

SAPPHIRE™ Viewer: The Collaboration Tool

MiTek® **SAPPHIRE™ Viewer** is a scaled down version of SAPPHIRE™ Structure that allows users to open, view, comment on, and print Structure files. This free application allows Structure users to collaborate on projects with customers that do not have a Structure license.

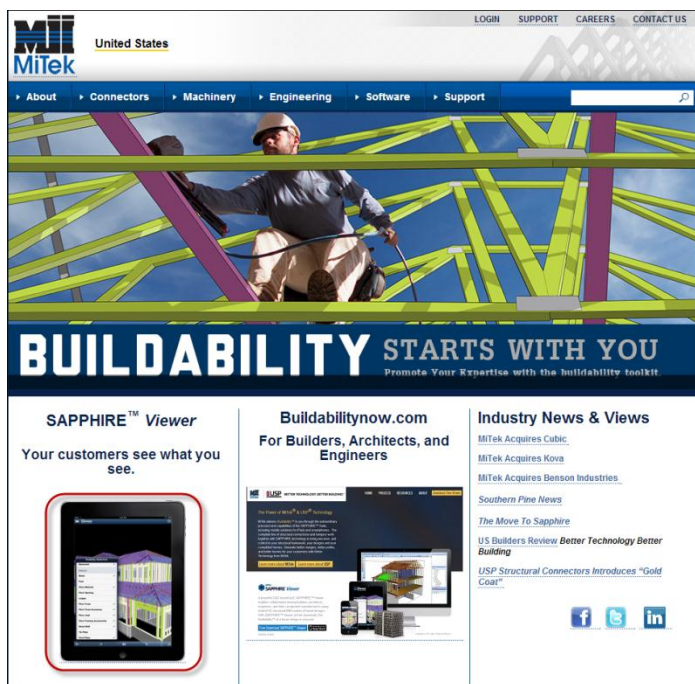
With *Viewer*, customers of component manufacturers are able to:

- View the 3D Model
- Verify Dimensions
- Add Comments
- Create Section Views
- Look at Components in Elevation View
- Print Layout Sheets

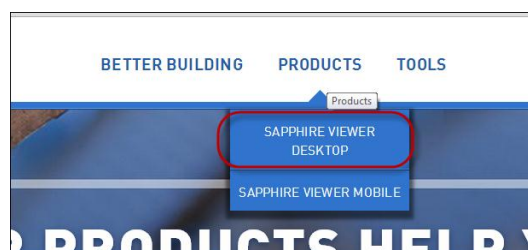
This document introduces the concepts listed above and provides an overview of how to download and install MiTek SAPPHIRE™ *Viewer*.

- **Download Viewer**

To download a free copy of *Viewer*, visit the MiTek-US website (www.mitek-us.com) and click the SAPPHIRE™ *Viewer* link.



Clicking the SAPPHIRE™ *Viewer* link displays Mitek's Buildability Now website. Here, click the Products drop-down at the top of the page and select the option for SAPPHIRE™ *Viewer* Desktop.

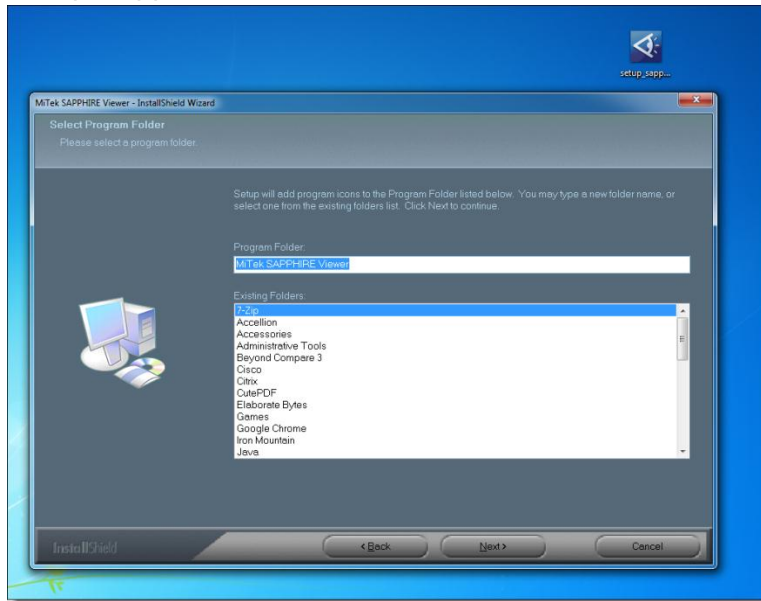


Click the Download Now button, complete a short form and then proceed to downloading the application.

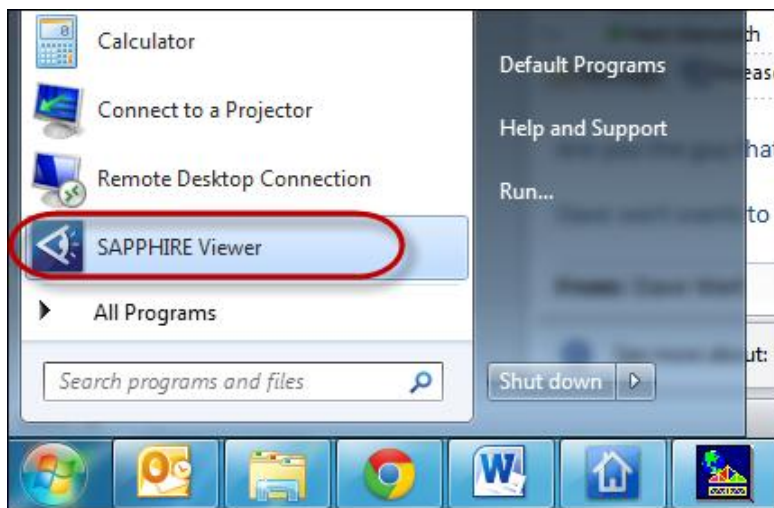
- **Install and Launch Viewer**

Once the *Viewer* installation file is downloaded, double-click

“setup_sapphire_Viewer” and follow the on-screen installation prompts.

