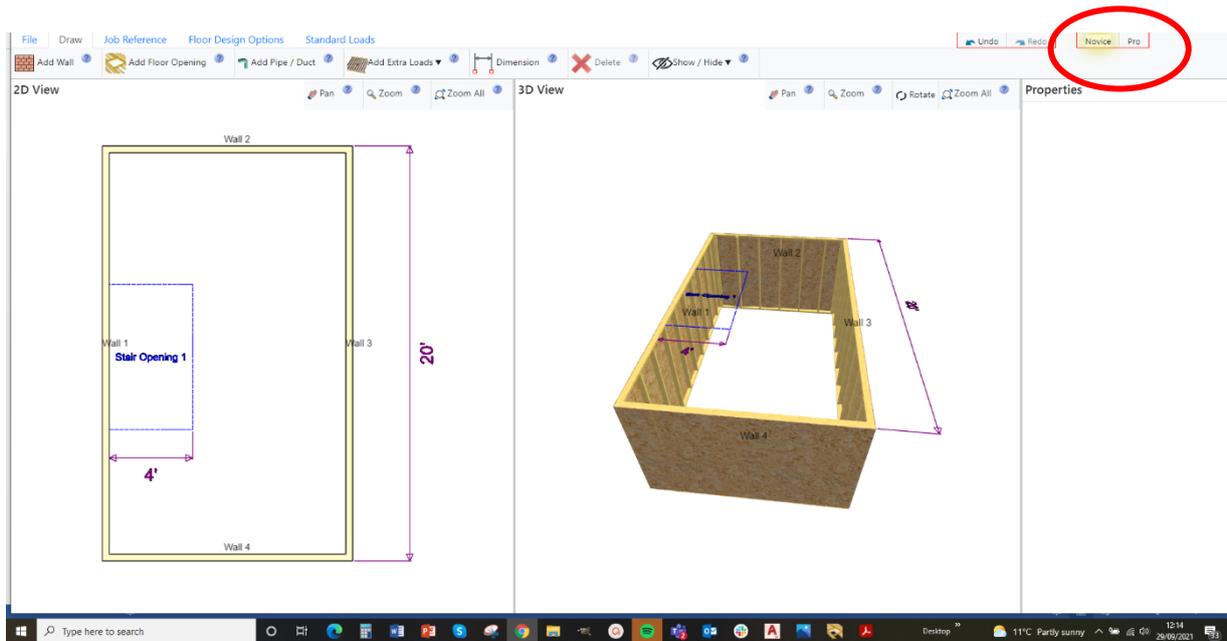
Some of the other buttons which are available.

Pan – click on the Pan Button, then click in the screen and while holding down your mouse click you can drag your drawing around the page.

