Adding Clear Panel Eave Lights and Sky Lights to a Building

SmartBuild now includes a new feature that allows users to add clear panels to buildings as eave lights and sky lights. This document will provide you with an overview of what you need to know to get started with this new feature. It is assumed that the reader has a basic understanding of SmartBuild's interface and functionality.

Adding Clear Panels to Your Materials

Before you can add clear panels to a job, you must first add the required color(s) and material(s) to your SmartBuild database. To begin this process, open the SmartBuild *Setup Wizard* and click on the `Colors` tab.

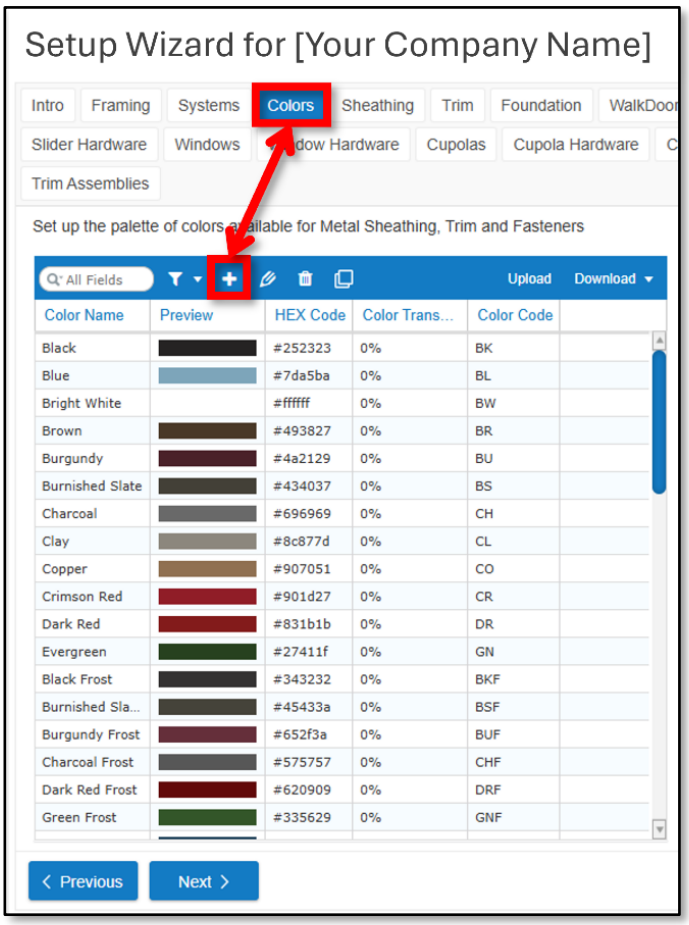

Figure 1: Click on the `Colors` tab to define the color and transparency to be used for your clear panels.

With the `Colors` tab open (**Figure 1**, left) click on the + (plus) symbol to add a new color. This will open the *Add New Color* dialog box shown in **Figure 2** on the following page.

In the *Add New Colors* dialog box (**Figure 2**, right), enter a `Color Name` for your clear panels. In the `HEX Code` field, type in `#ffffff`. Next, you must enter a percentage in the `Color Transparency` field. Since clear panels are not 100% translucent, we have used the figure 85% here. The exact figure you type in is not important unless you will be adding multiple clear materials of varying transparency. In that case, you will want to enter unique percentages of transparency to differentiate among them. Finally, add a value in the `Color Code` field. When you are done, click on the `Save` button to close the dialog box and save your work.

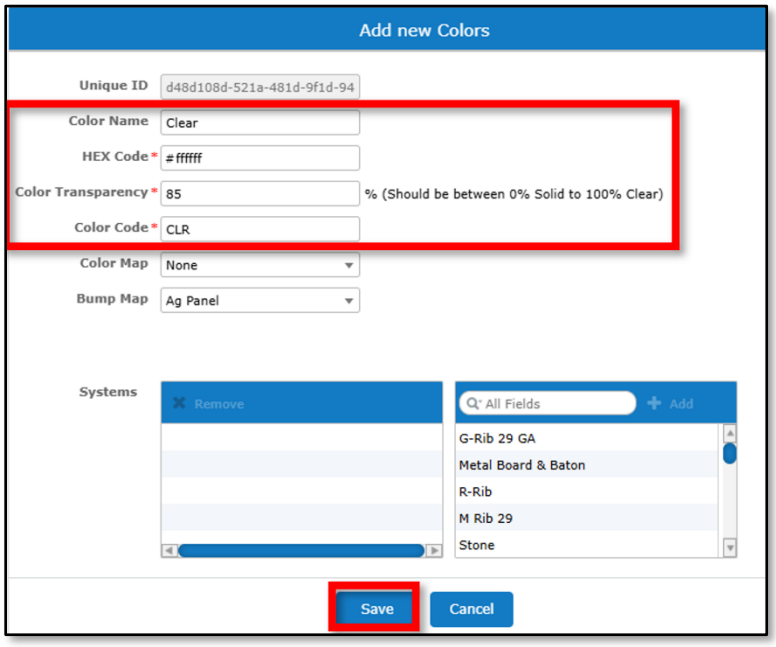

Figure 2: Enter a value in the Color Name field, as well as the three required fields: Hex Code, Color Transparency and Color Code.

After your clear-panel color(s) have been added, click on the `Sheathing` tab in the *SmartBuild Setup Wizard* (**Figure 3**, below). In the `Sheathing` tab, click on the `Add New Material` button to open the *Add New Sheathing* dialog box shown in **Figure 4** on the following page.

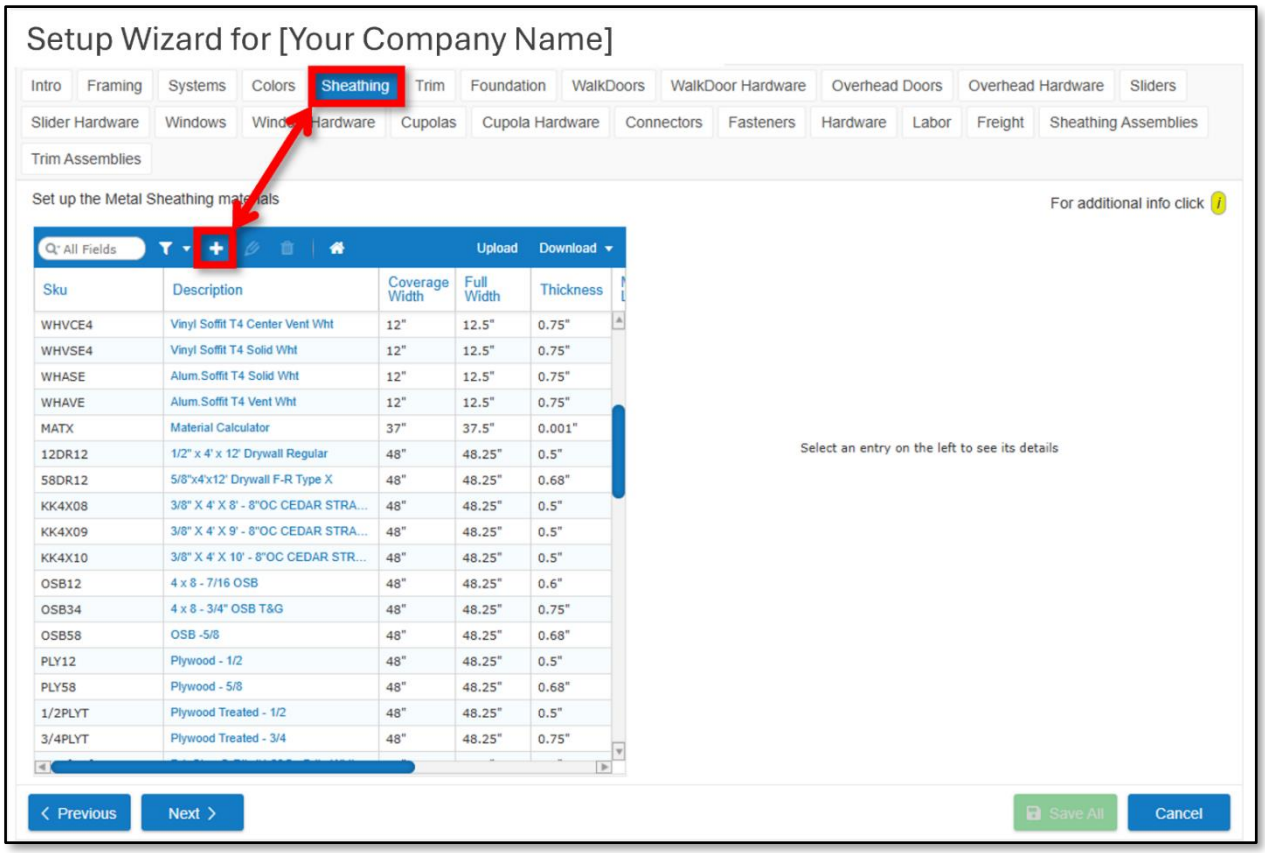

Figure 3: Open the *SmartBuild Setup Wizard* and click on the `Sheathing` tab to add clear panels to your materials inventory.

