Tutorials

Tutorial One - Building a one-room floor plan

Video one: Downloading Sweet Home 3D For Free

- 1. Go to Sourceforget.net
- 2. Click download



- 3. Once downloaded, double click the installation file, and follow the prompts
- 4. When prompted, select "create desktop shortcut" for easiest access to your program

Great! You're now ready to launch Sweet Home 3D.

Video 2: Launching Sweet Home 3D

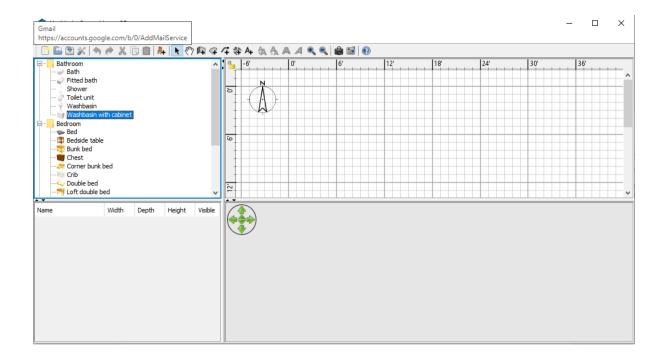
1. Simply double click the program icon.

Since you chose "create desktop shortcut" it will be on your desktop.

If you missed this step, it will be in a folder on your computer.

[Can't find it? Search for "Sweet Home 3D" in your computer's search function.]

2. Wait a few seconds for the program to open. When it's ready, you'll see the landing page:



That's it! Now you're all ready to start designing!

Video three: Beginning a New Floor Plan

So, how do you start a new floor plan in Sweet Home 3D? You have three options.

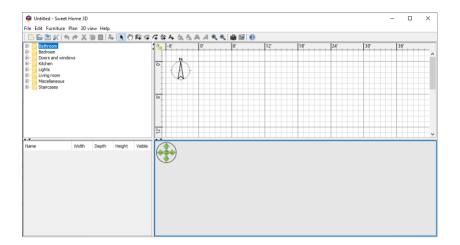
- 1. Start a new floor plan from scratch
- 2. Start a new floor plan from demo
- 3. Open a saved floor plan

In this tutorial, we will be starting our project from scratch so you can learn step-by-step how to build a custom house.

So, how do I start a new floor plan from scratch?

Good news!

You've already done this by **launching the software**! A blank workspace opens whenever you launch the software, ready to go.



Video Four: Saving a floor plan

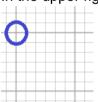
To do this:

- 1. Click File
- 2. Click Save As
- 3. Save the design as "SweetHome3D Beginner Tutorial"

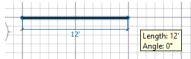
Video five: Drawing a Single-Room Floor Plan

We're going to draw a simple, 12 foot by 12 foot single room floor plan:

- 1. Select *create rooms* in the toolbar.
- 2. In the upper right hand grid, left-click on the corner of one of the larger squares



- 3. Move your cursor straight across the grid to draw a side. The length will appear beside the line you're drawing in a yellow box.
- 4. Once the side of the room is 12' long, left-click again to set the length.



- 5. Repeat this 2 more times until you have a square room that is roughly 12' x 12'. The 4th wall will fill in automatically
- 6. Double left-click **or** click **Escape** to release the room-drawing function. **If you don't,** your cursor will keep adding sides to your room.

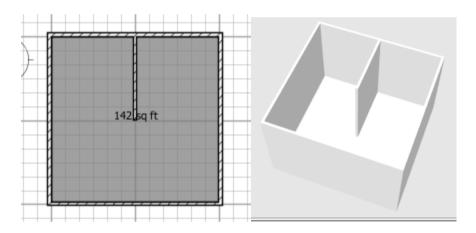
Video Six: Adding Basic Walls

To draw walls around all the way around your room:

- 1. Click create walls
- 2. Double left-click anywhere in your floor plan You have walls!

But what if you only want one or two walls, not multiple? You can do that too! Let's look at how to add individual walls:

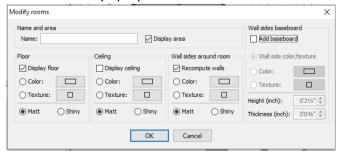
- 1. Click create walls
- 2. Click around the midpoint of any existing wall
- 3. Draw a wall to the middle of the room
- 4. Double left-click or press Escape



Video Seven: Launching the Room Editor

To launch the room editor:

- 1. Click the cursor
- 2. Double left-click anywhere in the room
- 3. You'll see this pop up:



Video eight: Naming Rooms

First, let's name the room.