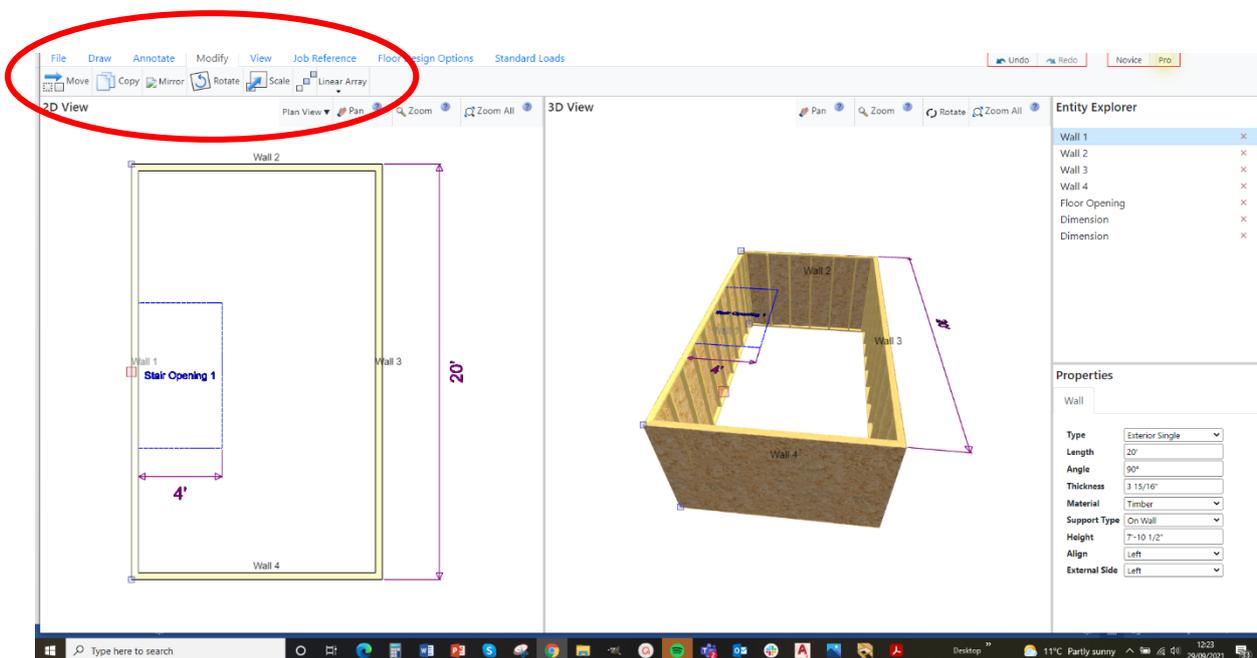
Zoom – click this button and then use the ‘roller’ on your mouse to zoom in and out of the page, alternatively click in the page and while holding the click drag the mouse back and forward to zoom in and out of the layout.

Zoom All – this zooms the entire layout in to fit on the screen.

Dimension – click this button, click the start point you wish to dimension from and the end point you want to dimension too and then drag your mouse to place the dimension where you require it.



All of the above input has been done and shown in our Novice mode, there is also a 'Pro' mode where the operator has access to more wall types and drawing tools, e.g. copy, move etc. commands. Once you have got the hang of the Novice Mode why not try and play with the Pro tools. See screen shot of the Pro tools below.



4. ADDING DESIGN PARAMETERS

Once we have completed our layout we need to set some design parameters to allow this to be pushed in to DAISY™ and get a design done.

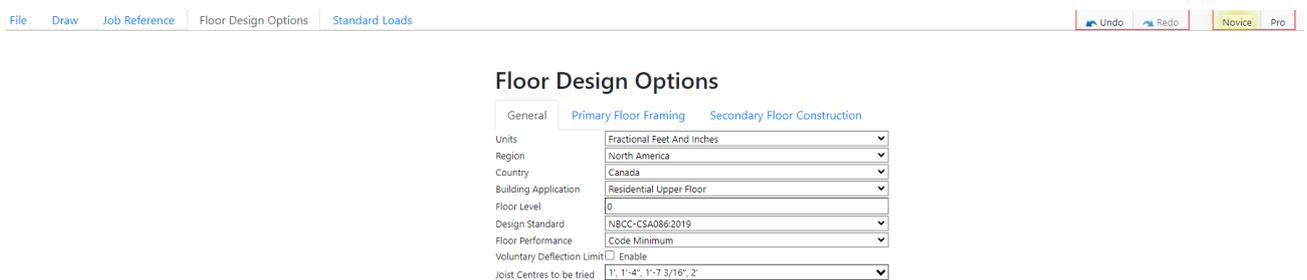
Open the Floor Design Options tab. You will see a number of sub tabs in this screen.

To start we need to choose our units, these will also go through to the drawing input area. Depending on the settings your drawing tools will follow these units.