Fill out the *Add New Sheathing* dialog box, completing the required fields for `Description` and `Coverage Width` at the top. Complete the non-required fields at the top, in accordance with your company's internal procedures. (**Figure 4,** right.)

Once you have entered values in the `Description` and `Coverage` fields, scroll down to the `Usages` section of the *Add New Sheathing* dialog box. (See **Figure 5**, below.)

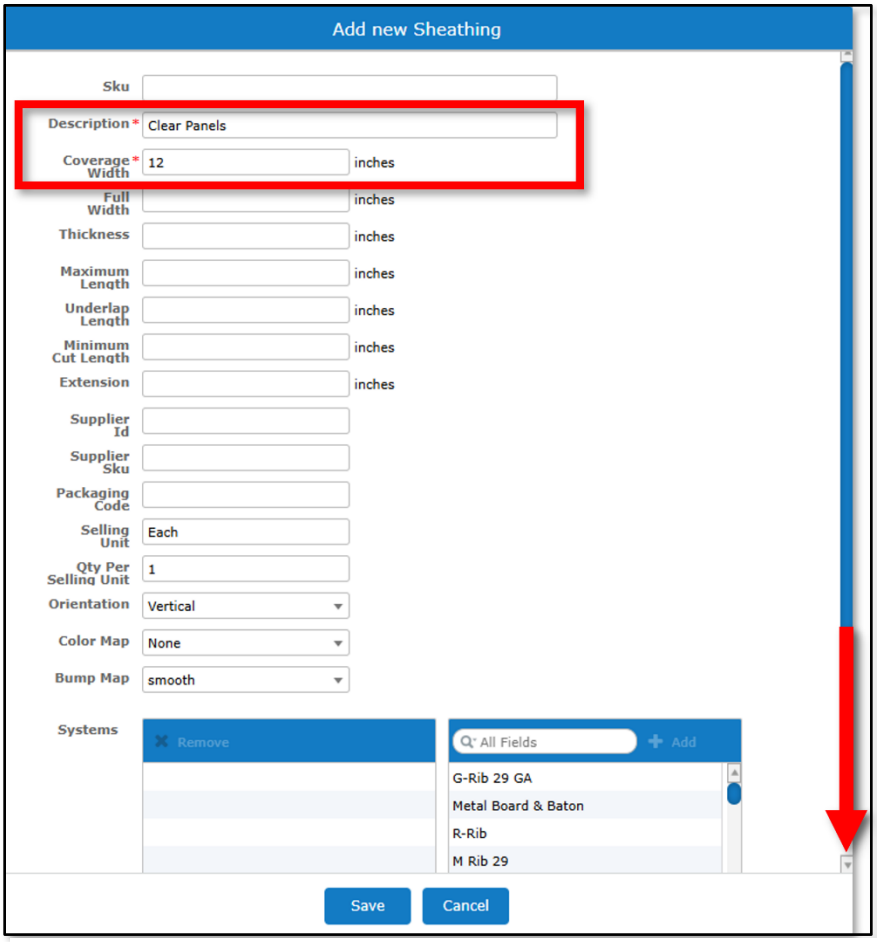

Figure 4: Enter a `Description` and the `Coverage Width` for your clear panels.

On the right side of the `Usages` section, select `Skylight Material – Roof Sheathing` and `Eave Light – Wall Sheathing` from the list of available materials usages. (See **Figure 5**, below.) **NOTE:** You can select multiple materials on the right by holding down the `Ctrl` key on your keyboard as you click on the

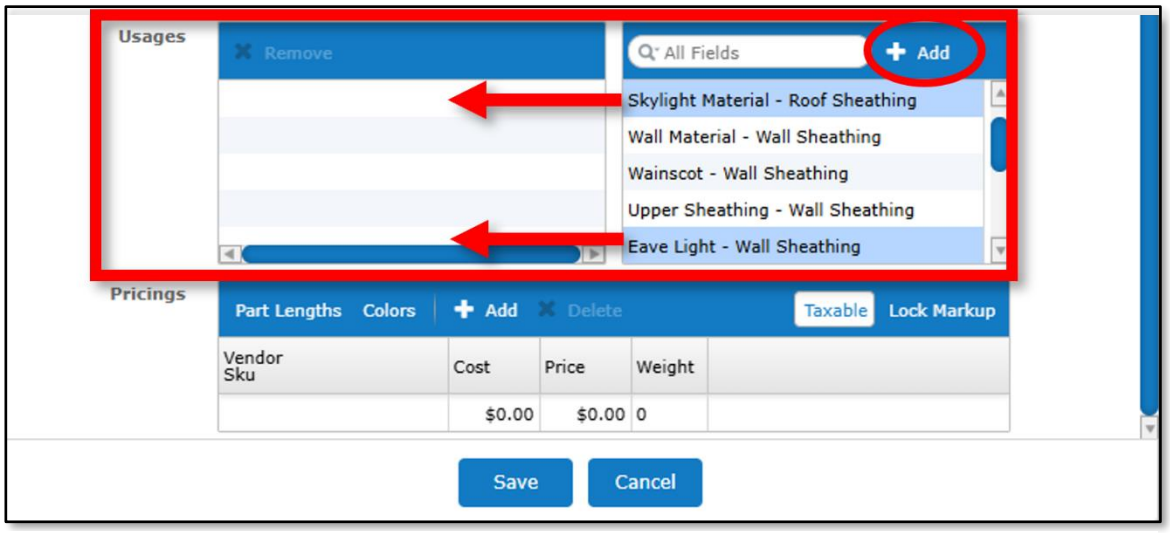

Figure 5: Select materials from the right column and click on the `Add` button to move them to the left column.

materials. Once you have selected the materials on the right, click on the `Add` button to move these materials to the left side of the `Usages` section. (See **Figure 6**, below.)

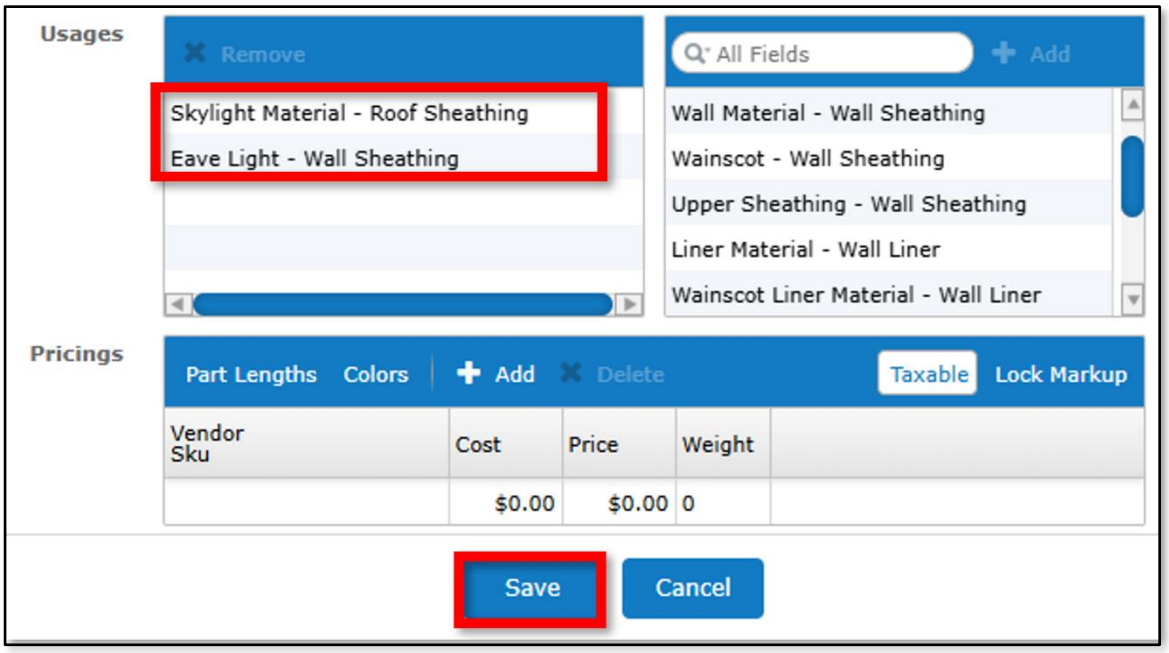

Figure 6: The *Skylight* and *Eave Light* materials added to the Sheathing `Usages` column.