- 1. Click in the name field
- 2. Enter "My First Room"

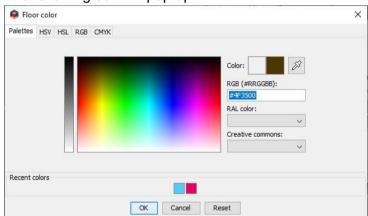
Video nine: Changing Floor Colour

Now, let's change the floor colour:

1. Under Floor, click the circle beside Colour



- 2. Click the rectangular box to the left
- 3. The following box will pop up:



You can either choose a colour with the dropper, or with the RGD number. For now, we'll use the RGD number:

- 1. In the RGD field, enter "#4F3500"
- 2. Click OK to exit the Floor Colour pop-up
- 3. Click OK again to close the **Room Editor** (If you don't, your changes will not be applied)
- 4. Your floor is now brown!

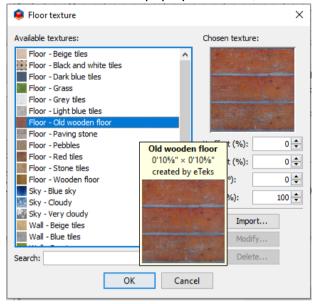
Video Ten: Changing Floor Texture

Now, let's change to a floor texture:

- 1. Open the Room Editor
- 2. Under *Floor*, click the circle beside *Texture*



- 3. Click the rectangular box to the right.
- 4. A window will pop up. For now, let's select "Old Wooden Floor"



- 5. Click OK to exit the Floor Texture pop-up
- 6. Click OK again to exit the *Editor* (If you don't, your changes will not be applied)

Notice how you can't have a floor and a texture at the same time. However, you can switch between them at any time by following the steps above.

Video 11: Changing Wall Texture

To change wall texture:

- 1. Open the Room Editor
- 2. under the section Wall Side Around Room, select Texture
- 3. Click the rectangular button to the left
- 4. From the texture options, scroll down until they start with "Wall"
- Let's click the second option called **Stone** near the bottom (Pay attention! There are three different "stones")
- 6. Click OK
- 7. Click OK again to close the **Room Editor** (If you don't, your changes will not be applied)

Video 12: Changing Wall Colour

Let's say, instead of a wall texture, you want a wall colour:

- 1. Launch the Room Editor again
- 2. This time, choose Colour
- 3. Set the colour to the RGB code #D8FFFC
- 4. Click OK
- 5. Click **OK** again to close the **Editor** (If you don't, your changes will not be applied)

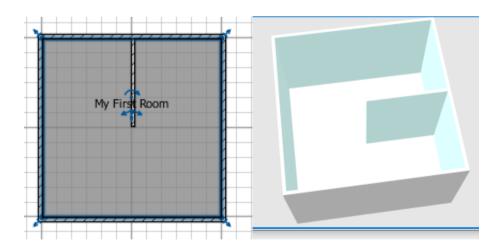
Video 13: Reverting to the Original Floor or Wall Colours

Let's revert the floor back to its original colour:

- 1. Launch the Room Editor
- 2. Under *Floor*, click whichever option is *not* being used. In this case, it's *Colour*



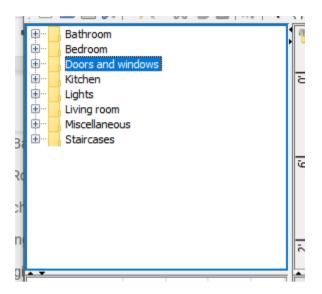
- 3. Click OK
- 4. Click **OK** again to close the **Room Editor** (If you don't, your changes will not be applied)



Video 14: Adding Windows and Doors

Adding windows and doors is pretty similar, so we'll tackle them together.

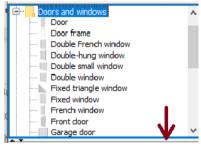
Well find them in the upper right hand corner, which has the catalogue:



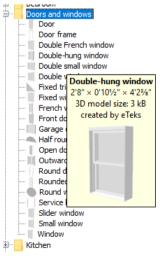
This catalogue has everything you need to furnish your home, neatly arranged into rooms.

For now, we need doors and windows. Conveniently, these are in the section called...Doors and windows.

- 1. First, double click on **Doors and Windows** to expand the catalogue section
- 2. Drag the bottom of the frame down to show the whole section

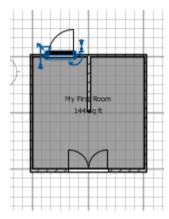


3. Mouse over each item to see it in a larger form



4. Choose one door and one window -- we'll use the *Rounded Door* and *Double Window*, if you want to do the same

5. Drag them over to your room on the 2D view pane, and align them on any wall



Video 15: Changing the direction of doors/windows

The curved lines you see indicate the direction the door or window will open in.