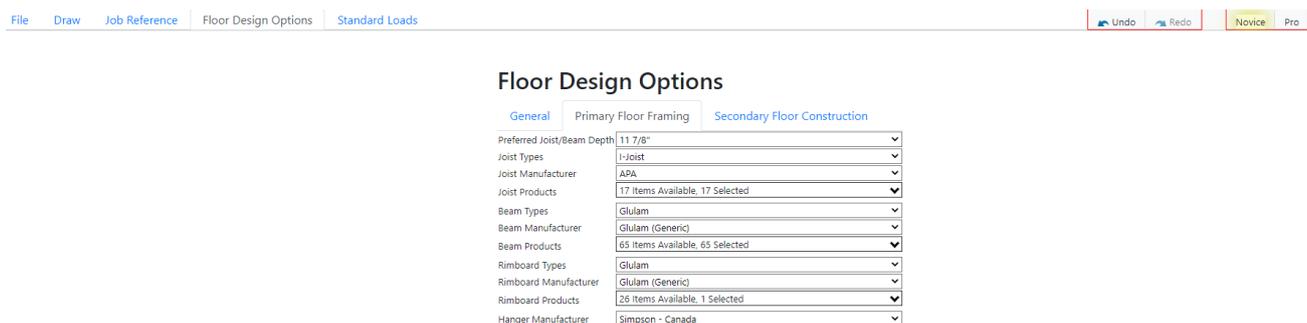
Then set your Region, Country, your building application which will bring in the relevant load cases for this country. Set the level you wish to design. Your design code should already be correct as this is based on the Country selected.

Floor performance is pre-set to your countries code minimum but you can increase the performance by a percentage should you wish. i.e. this will make your floor stiffer by the percentage selected.

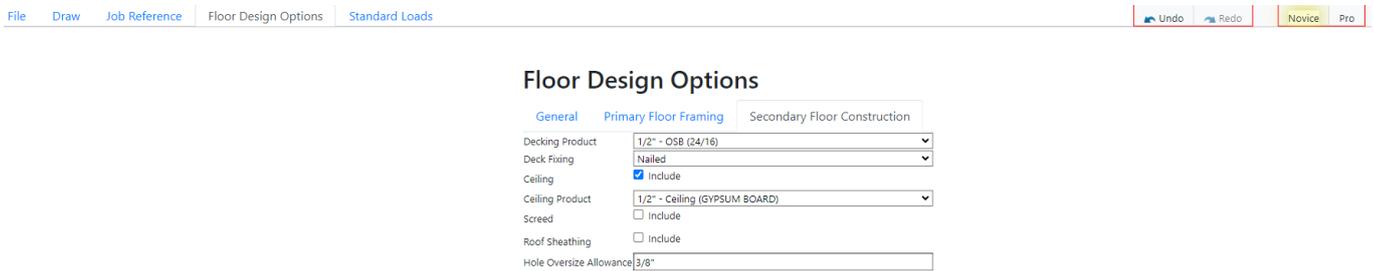
Voluntary deflection is a max you may wish your floor to deflect and lastly the Joist Centres are the on-centre spacing's you wish DAISY™ to try out during the design. These are intended to work with the decking sheet size you are going to use and which you can set under the Secondary Floor Construction tab.



Now under the Primary Floor Framing tab you can choose the depth products you wish your floor to comprise, the type of joist / beam / rim and the specific manufacturer should you wish. All products should automatically be selected once the Joist manufacturer is selected. You can turn options on and off as needed. Finally the hanger manufacturer will be selected as per the Country you selected on the 1st tab.



Lastly the Secondary Floor Construction tab allows you to choose your sheet material, size whether the decking is nailed or glued and nailed, the ceiling attachment and thickness of this board. Also choose whether there is a screed topping, roof sheathing and a tolerance on hole size input.