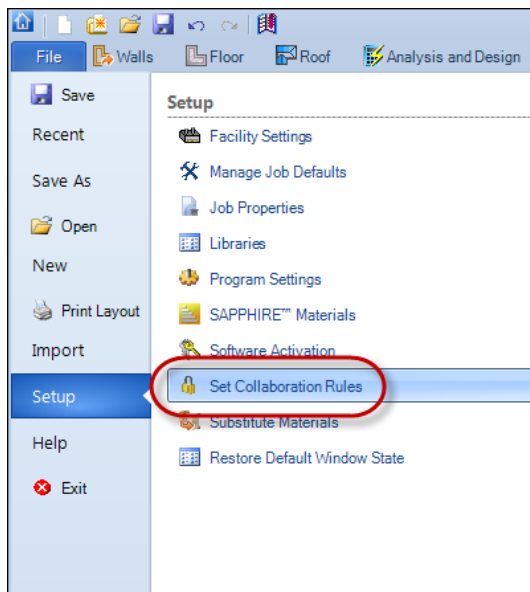


When the installation completes, open the application by clicking the SAPHIRE Viewer link on the Start menu.

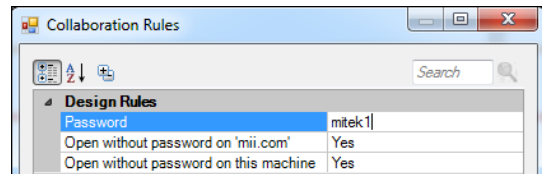


- **Component Manufacturers – Define Collaboration Rules**

Prior to sharing a Structure file with a customer who has downloaded *Viewer*, the component manufacturer must establish collaboration rules by clicking File > Setup > Set Collaboration Rules.

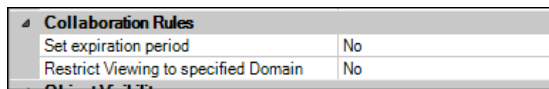


The first section, Design Rules, is used to limit access to the model by unauthorized users. The first field in this section, Password, affects both SAPHIRE™ Structure and SAPHIRE™ Viewer users. A password must be set in order for the model to be opened in SAPHIRE™ Viewer. SAPHIRE™ Structure users will need to know this password in order to reopen the model, unless exceptions are configured in the next two fields.

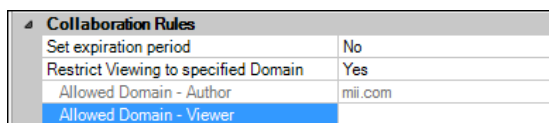


The first exception in the Design Rules section, open without a password on mii.com, is typically set to YES so that the job can be opened by MiTek Technical Support representatives. The second exception in Design Rules, open without a password on this machine, allows designers to open the job on their machine without being prompted for a password.

The Collaboration Rules section allows component manufacturers to configure an expiration period and a restricted domain for viewing the model.

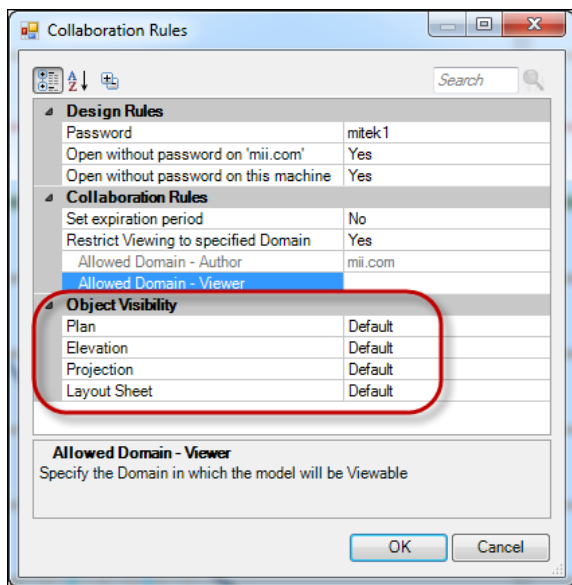


The Set Expiration Period Field is used to establish a number of days after which the model cannot be opened in SAPHIRE™ Viewer. Note that the model can be opened in SAPHIRE™ Structure after the expiration period.



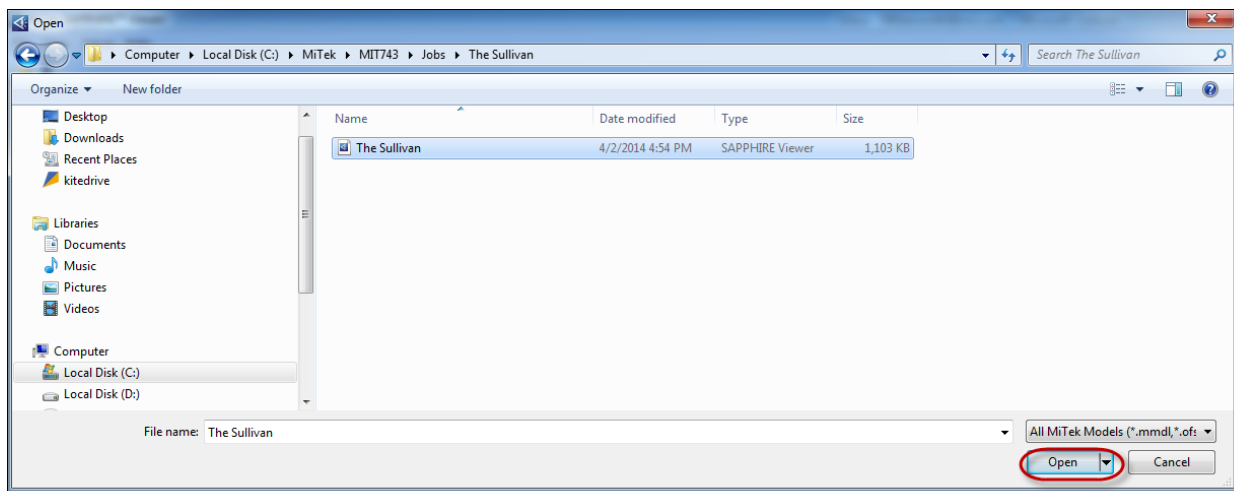
Restrict Viewing to Specified Domain allows for control over where the model can be opened. With this field set to, the system automatically indicates the author's domain, and provides a field to set an allowed Viewer domain.