Once you have added `Skylight` and `Eave Light` materials to the `Usages` column, click on the `Save` button to retain your work and close the *Add New Sheathing* dialog box.

Adding a Clear Panel Eave Light

With your clear color(s) and panel(s) now added to your materials inventory, it is time to add clear panels to your building. Begin by opening a job for editing in `3D Mode`, as pictured in **Figure 7**, below. On the toolbar, you will see the new `Clear Panels` option. Clicking on the down arrow displays the two options available to you: `Eave Lights` and `Sky Lights`.

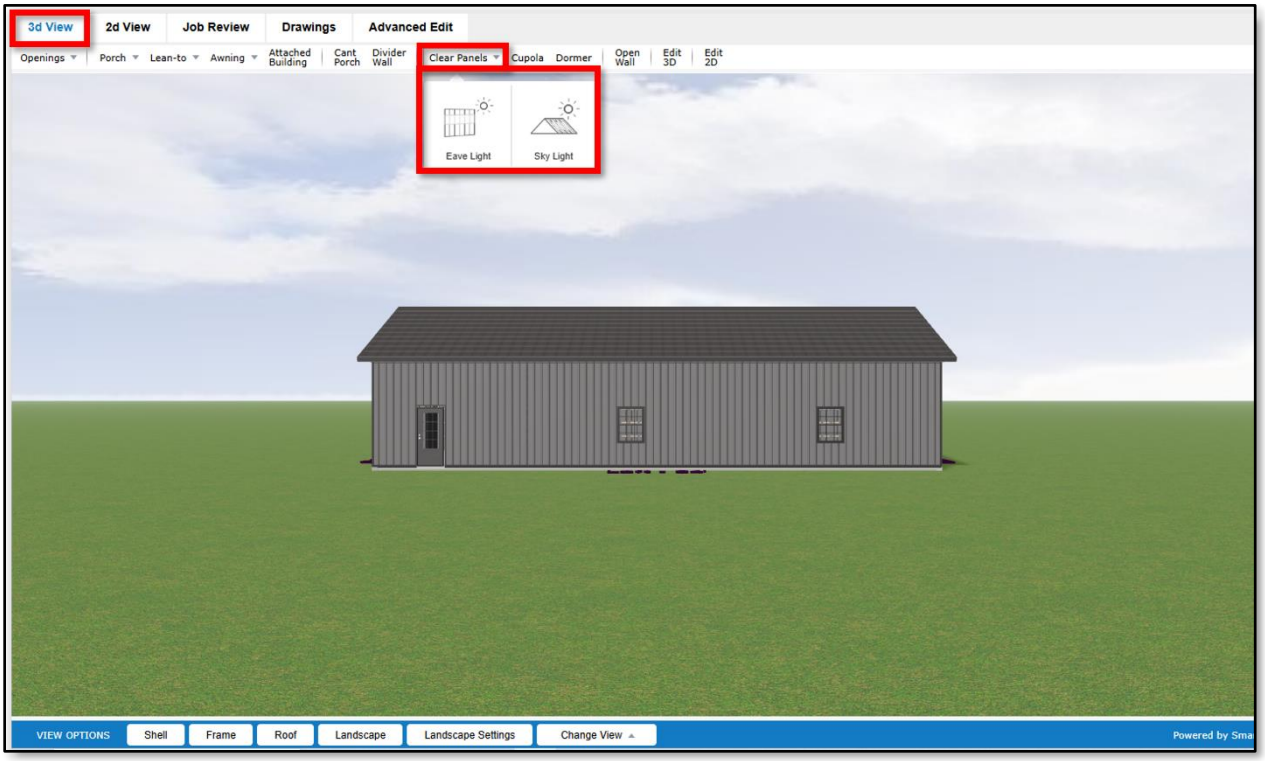

Figure 7: To add clear panels to a building, open the model for editing in *3D View Mode* and click on the `Clear Panels` button on the toolbar.

To add a clear-panel eave light, click on the `Eave Light` option pictured in **Figure 7** on the previous page. A message will appear, instructing you to click on a wall of your building to add a new `Eave Light`. (See **Figure 8**, below.)

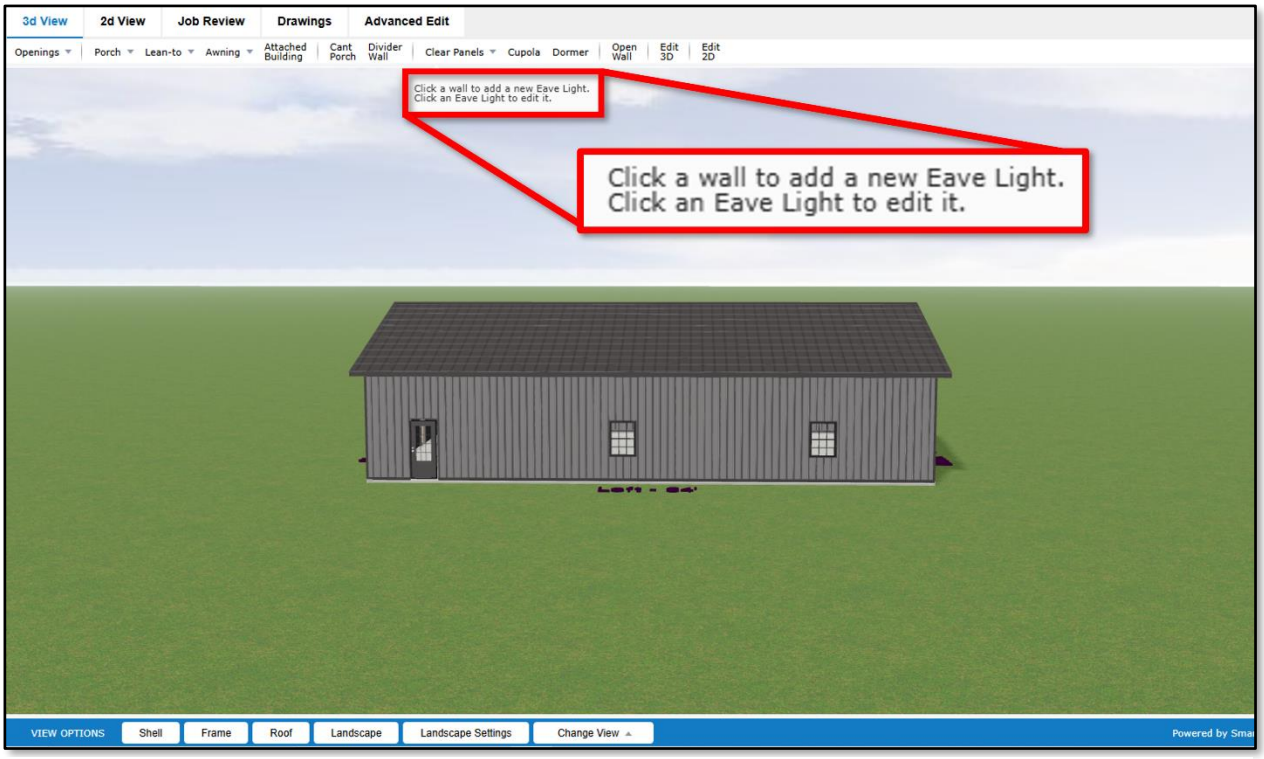

Figure 8: This message will appear when you clear on the `Eave Light` button shown in **Figure 7** on the previous page.

Now, when you allow your mouse to hover over the target wall, it will turn red. (See **Figure 9**, below.) When you click on the target wall for your eave light, the dialog box shown in **Figure 10** will open.