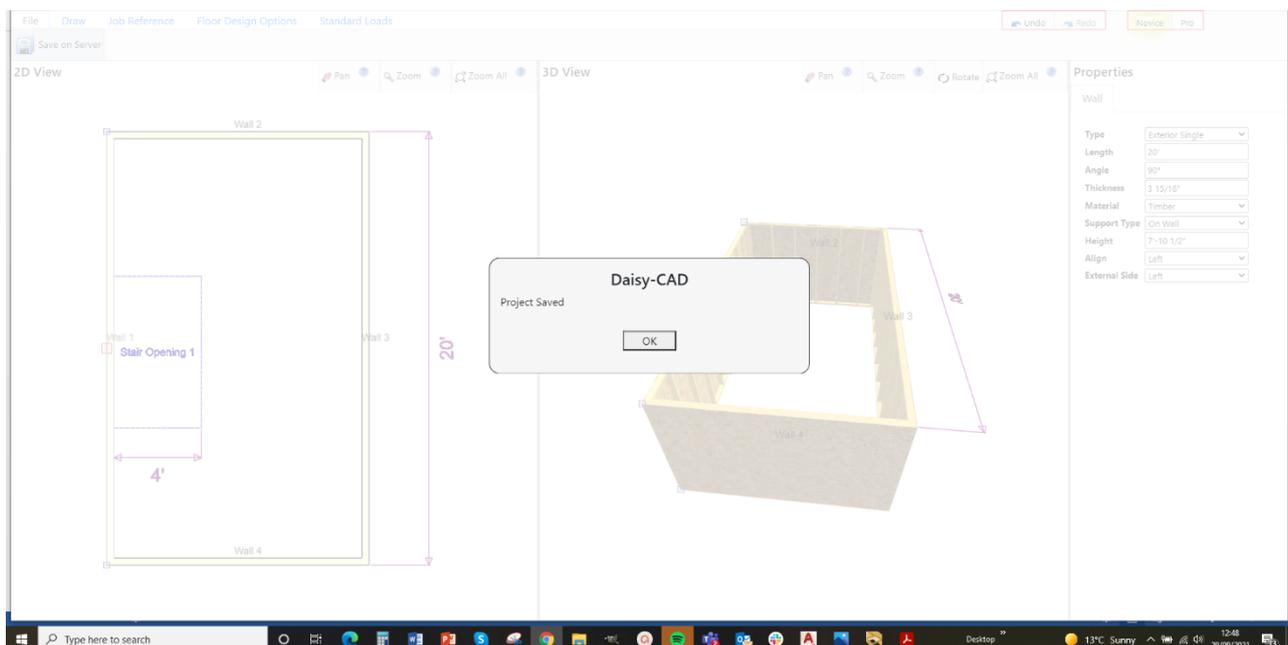


Once all of these have been set the final tab is the Standard Loads tab. This should already be populated with the correct loadings for your code but should you wish to increase these you can here.



Once you have completed all of these you may want to get a floor design done. At this point click the file button as highlighted above. The save on server button is now available which you need to click.

You will see the following which shows this job has now been saved to you DAISY™ dashboard. Click ok.

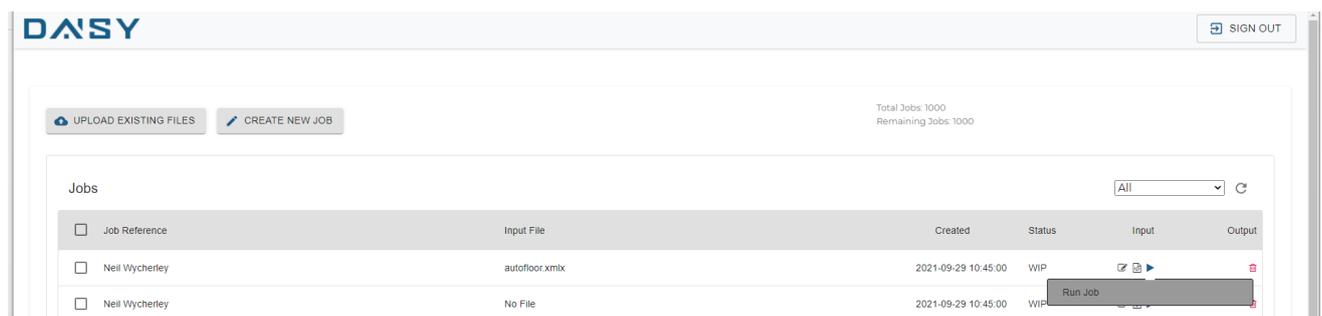


5. RUN A JOB

Once this is done go back to your DAISY™ dashboard.



You will now see this job is saved on the dashboard as WIP. If you click on the run button under the input heading the job will be pushed into the DAISY™ AI Design engine hosted on the cloud.



The following Design Options will need to be chosen.