The final section in Collaboration Rules, Object Visibility, allows the component manufacturer to control which objects are displayed by default when the model is opened in SAPPHIRE™ Viewer.



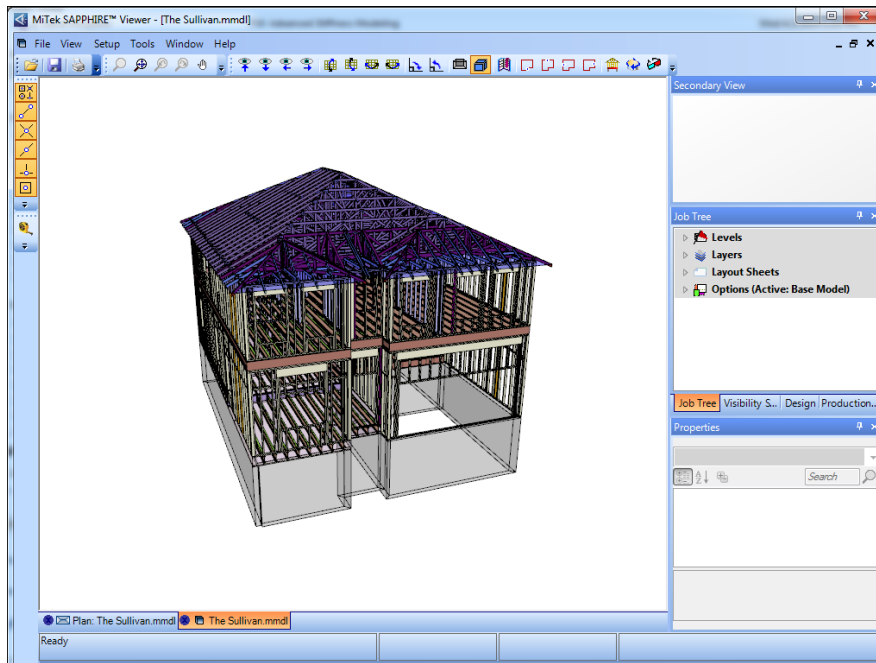
- **Open a Job**

To open a job in *Viewer*, simply click File > Open and browse to the job's location. Highlight the name of the job and click Open.



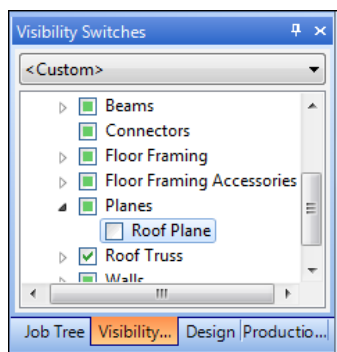
- **View the 3D Model**

After opening the job in *Viewer*, press the <F11> key on the keyboard to view the job in 3D.



A few basic 3D tools include:

- Rotate the Plan – Depress the left mouse button and drag the mouse in the direction you want to rotate.
- Zoom In/Out – Scroll up on the mouse wheel to zoom in and scroll down on the mouse wheel to zoom out.
- Visibility Switches – Click the Visibility Switch tab and use the switches to turn objects on or off.



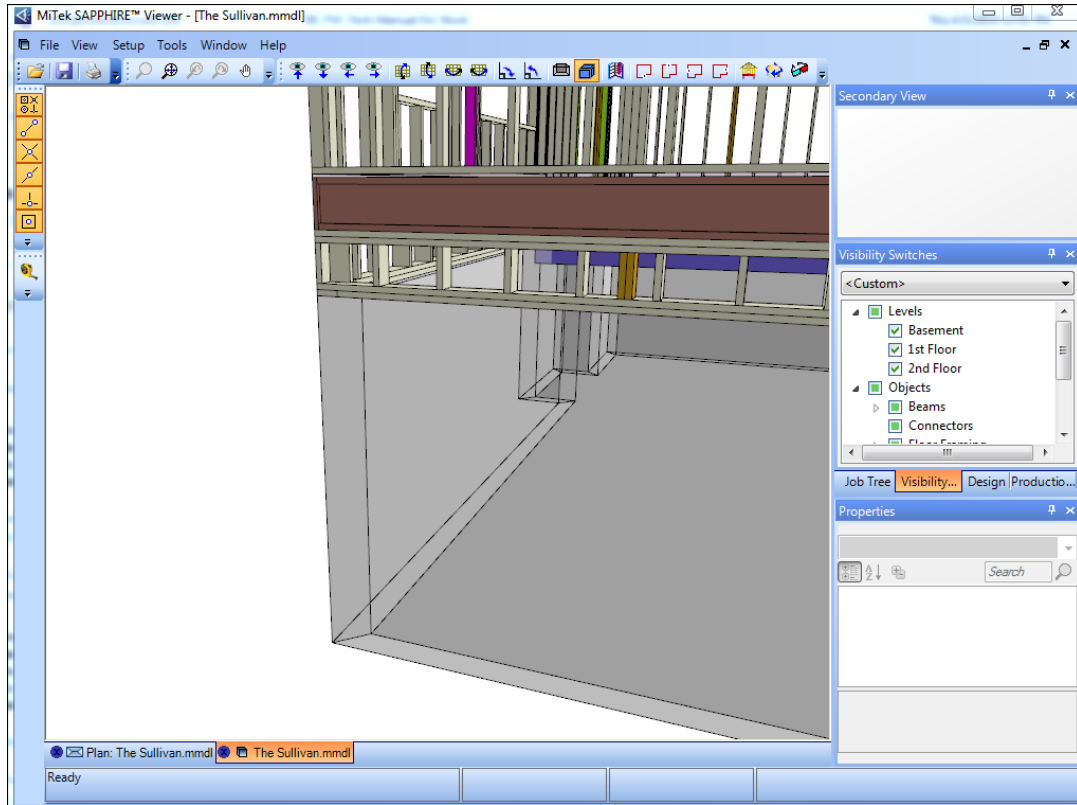
Use the following link to download a PDF file that contains additional information about 3D view navigation:

- [3D Navigation Commands](#)

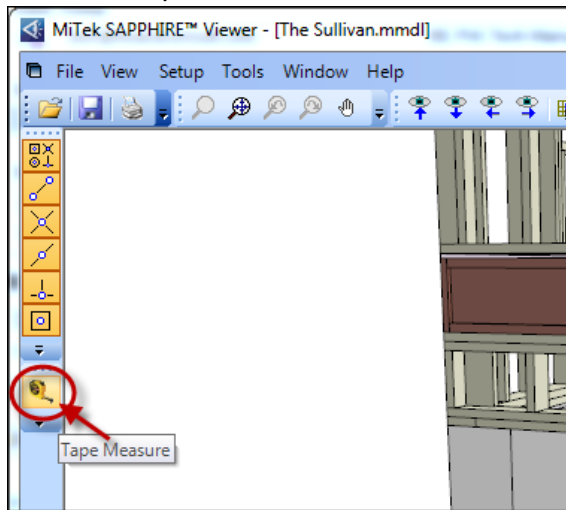
- **Verify Dimensions**

Use *Viewer's* Tape Measure tool to verify dimensions. In this example, level heights will be verified in 3D view.

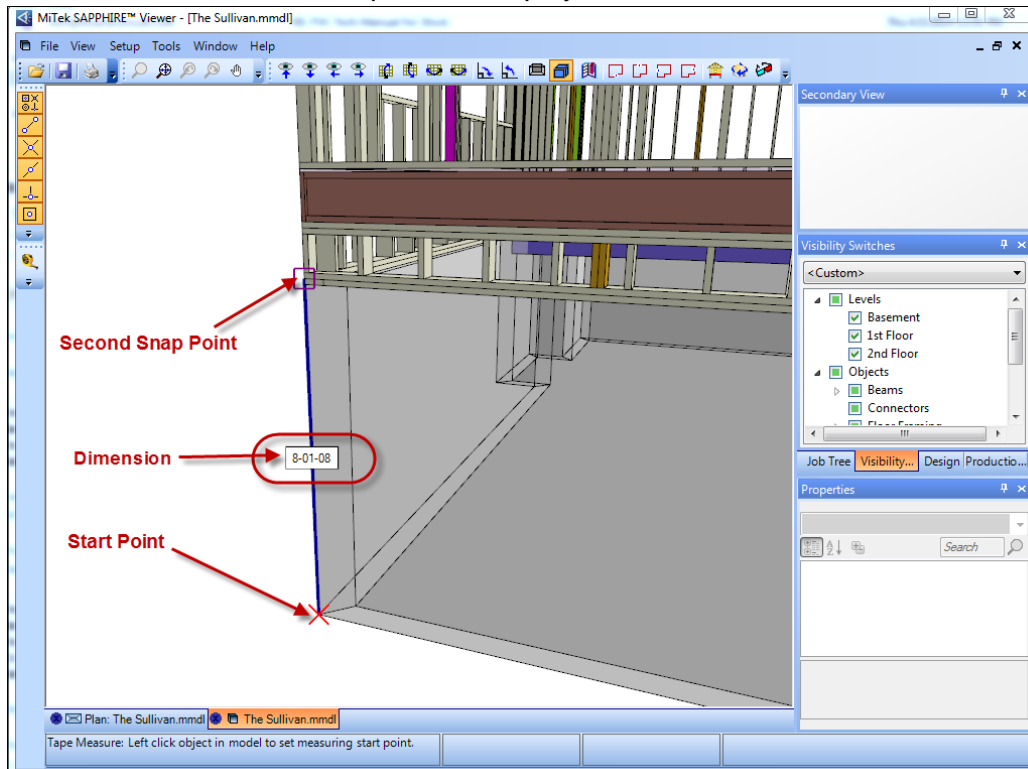
1. Open 3D view and use the navigation tools described above to zoom in to the corner of the foundation level.



2. Click the Tape Measure icon.



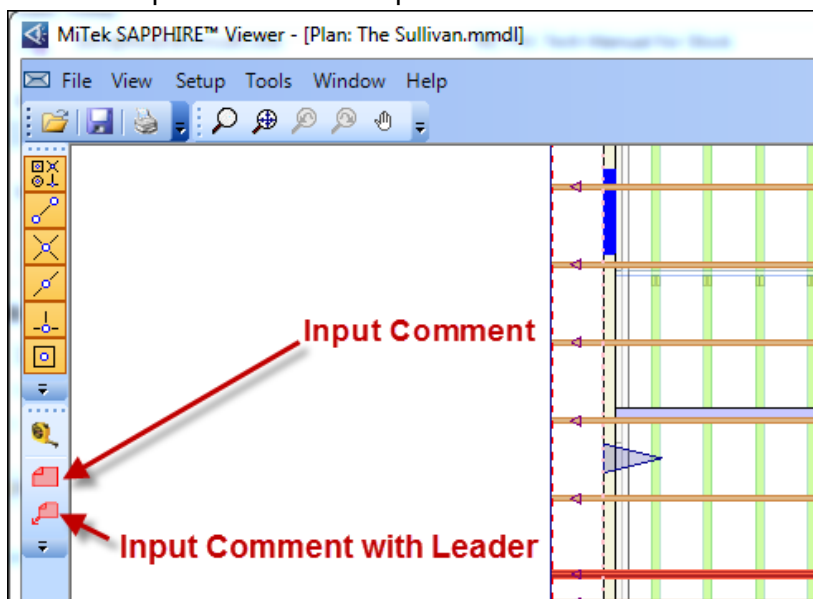
3. Left-click a start point and then drag the tape measure to a second snap point. The dimension between the two points is displayed.