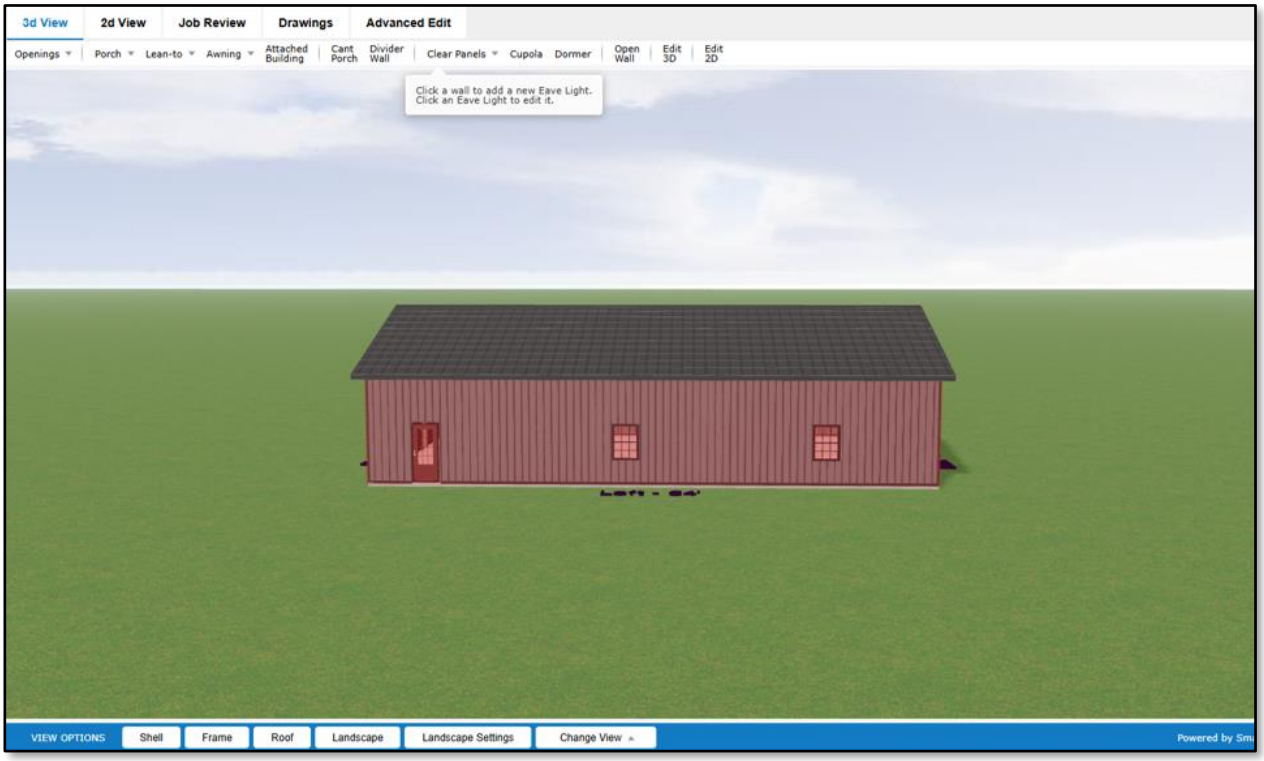

Figure 9: When your mouse hovers over the target wall it will be highlighted in red to show that the `Eave Light` option it is active.

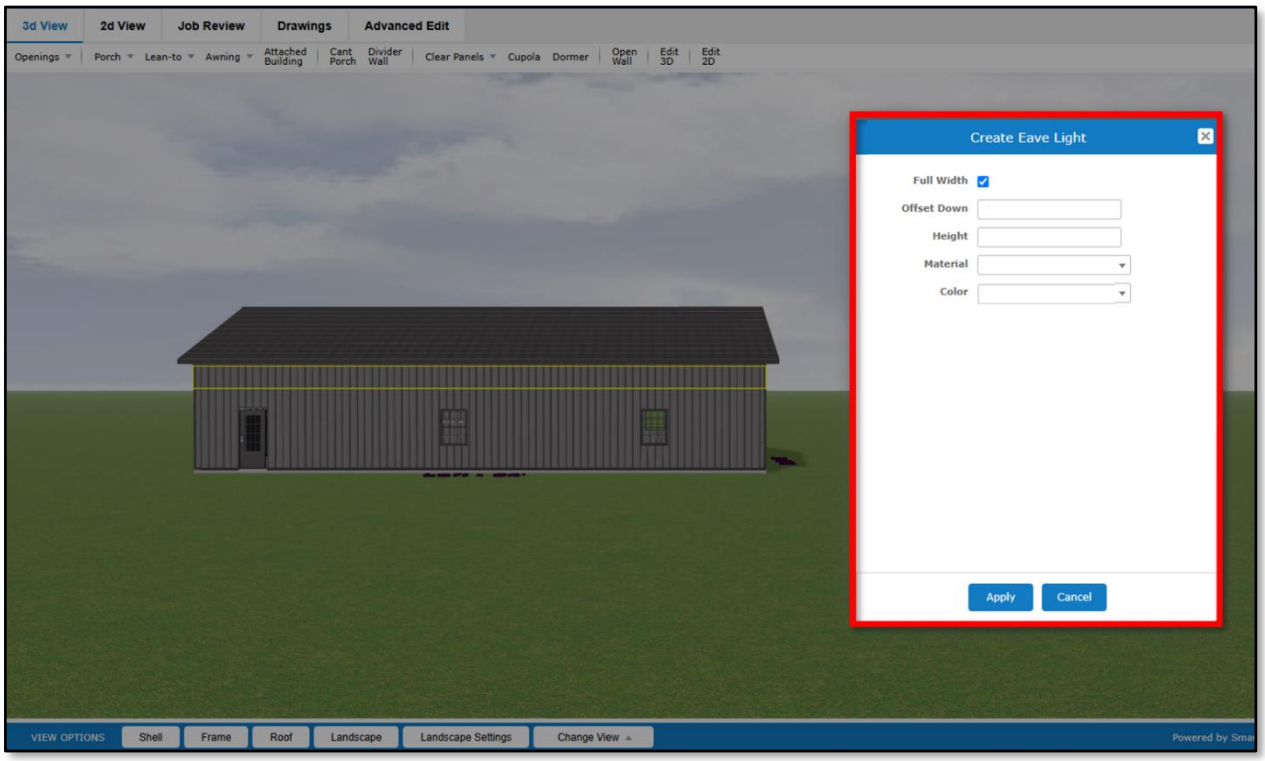

Figure 10: The *Create Eave Light* dialog box opens once you click on the target wall.

In the *Create Eave Light* dialog box (**Figure 11**, right), the `Full Width` checkbox is enabled by default, indicating that the eave light will run the entire length of the target wall. If this is the desired configuration, enter the appropriate values in the `Offset Down` and `Height` fields and select the appropriate `Material` and `Color` from the drop-down lists provided. (These drop-downs will be populated with the materials and colors you added at the beginning of this document.) When you are done, click on the `Apply` button to save your work.

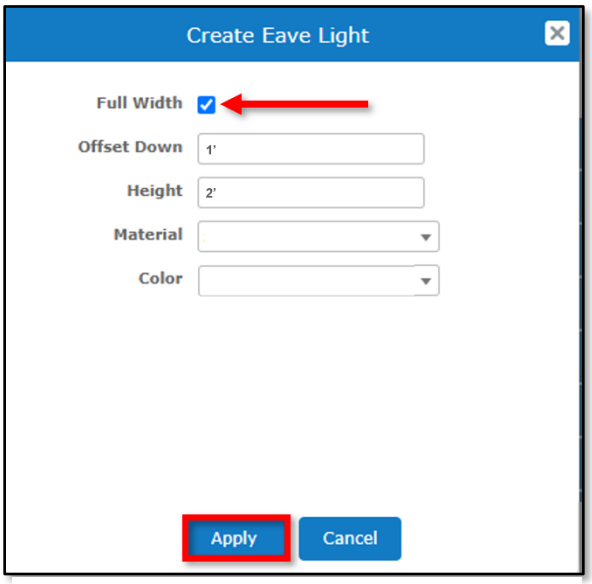

Figure 11: Enable he `Full Width` checkbox if your eave light is to run along the entire wall.