Run

Selected 1 Job

Design Options ^

Override floor performance value specified in file.

Floor performance (% above code) 0 5 10 15 20 25

Construction time prioritisation none reduce minimise

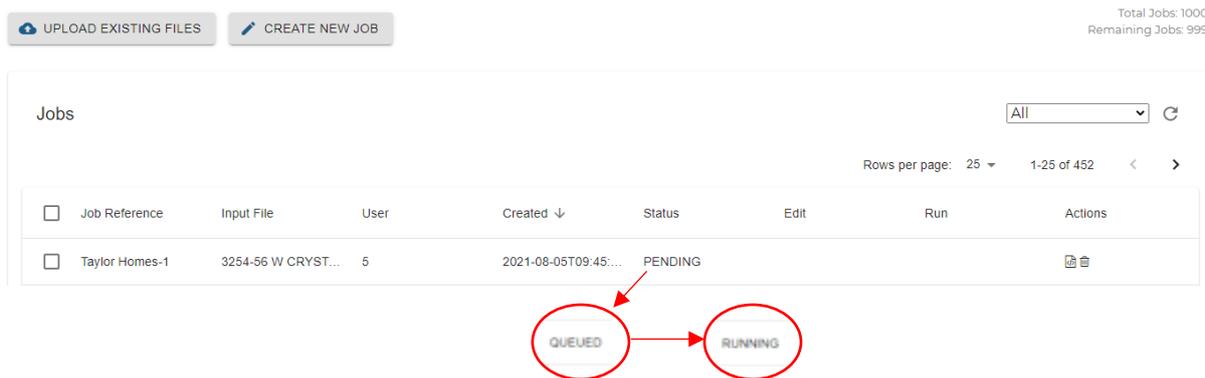
Optimization Options v

CANCEL RUN JOB(S)

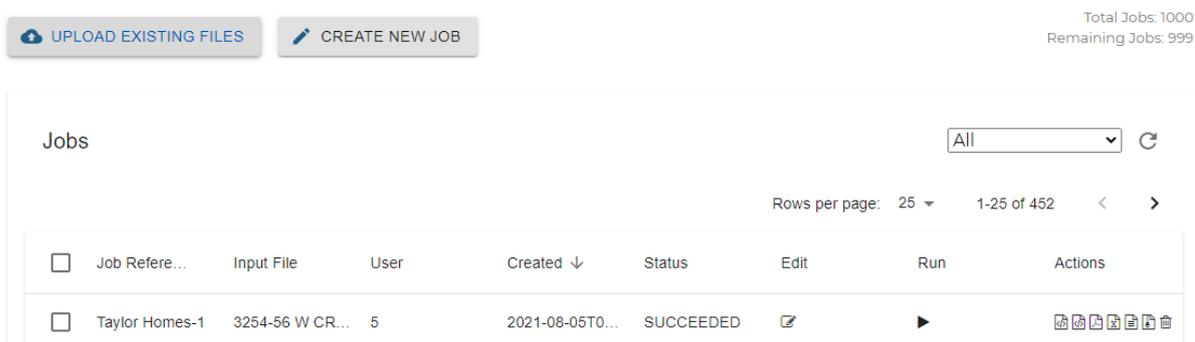
You can override the floor performance you chose while drawing the floor and you can choose how the floor is designed using Construction time prioritisation. When 'None 'is selected the software will allow joists on best centres to have cheapest joist layout but ignoring how much decking sheet material needs to be cut. The

'Reduce 'setting is a mid- way solution, best of joist centres and reduced deck cutting whilst 'Minimise 'means the joists will follow the decking sheet sizes and eliminate cutting of the decking wherever possible.