For doors, this should almost always be into the room.

That means, if your room looks like the example above, you need to change the door's direction:

- 1. With the cursor , mouse over the door
- 2. Click and drag lightly toward the *inside* of the room, until the curved lines are in the dark grey area
- 3. Release

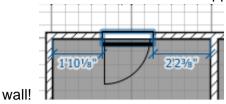


Video 16: Moving Doors

If you want to change the location of the door/window at any time:

- 1. With the cursor , mouse over the window until it turns into
- 2. Simply drag the door/window to any wall you want it

3. Notice how the measurements appear to show you the exact distance from each



Try it: How close to equal can you get the two measurements?

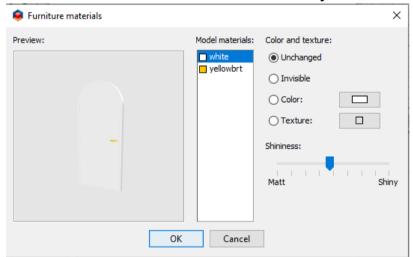
Video 17: Editing the Colour of Doors and Windows

Just like your walls and floors, you can edit windows and doors.

However, unlike before, there is an added component: you can change different parts of the door/window individually.

Let's try:

- 1. Like before, open the *Editor* by clicking on the item in question -- Let's use the door
- 2. From the *Modify Furniture* pop-up, find the Colour and Texture Section.
- 3. You already know how to use Colour and Texture, so skip them for now
- 4. Click the circle beside *Materials* and then *Modify*



Unlike before, when each floor and wall could only be one colour, the door has two components, that can each be a different colour or texture.

Right now, the *white* is selected, corresponding to the door, while the yellow is the door handle.

Play around with changing the colours and textures just like you did before.

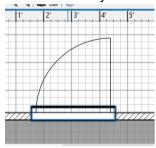
Video 18: Resizing Doors and Windows with the On-Screen Controls

First, to make it easier, let's **Zoom In**.



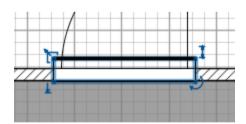


2. Zoom in closely on the door



- 3. If the door is no longer in the frame, use the *Hand* button to pan the frame back into focus. Simply click and drag the frame until it is back where you would like it to be
- 4. Now, switch back to the cursor
- 5. Click on the door

You should now be able to clearly see the different on-screen controls:



Here's how they work:

1. To resize the door, click and drag the resizing tool Try it!



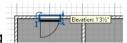
Can you make the door as wide as the whole wall?



- Notice the measurements appearing
- 2. To move the door up and down, also known as changing its *Elevation*, click and up and down. drag the Elevation Tool

Try it!

Can you move the door off the ground?



- Notice the elevation measurement appearing
- 3. To change to door's height, or make it taller and shorter, click and drag the Height



- Can you make the door as tall as the wall?
- Notice the height measurements appearing



- 4. To rotate the door, drag the Rotation Tool to the right or left, depending Try it!
 - Can you rotate the door so that it's at a 90 degree angle?
 - Notice the degree measurement appearing

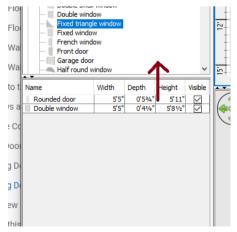
 Angle 90

 Angle 90

These basic commands are all very important, because they're the same for **all the furniture** in the catalogue! So play around with them to get used to them.

Video 19: Resizing Doors and Windows with Measurements

In the bottom right-hand frame of the interface, you'll see a list of all **furniture items** that you use.



This list shows the exact width, depth, and height (and visibility status -- we'll get to this later!) of every piece of furniture in your floor plan.

To modify these measurements, double click on the measurement or item in question.

This will bring up the *Furniture Editor*



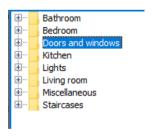
Use the arrows **or** your keyboard to change the measurements here.

Try it!

Can you make the door and the window the exact same width?

Video 20: Using the Catalogue

So we're back at the Catalogue, which is divided mainly into sections by room type.



For the most part, this works great -- except some rooms overlap with furnishings (especially the bedroom and living room!) so you might sometimes need to go looking in a different category than you're working it.