- **Add Comments**

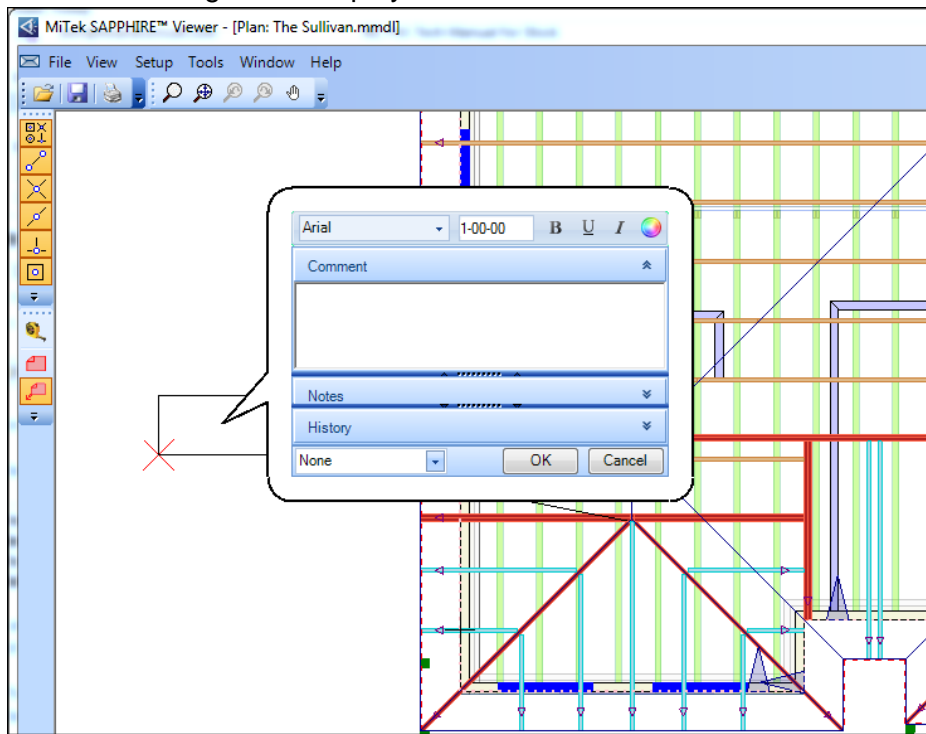
Comments can be added in *Viewer* and sent back to the component manufacturer. To add a comment:

1. Click the Input Comment or Input Comment with Leader icon.

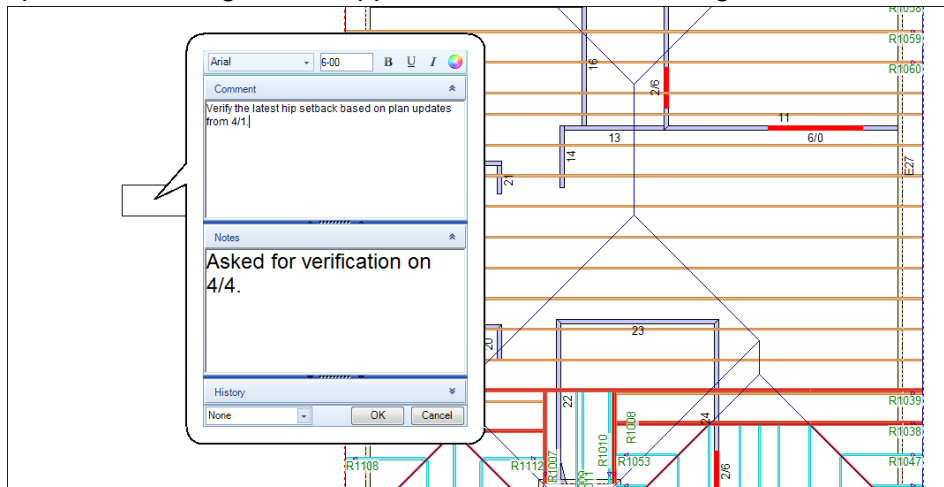


2. In this example, the Input Comment with Leader option is used. Left-click to place the Leader Start Point and then drag the cursor to the comment's location and left-click. The

Comment dialog box is displayed.



3. Type a comment and click OK. The Notes section of the comment dialog box can be used to track additional information about the question. In the example below, a note was added that includes the date that the question was asked. Comments are displayed on the layout while notes are only visible in the dialog box. Font type, text size and any special formatting can be applied in the comment dialog box.