After choosing your settings click RUN JOBS to start the design process. You will notice you have been returned to the dashboard where your uploaded new job is showing as PENDING. This notice will change through to Queued, then on to Running with a final Failed or Succeed



Once the job has finished and you see Succeeded under the Status column you will see further options now available

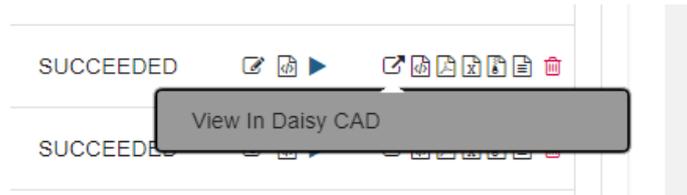


A button now available under Edit if clicked will take you back into our DAISY-CAD™ software which will allow editing of wall positions etc. to be done. Clicking the button under run will re-run the design for you in DAISY™.

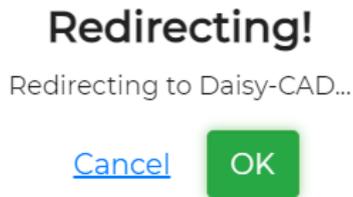
You will also notice a number of new icons available under Actions. Here you have the option to download a Pdf of the final design, export a Csv file with the materials contained in it, export an xmlx file of the output which can then be used to import the floor back in to an original Revit model (see how to do this below), download the floor to see it in the DAISY-CAD™ software, download a Log file which has all of the design details contained, export a zip file containing all of the other files available (Pdf, Csv, etc.) and finally delete the job should you need.

If you get a 'Failed 'status you will just get the Log file with the design details in and a message pointing you to the reason for the fail along with the delete option.

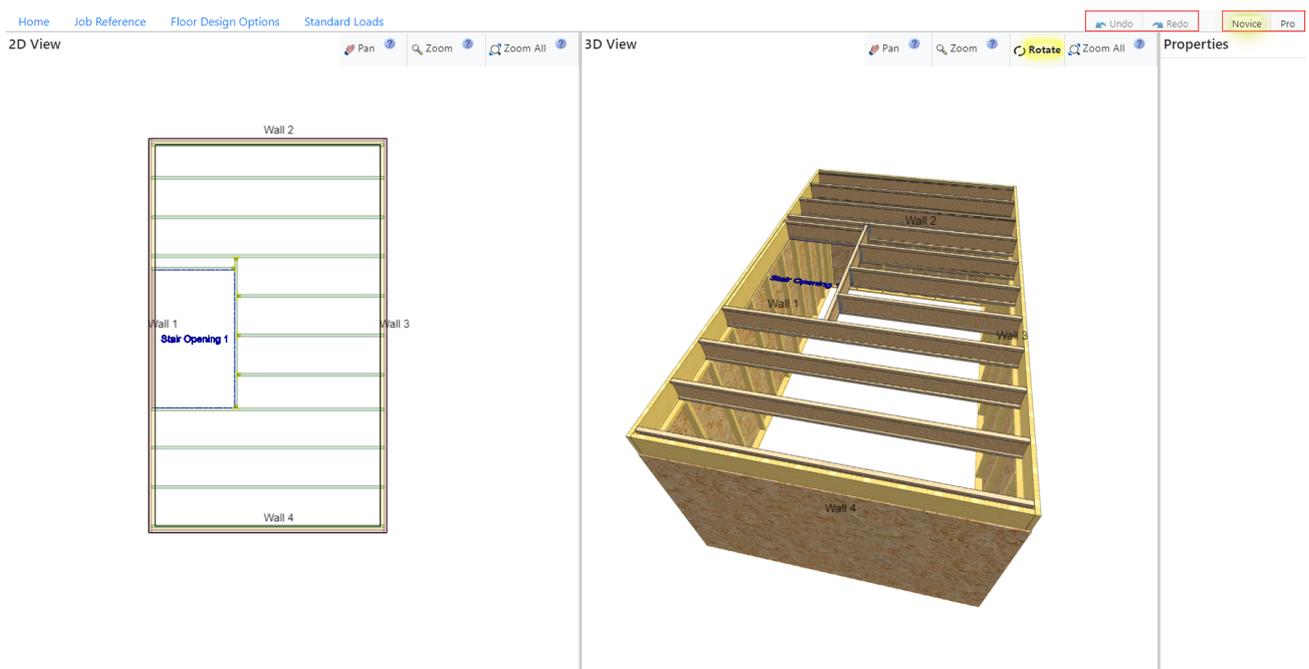
Once the job has succeeded view your results by clicking on the View in DAISY-CAD™ button shown below.