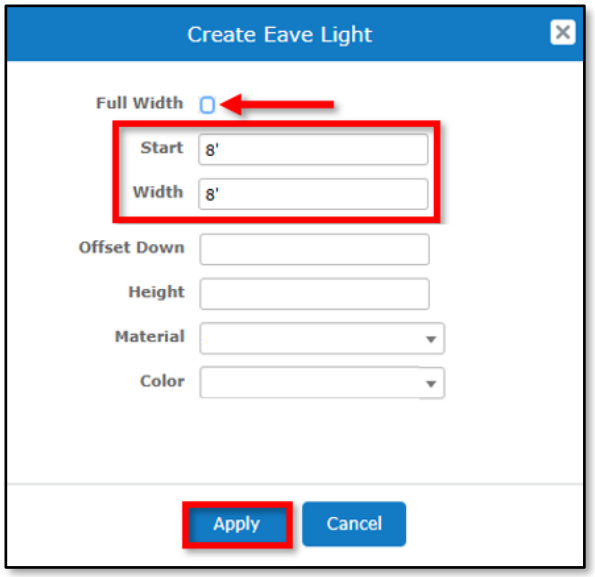

Figure 12: If your new eave light is NOT to run the entire width of the target wall, you must enter values for its `Start` and `Width` measurements.

If you uncheck the `Full Width` checkbox, two additional fields will appear in the *Create Eave Light* dialog box, requiring you to enter values for both the `Start` and `Width` measurements. (See **Figure 12**, left.) Use these fields to define how wide the eave light is to be from end to end (`Width`) and where the eave light is to be placed on the wall (`Start`). Once again, when you have completed all fields in the dialog box, click on the `Apply` button to save your work and close this dialog.

Once the *Create Eave Light* dialog box has closed, the new clear panel sheathing will appear on your model. As shown in **Figure 13** below, the interior of your building is now visible behind the clear eave light. That is all there is to adding an eave light to your model. Be sure to click the `Save` button to retain your changes.

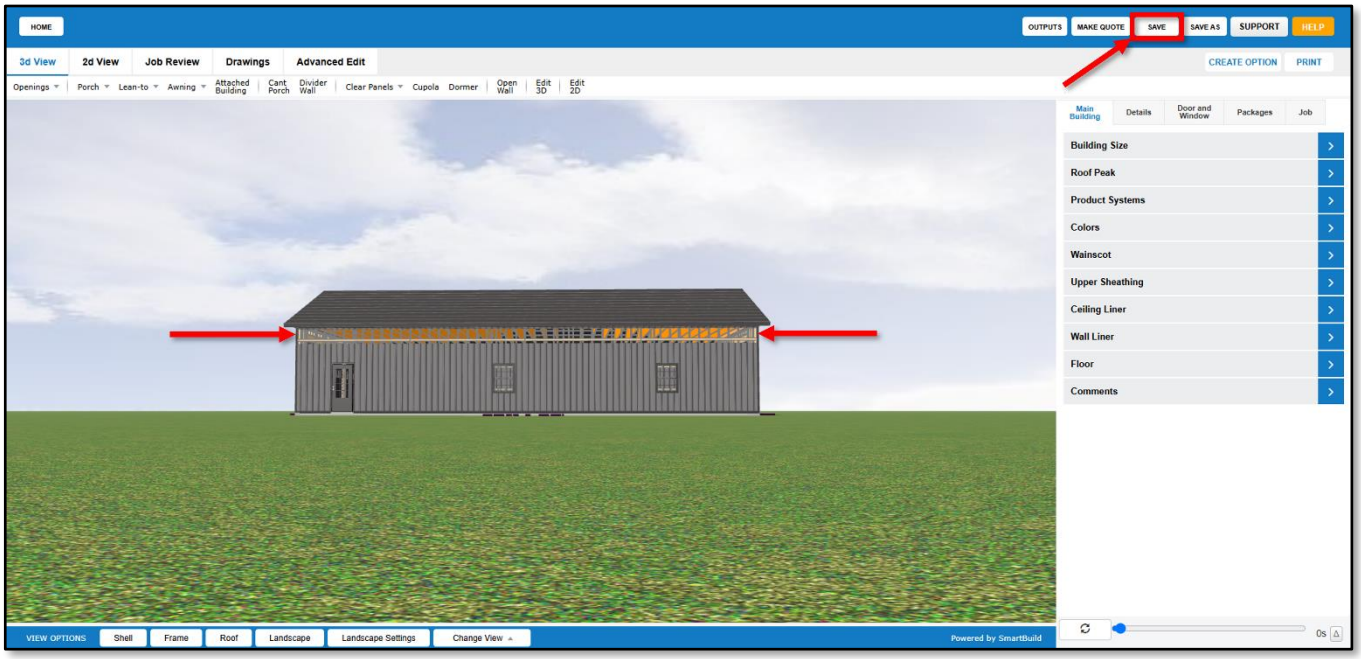

Figure 13: Once your clear eave light panels have been added, they will appear transparent on your model.

Editing or Deleting a Clear Panel Eave Light

If after adding an eave light you wish to make changes to its configuration, go back to the toolbar and click on the `Clear Panels` drop down and select `Eave Light` once again. (**Figure 14**, below.)

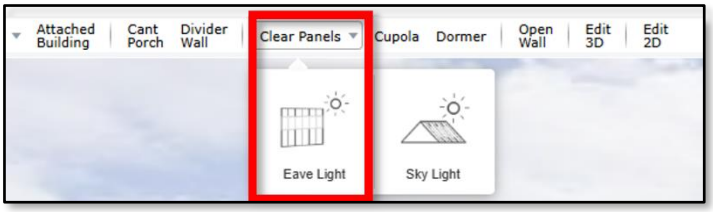

Figure 14: To make changes to an existing eave light, go back to the toolbar and click `Clear Panels` → `Eave Light` once again.

When the "*Click an Eave Light to edit it*" message appears below the toolbar (**Figure 15**, below), click directly on the eave light you wish to change.

Figure 15: With the `Eave Light` option active, click on the existing eave light to be edited.

As soon as you click on the active eave light, the *Edit Eave Light* dialog box will open, as pictured in **Figure 16** at right. Here, you can make changes to any of the fields provided. Be sure to click on the `Apply` button at the bottom left when you are done, to save you changes and close the dialog box.

As you can see, there is also a `Delete Eave Light` button at the bottom right of the *Edit Eave Light* dialog box. Clicking on this button will open a second dialog box asking you to confirm your choice to delete the selected eave light. (**Figure 17**, below left.)

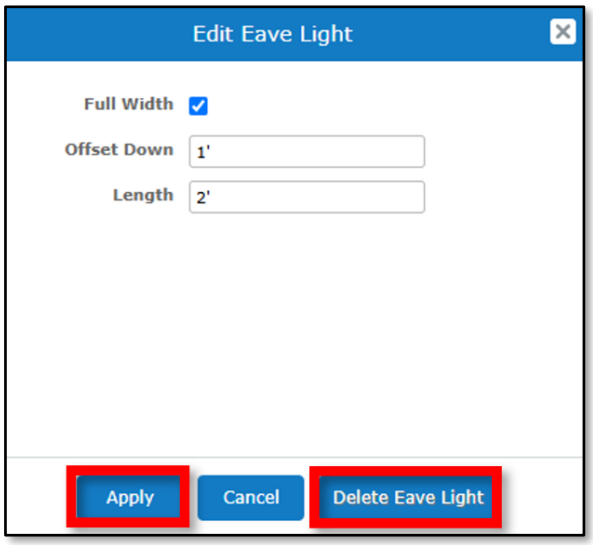

Figure 16: The *Edit Eave Light* dialog box allows you to make changes to the existing configuration, or to delete the selected eave light entirely.

Figure 17: Click on the `Yes` button to delete the selected eave light.

Click `Yes` remove the selected eave light entirely. Click `No` to close the *Edit Eave Light* dialog box and back out of the deletion process.

Adding a Clear Panel Sky Light

To add clear-panel sky light to a building, click on the `Sky Light` option pictured in **Figure 18**, below.