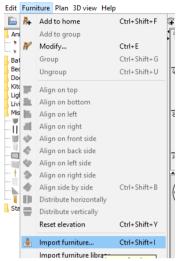
Let's see, say we want a bed, a wardrobe, a bookshelf and an armchair:

• We find the beds and wardrobes in the **Bedroom** section, but the bookshelves and armchairs are in the **Living Room. See?**

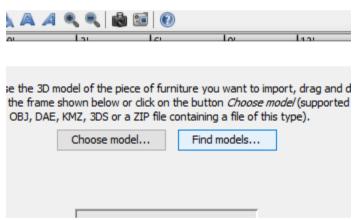
Video 21: Importing Furniture

To download extra furniture to the catalogue:

First, to bring up the Furniture Import Wizard, click on Furniture then Import
Furniture in the menu



2. Next, click on Find Models in the Wizard



3. This will bring you to Sweet Home 3D.com. Under "Libraries of 3D Models" click *free models page*.

Libraries of 3D models

Sweet Home 3D lets you also import libraries of 3D models stored in SH3F files. A SH3F file groups some models with their description, and can be easily installed by double-clicking on it or by choosing *Furniture > Import furniture library* menu item in Sweet Home 3D.

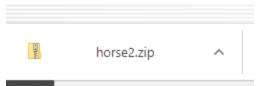
The following ZIP files contains a SH3F file you can import in Sweet Home 3D. These libraries contain the 3D models available at the <u>free models page</u>.

4. This page has tons of additional Sweet Home 3D models you can browse.

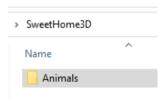
Let's choose the model Horse



5. To download the horse, click on *Horse*. It will download as a Zip file.



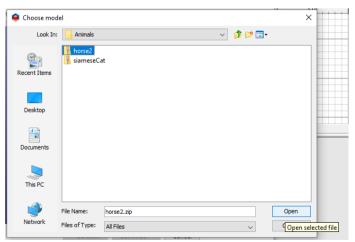
6. To keep track of all your files, create a Folder called "Sweet Home 3D". I have also made a Sub folder called "Animals".



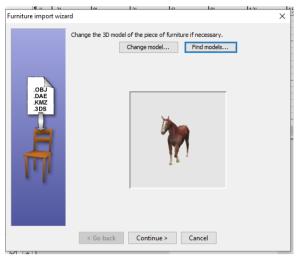
7. To import your new model, go back to the Wizard. This time, click Choose Model...



8. Find and select your downloaded Zip file, then click *Open*.

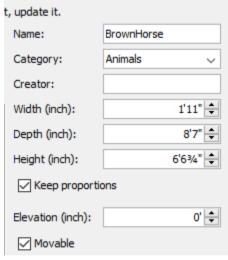


9. In the Wizard, click Continue then Continue.



10. You'll then be able to modify the model's information:

- Change the name *Horse2* to the more descriptive label *BrownHorse*.
- Then, under **Category**, type **Animals**. This will create a new subcategory in the catalogue.



- 11. Click Finish.
- 12. Drag your new Horse from the new *Animals* label, and add it to your house:

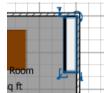


Video 22: Editing Furniture

You basically already know how to do this, since you should recognize all the editing tools from the last sections. Indeed, editing furniture is exactly the same as doors and windows.

There are only two differences, which we'll go through now.

1. The dark line, indicating the **front** of a piece of furniture, when selected

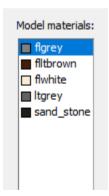


- Doors and windows also have this line, but it is less noticeable, on account of the curved lines.
- It is also less important on doors and windows, since you have the door/window path indication to mark which way the item is facing.
- For furniture, this line is the only indication of direction in the floor plan.
- 2. The more parts there are to a piece of furniture, the more complicated it can be to change its colours.

Let's take a closer look:

- 1) Let's add the bed that is just called **Bed** to the room
- 2) Open the *Furniture Editor* for the bed
- 3) Select *Materials* and click *Modify*

You will see what appears to be a random list of "Model materials".



Each colour, in fact, is a different component of the bed.

You may be able to discern which is which by:

- 1) Matching the colours to the bed (For example, noticing that "fltbrown" matches the colour of the bed's legs)
- 2) Mousing each colour, and paying attention to which part of the bed (very briefly) flashes

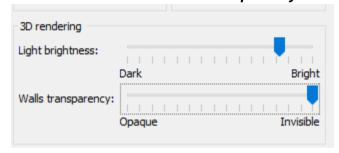
3) Changing the colours one by one to a really bright colour like neon yellow, so you can clearly see which box belongs to which part of the bed

Try out all of the options, and decide which is best for your eyes.

Video 23: Making Walls Invisible

Now we gonna make walls invisible:

- 1. Click 3D view | Plan 3D view Help | In the menu
- 2. Select Modify 3D view
- 3. Move the slider beside Walls transparency to Invisible



You can easily get them back by moving the same slide back to *Opaque*.