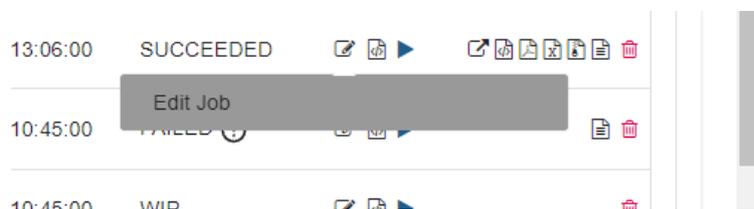
The following will pop up



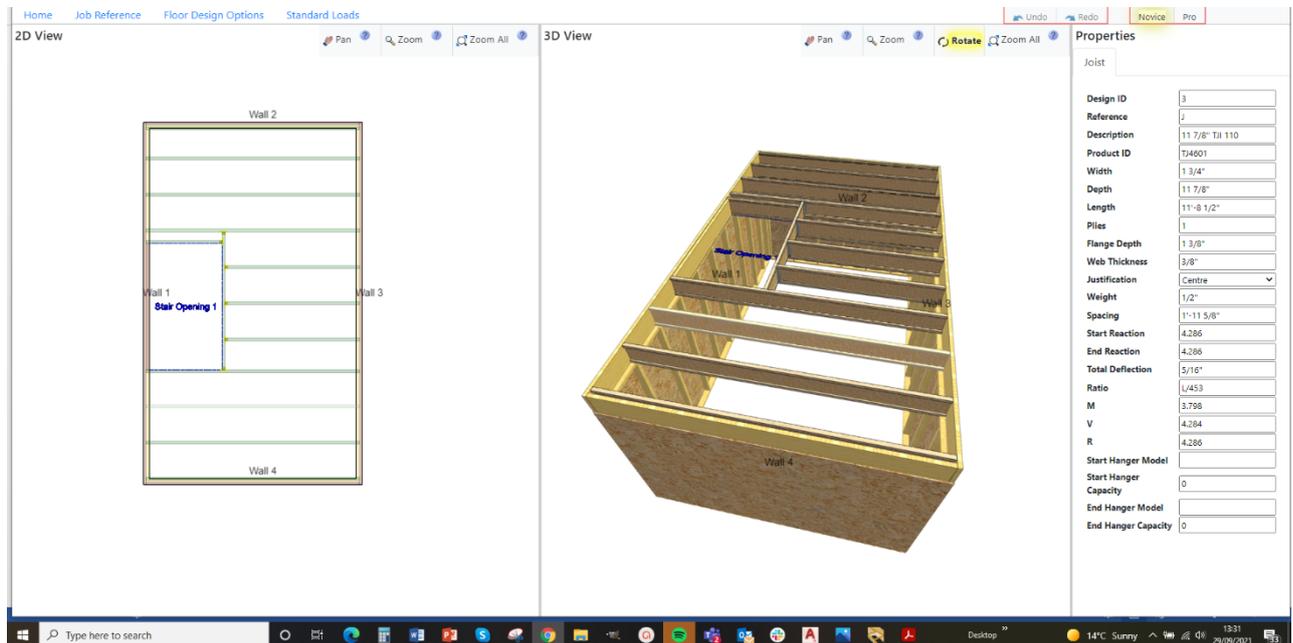
When you click on the ok you are redirected to view your completed design.



Please note this cannot be altered or edited in any way. The edit the job you will need to click on the edit job icon which will take you back in to your original DAISY-CAD™ drawing. Once you have made your changes you can follow the process as above to save the job back to the dashboard and then re-run.



Finally if you are in DAISY-CAD™ showing the final design you can click on individual members and then you will see the pop up on the right which shows the properties of the joist / beam selected.



Thank you for using DAISY.

If you have any questions please reach out to DAISY Head of Product Mario Selvaraj at mario@daisy.ai or contact our team at contact@daisy.ai