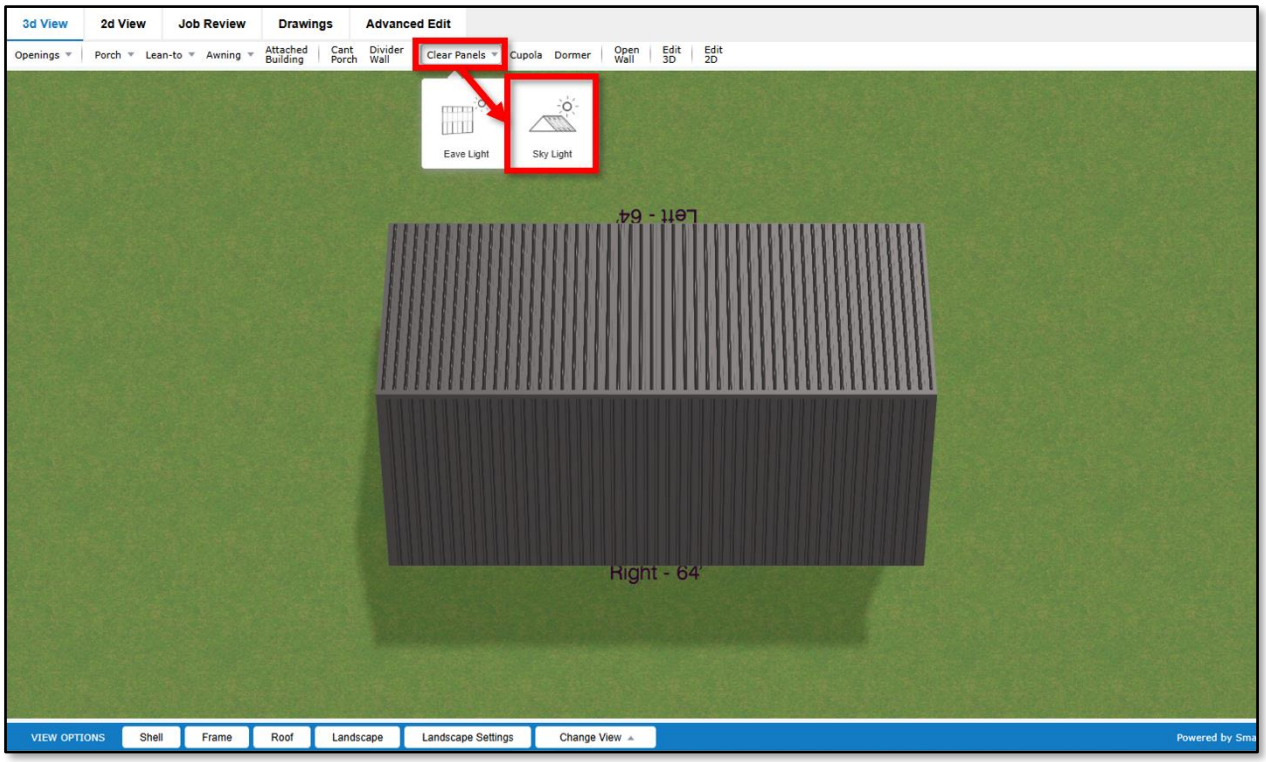

Figure 18: In SmartBuild's *3D Edit Mode*, click on the toolbar and select click on `Clear Panels` → `Sky Light`.

When you click on the `Sky Light` option, a message will appear instructing you to click on the roof plane of your building to which you wish to add a new Sky Light. (See **Figure 19**, below.)

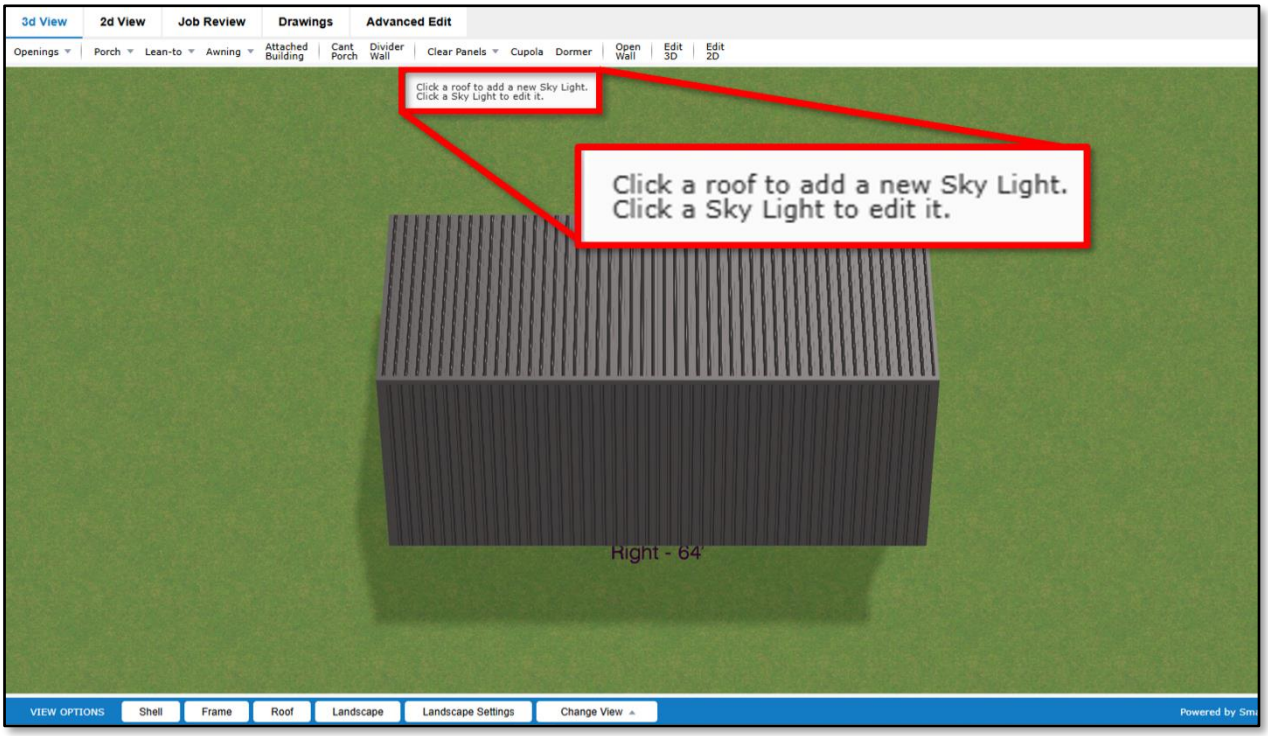

Figure 19: When you click on the `Sky Light` button on the toolbar, this message will appear showing the `Sky Light` option is active.

Next, bring your mouse to hover over the target roof. It will be highlighted in red, as pictured in **Figure 20**, below.

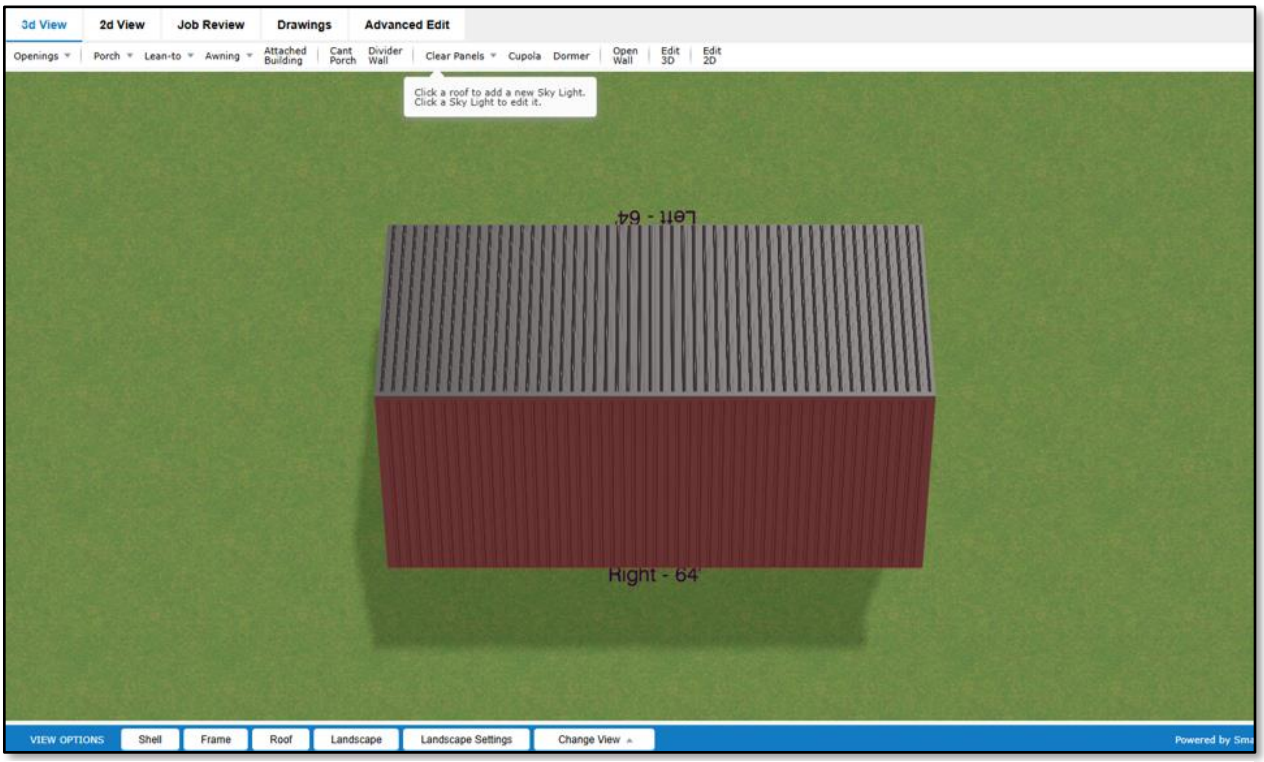

Figure 20: When your mouse hovers over the target roof plane, it will be highlighted in red.