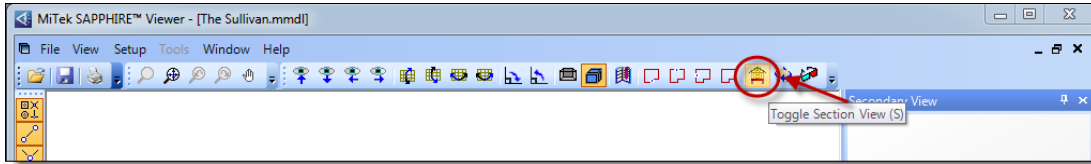


4. Comments are saved with the job file and can be viewed by the component manufacturer.

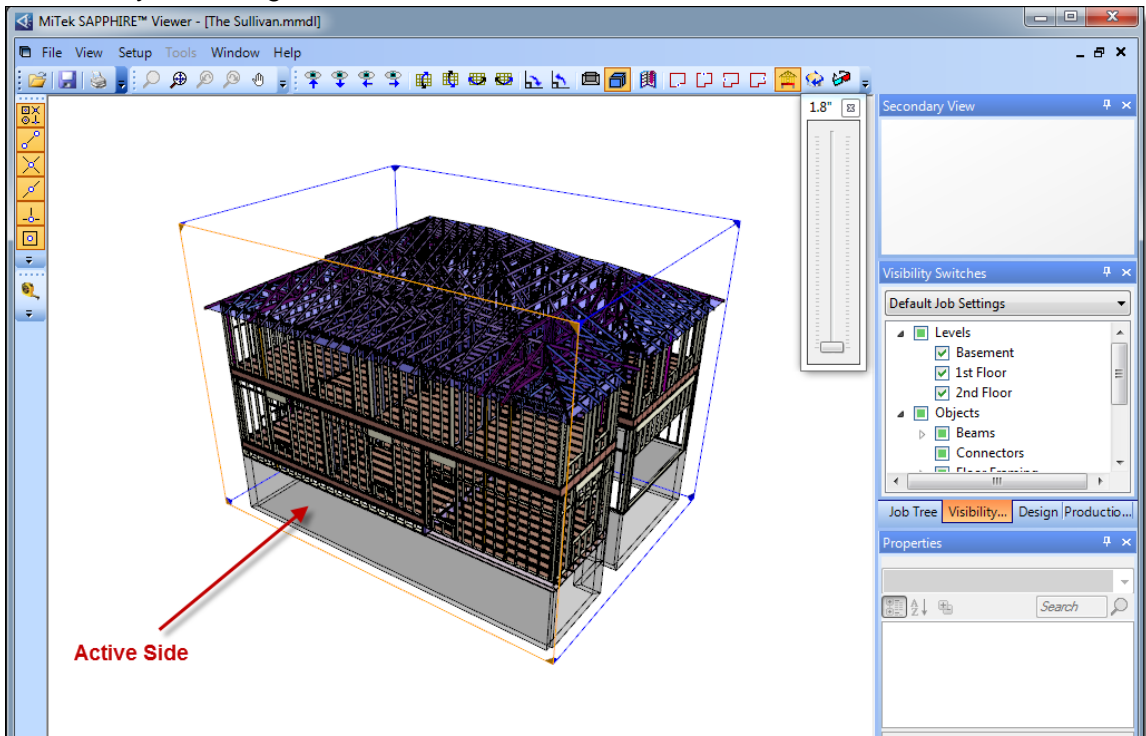
- **Create Section Views**

Viewer can also be used to create section views. Use the following steps to create a 3D section view:

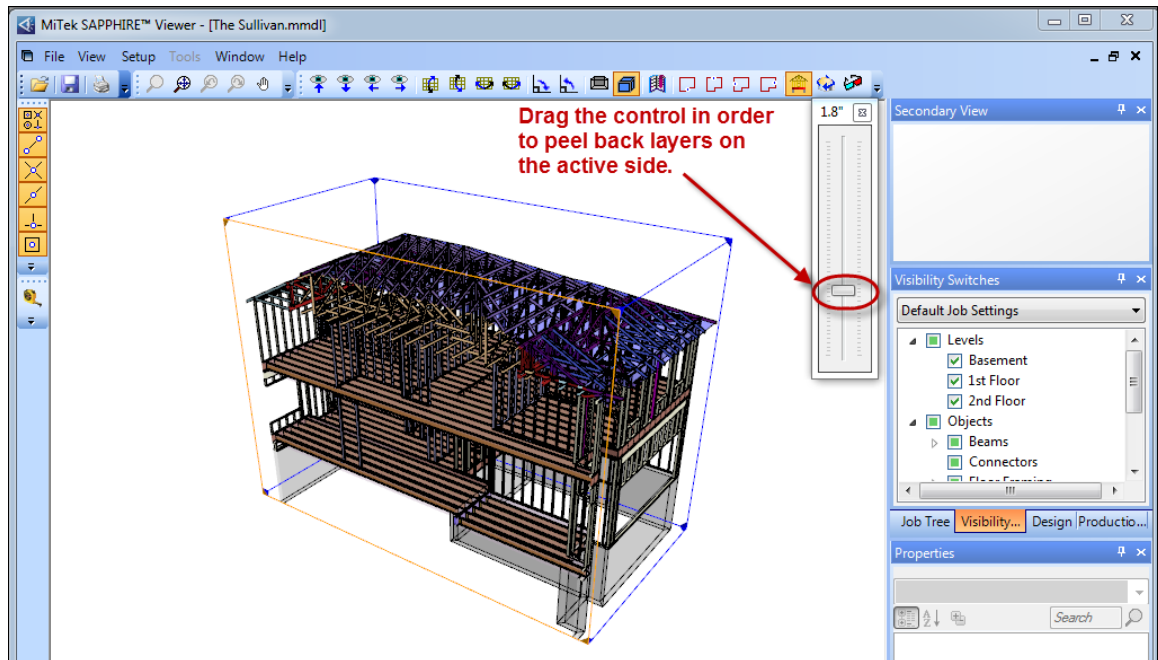
1. Open 3D view.
2. Click the Toggle Section View icon.