Video 24: Making Furniture Invisible

To make furniture invisible, it's SUPER EASY:

Remember the list of furniture in the bottom left-hand corner? Simply uncheck the box for *Visible*.

Try it!

Make the horse invisible!

Video 25: Navigating Aerial View

Let's take a look at *Aerial View* first since it's the default mode. You can skip the first two steps until you need to switch back to Aerial View from Virtual Visit later on.

- 1. Click 3D View in the application menu
- 2. Select Aerial View from the drop-down menu
- 3. Click the on-screen arrows in the 3D View pane to navigate your layout. They'll look like this:



- a. Click the outer *up* and *down* arrows to zoom in and out
- b. Click the inner *up* and *down* arrows to look up and down
- c. Click the *left* and *right* arrows to look left and right

You can also navigate the 3D View pane using your mouse and keyboard arrows if you'd prefer.

Try it!

- Can you zoom in enough so that only one door is visible?
- Can you switch between a bird's eye view and an eye-level view of the door?
- Can you switch between looking at the door straight-on and at an angle?

Video 26: Navigating Virtual Visit

- 1. Click 3D View in the application menu
- 2. Select Virtual Visit from the drop-down menu
- 3. Notice that a "virtual visitor" has appeared in the 2D View pane for your reference. The positioning of this figure will update in real-time as you navigate your layout. It'll look like this:



- 4. To navigate your layout, you can either click the on-screen arrows in the 3D View pane, or manipulate the virtual visitor directly in the 2D View pane:
 - a. Click and drag the button to rotate the head side to side
 - b. Click and drag the $\underline{\Psi}$ button to adjust the body size
 - c. Click and drag the \mathbf{C} button to tilt the head up and down
 - d. Click and drag the virtual visitor itself (themselves??) to relocate

You can also navigate the 3D View pane using your mouse and keyboard arrows if you'd prefer.

Try it!

- Can you make the virtual visitor walk across the room and look around?
- Can you make the virtual visitor taller than the walls?

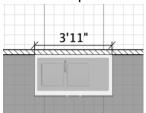
Video 25: Adding labels

Creating room dimension labels

What if we told you there was an easy way to see dimensions at a glance? Here's how:

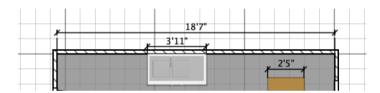
1. Select **Create dimensions** from the toolbar.

- 2. Mouse/hover over the various features in your layout to see their dimensions.
- 3. Decide which feature you'd like to measure, and either double left-click on it **or** left-click once at its starting point and once again at its end point. A dimension label will appear on a moveable plane/and you'll be able to adjust its positioning.
- 4. Position the dimension label somewhere legible and left-click one more time to set the label in place.



- 5. If you need to adjust a dimension label, select the *Cursor* from the toolbar.
 - a. To adjust the position of the label itself, click and drag the *adjustment arrow* parallel to the feature either towards or away from it.
 - b. To adjust the area being measured, click and drag one of the *adjustment* arrows perpendicular to the feature either towards or away from it/

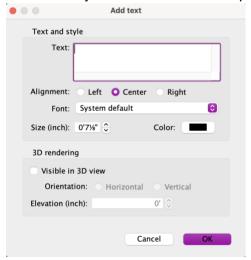
Being able to adjust the position of your dimension labels comes in really handy when you've got multiple measurements to keep track of in one area!



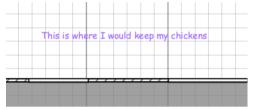
Creating text labels

Text labels are useful for adding details to your design as well as little notes to self in the margins. Let's learn how to make them!

- 1. Select *Add texts* A+ from the toolbar.
- 2. Left-click anywhere on the 2D View pane and the Add text window will pop up.



- 3. Type your label into the text field. We're going to make this a homesteading note to self: "This is where I would keep my chickens."
- 4. Adjust the alignment, font, size, and font of your text. We're going to align the text to center, and make the font Comic Sans MS, 0'8", and purple (#A46EFF).
- 5. If you'd like to see your label in the 3D View pane, make sure to select "Visible in 3D View" and adjust the label's alignment and elevation. We won't do that for now.
- 6. Click *OK*.
- 7. Select the **Cursor** from the toolbar.
- 8. Click and drag your text label to wherever you'd like it. We're going to place our label in what would be the backyard of our home.



- 9. If you'd like to adjust the orientation of your label, click and drag the orientation arrow
- 10. If you'd like to adjust the text of your label, double left-click the label and the *Add text* window will pop up again.