Now, when you click on the target roof with your mouse, the *Create Sky Light* dialog box will open, as pictured in **Figure 21**, below.

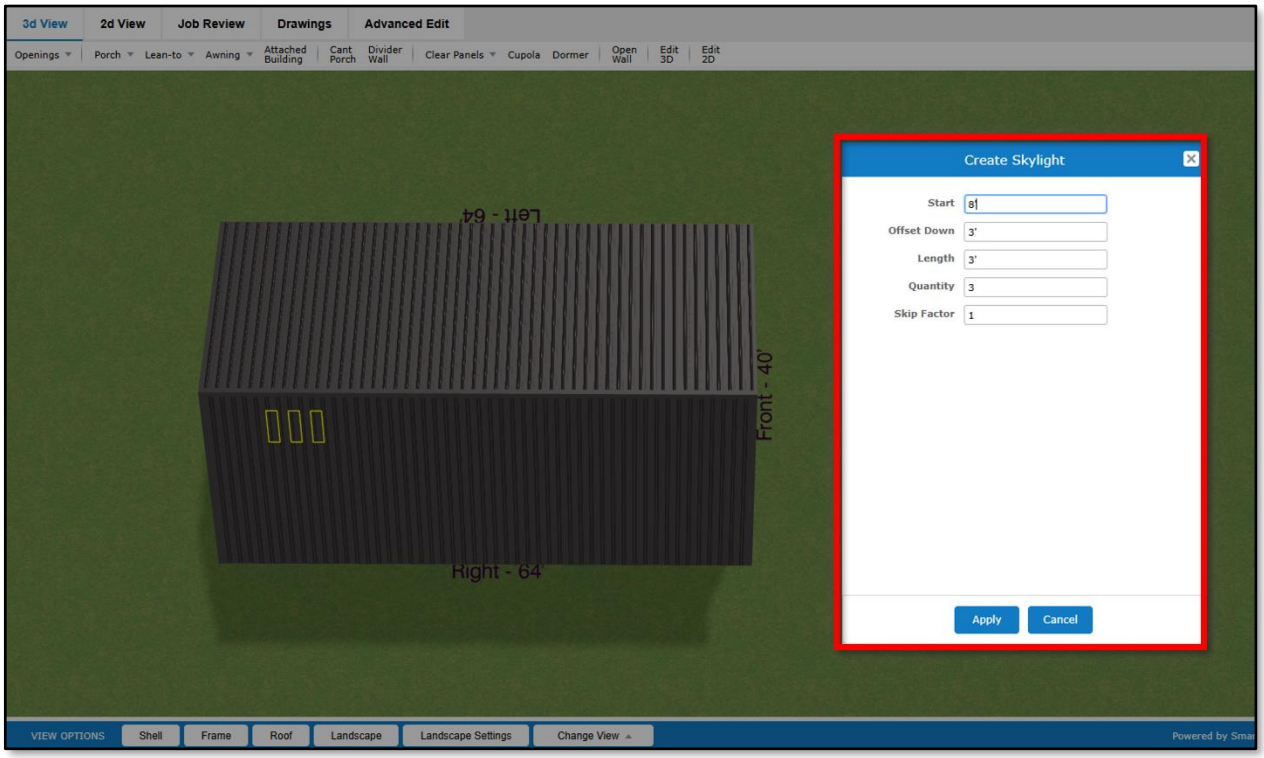

Figure 21: The *Create Sky Light* dialog box is used to enter specifications for the quantity and placement of your clear panels.

In the *Create Sky Light* dialog box (**Figure 22**, right), enter the desired values in the fields provided. Be sure to include the number of clear panels to be added in the `Quantity` field, as well as how many panels are to be skipped between clear panels (`Skip Factor`). When you are done, click on the `Apply` button to save your work and close the dialog box.

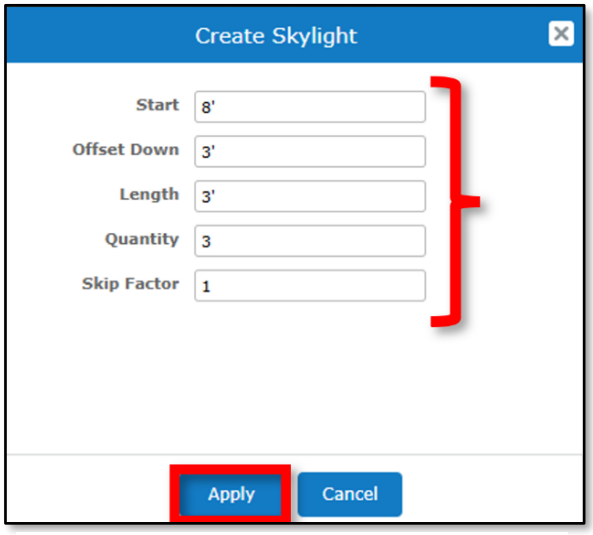

Figure 22: The *Create Sky Light* dialog box.

Once the *Create Sky Light* dialog box has closed, the newly created sky light(s) will appear on your model, as shown in **Figure 23**, below. The process of adding a new sky light is now complete.

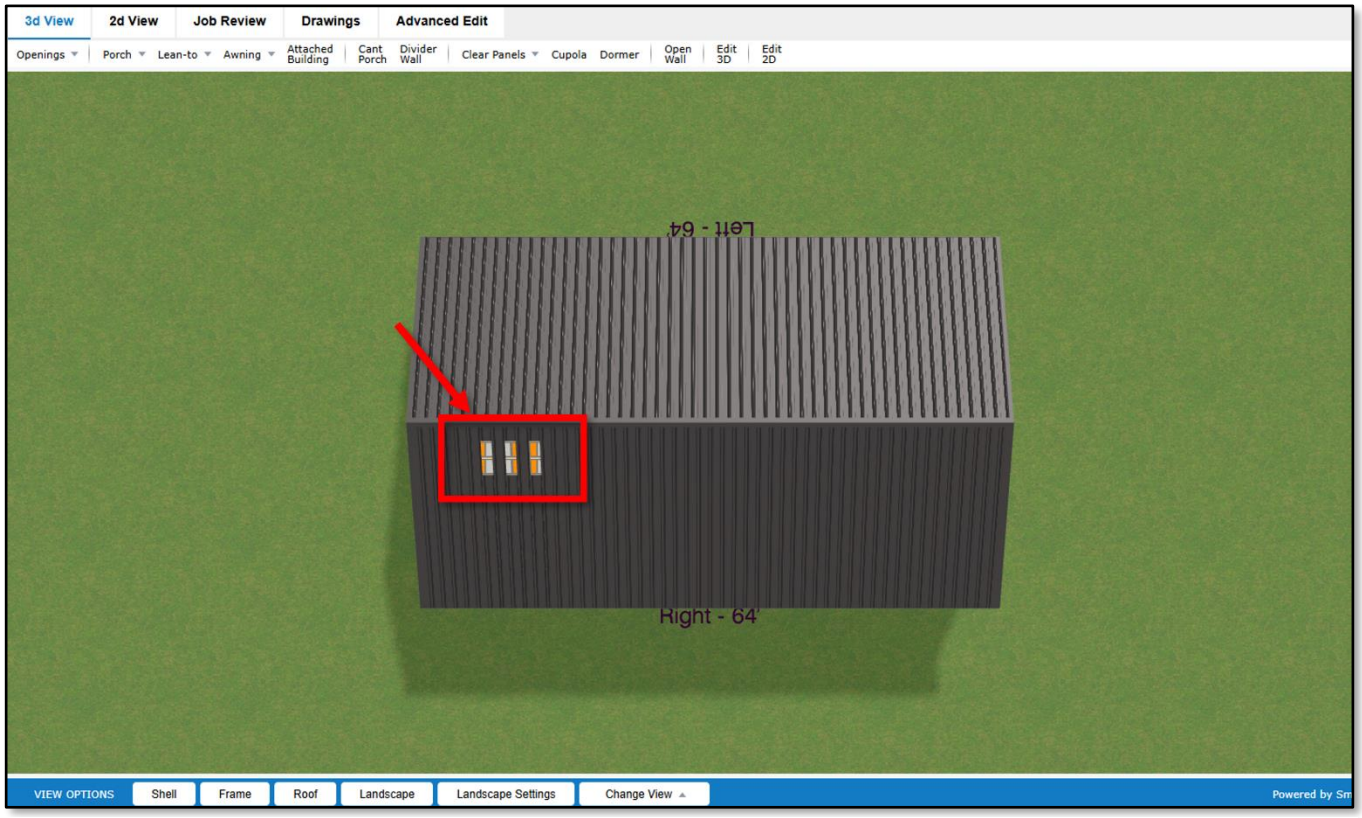

Figure 23: Once you click on the `Apply` button in the *Create Sky Light* dialog box your clear panels are locked in place and the job is done.