3. The plan is enclosed in a cube. As the plan is rotated, the “active” side of the cube is denoted by the orange color.



4. Drag the control bar on the section view control up in order to peel back layers on the active side.

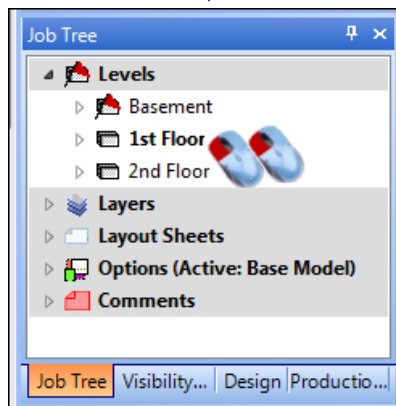


5. Layers can be peeled back on multiple sides of the section cube. Simply rotate the cube using *Viewer's* navigation tools in order to specify a second active side.

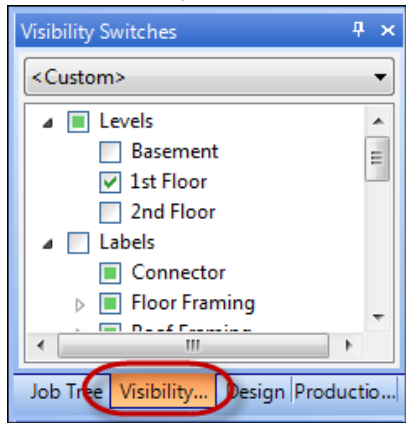
- **Look at Components in Elevation View**

In order to get a detailed look at a specific roof truss or wall panel, a single component can be displayed in Elevation View. In this example, use *Viewer's* Job Tree, Visibility Switch and Zoom tools to locate the wall panel in question and then display it in Elevation View.

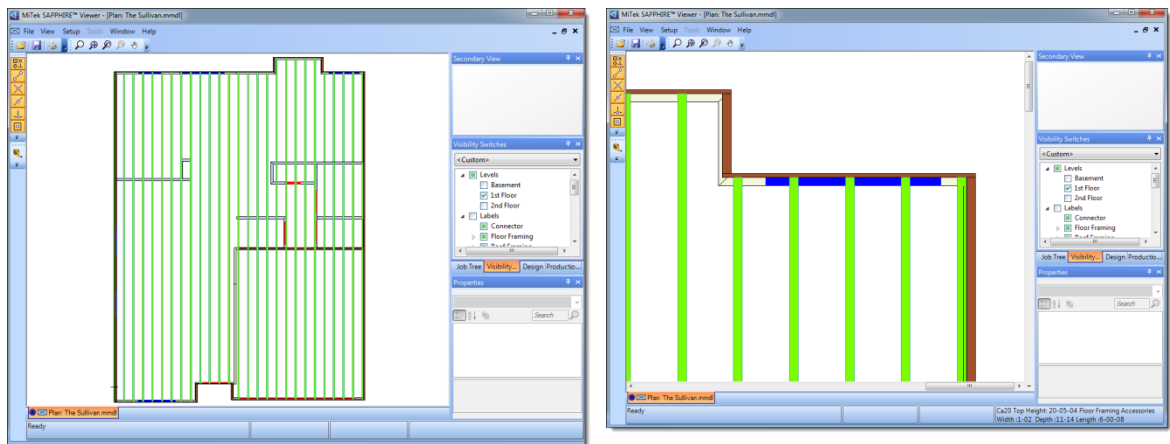
1. In the Job Tree, double-click the 1st Floor in order to make it the current level.



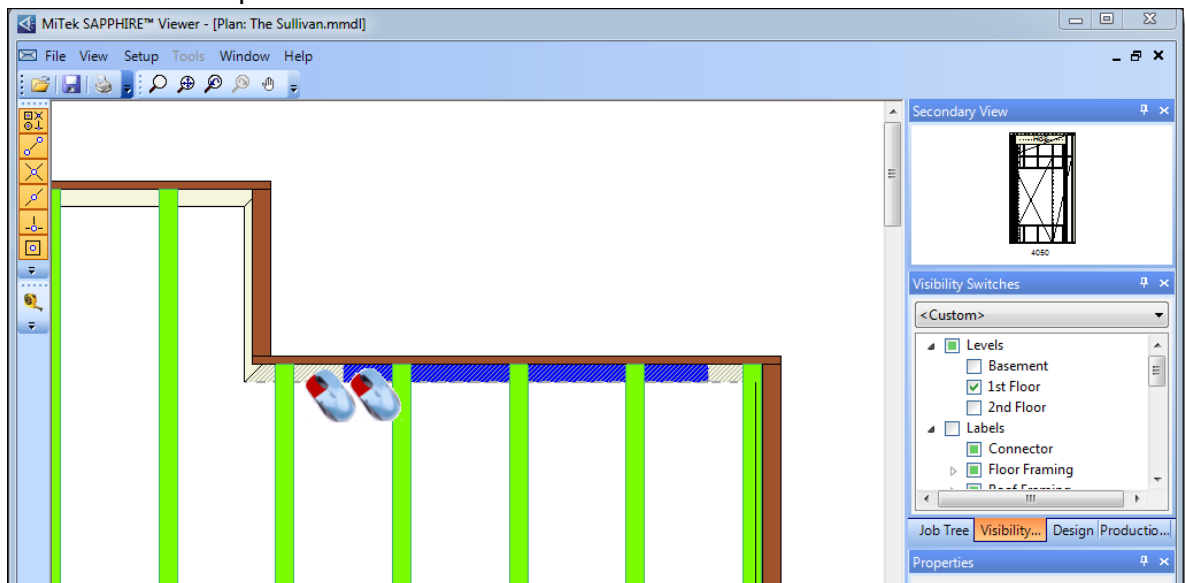
2. In the Visibility Switch tab, turn off visibility for the Basement and 2nd Floors.