Editing or Deleting a Clear Panel Sky Light

If after adding a sky light to your model you wish to make changes to its configuration, go back to the toolbar, click on the `Clear Panels` drop down and select `Sky Light` once again. (See **Figure 24**, below.)

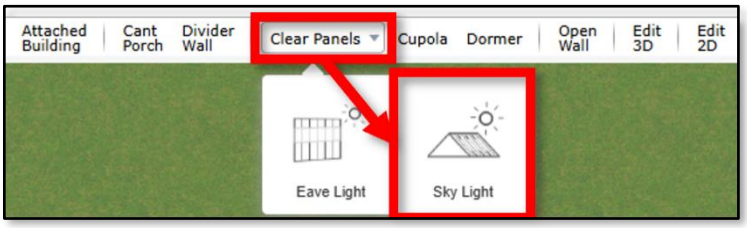

Figure 24: Click on `Clear Panels` → `Sky Light` once again to make changes to an existing sky light.

When the "*Click a Sky Light to edit it*" message appears below the toolbar (**Figure 25** below), allow your mouse to hover over the target roof plane. Notice that the roof plane becomes highlighted in red to show that it is active. Click directly on the sky light you wish to change. This will open the *Edit Sky Light* dialog box pictured in **Figure 26** on the following page.

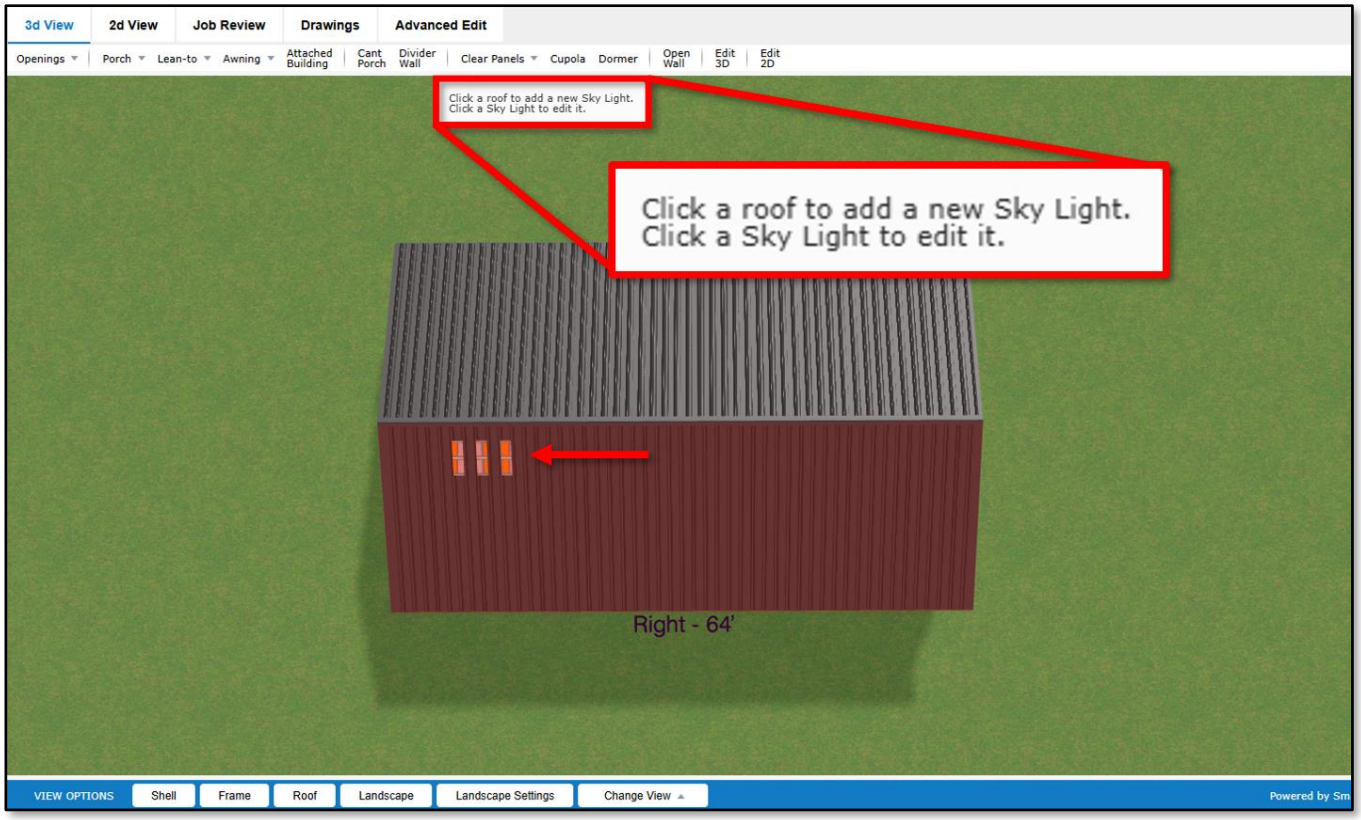

Figure 25: Once the edit sky light function is activated, the roof plane over which your mouse hovers will be highlighted in red.

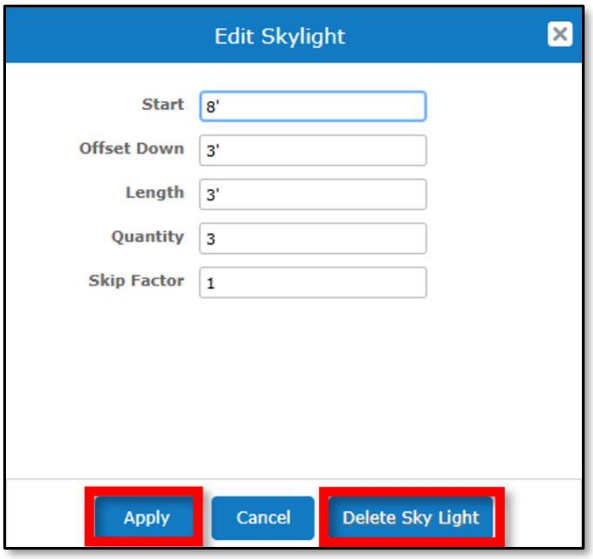

Figure 26: The *Edit Sky Light* dialog box.

In the *Edit Sky Light* dialog box (**Figure 26**, left) make the desired changes in the fields provided. Be sure to click on the `Apply` button at the bottom left when you are done.

There is also a `Delete Sky Light` button at the bottom right of the *Edit Sky Light* dialog box. Clicking on this button will open a second dialog box asking you to confirm your choice (**Figure 27**, below right.)

Click `Yes` to remove your sky light entirely. Click `No` to close the dialog box and back out of the deletion process.

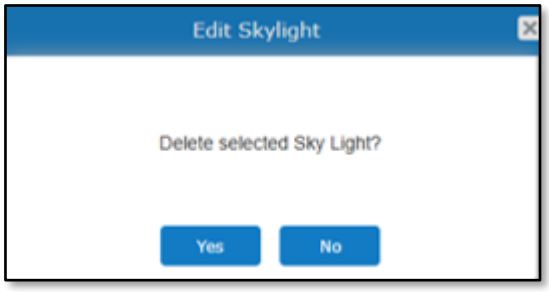

Figure 27: Click on the `Yes` button to permanently delete the selected sky light.

This concludes our introduction to adding clear-panel eave lights and sky lights to your SmartBuild models. If you require further assistance on this or any other SmartBuild feature, please click on the Support button within the application to submit your request.