3. Use the scroll wheel on the mouse to zoom in to the plan's upper right-hand corner.

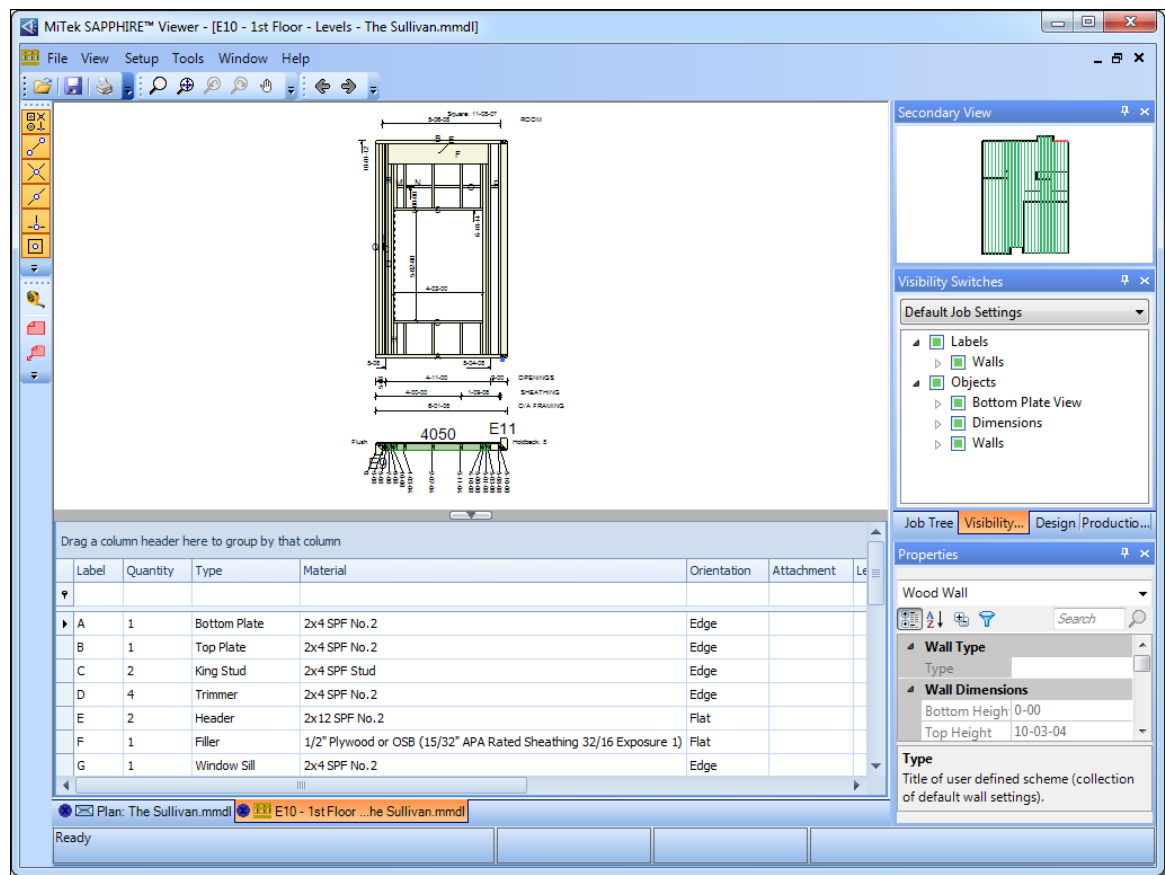


4. Double-click the specified wall.



5. The wall is displayed in Elevation View. Here, the Tape Measure can be used to verify specific wall properties and components inside of the wall (openings, junctions) can be

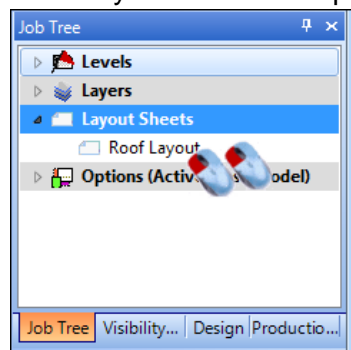
viewed in detail.



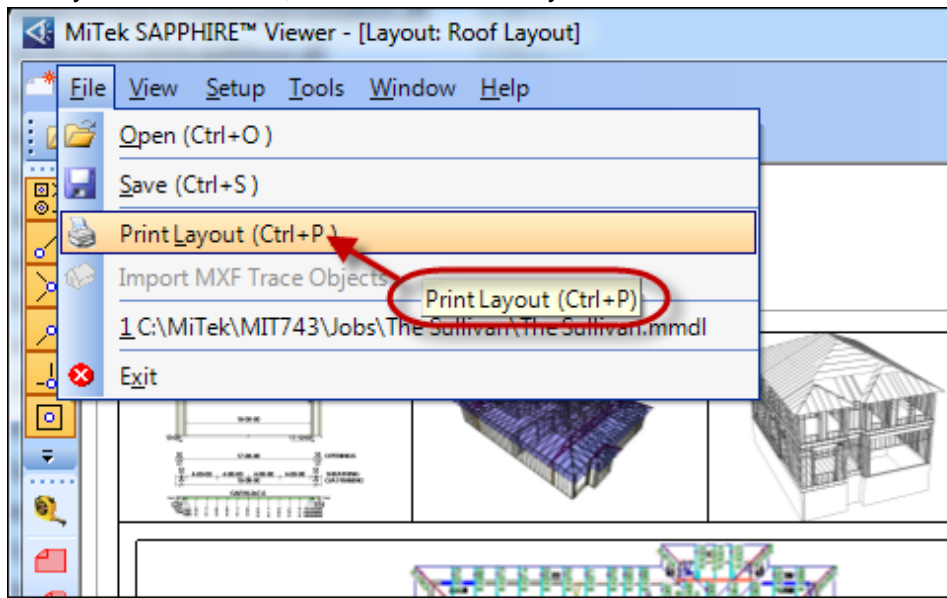
• Print Layout Sheets

Use the following steps to print Layout Sheets in *Viewer*.

1. From the Job Tree, expand Layout Sheets and double-click the appropriate layout sheet, Roof Layout in this example.



2. In Layout Sheet View, click File > Print Layout.



3. In the Print Session Dialog, specify printing properties and click the Print button.

