# 'I DONT BELIEVE IT!' MAKE VIEWS FROM SECTION BOX

## USER GUIDE VERSION 1.0

TABLE OF CONTENTS

## 1.0 WHO IS THIS APP FOR?

All Revit users. This app is for daily users of Revit of any discipline

## 2.0 WHAT DOES IT DO?

**Creates Up to Six New (Permanent Or Temporary) Views From The Faces Of the 3D Section Box With One Click.**

- Create Up to 6 View Sections At Any One Time, All faces will Produce a section
- Create Up to 4 View Sections, One Floorplan (Top Face), & One Reflected Ceiling Plan (Bottom Face) At Any One Time
- Format The Views By Selecting Section Type, Floorplan Type & Ceiling Type
- Match The 3D Views Look Exactly. Visual Style, Category & Element Overrides, Scale, Detail Level, Filters, Visible & Hidden Elements, Are Displayed In The New Views Exactly As They Are Shown In the 3D Section Box*
- Add Or Apply An Existing View Template To The New Views
- Add The New Views To Existing Or New Sheets.
- Name The New Views With A Prefix
- Open New Views as Tabbed Windows.
- Delete Latest Set Of Newly Created Views. Use The Views As Temporary Views For Modelling

## 3.0 WHAT ARE THE BENEFITS OF USING IT?

- Efficiency Supercharge Your Workflow, Up to 90% 'Mouse Click Saving' On Creating Six Comparable Views Manually. Saving Hundreds Of User Hours & Fingers!
- WYSIWIG 'What You See Is What You Get' Created Views That Look Exactly Like What You Can See In The 3D Section Box.
- No More View Range Struggling Floor Plans & Ceiling Plans View Range Is Set From The 3D Section Box Extents!
- Clean Up & Reduce The Number Of Levels In Your Project By Utilising Horizontal Sections.
- Model Faster By Using Temporary Section, Floor Plan & Ceiling Plan Views. Delete After Use.
- Point Cloud Slicing Generate perfectly Sliced Sections & Plans From Point Clouds To Model Over.
- Reduce Working Views Not On Sheets. Create Temporary Views Ón The Fly, Delete After Use.
- Assembly Views Get The Speed Of Assembly Views Without The Constraints Of Assemblies
- Third Angle, First Angle Views Sets Can Be Created With One Click
- RC Detailing Create All The Views For A Structural Element Instantly Ready For Tagging
- Ease Of Use. Make Your 3D Modelling Workflow Less Stressful.

*Please note there may be situations where match 3D is not 100% effective in matching a newly created view to its parent 3D view. e.g. Revit Link Graphic Display Options Not Matched.

## 4.0 INSTALLATION

The installer will run upon downloading this add-in from the Autodesk app store, initiating the installation process for the add-in. Alternatively, you can double-click on the downloaded file to install the add-in. Following installation, you will need to restart the Revit to activate the add-in.

## 4.1 LICENCE SSO, YOU SIGN INTO AUTODESK ACCOUNT TO USE REVIT

The SSO single sign on license, is Autodesk's newest form of license control. **You sign into your Autodesk account with your email or your company email details to use Revit**. For The Raking Brace plug in to work you need to download the SSO version and be signed in to your Autodesk account. The plug in will check your entitlement with your account. You can be offline for up to 30 days and the plug in will work , you will need to sign in again after 30 days. You can purchase as many licenses as required at the app store with this method and add team members in your account management dashboard to allow access to the plug in. You can also try the 30 day trial with this version of the plug in.

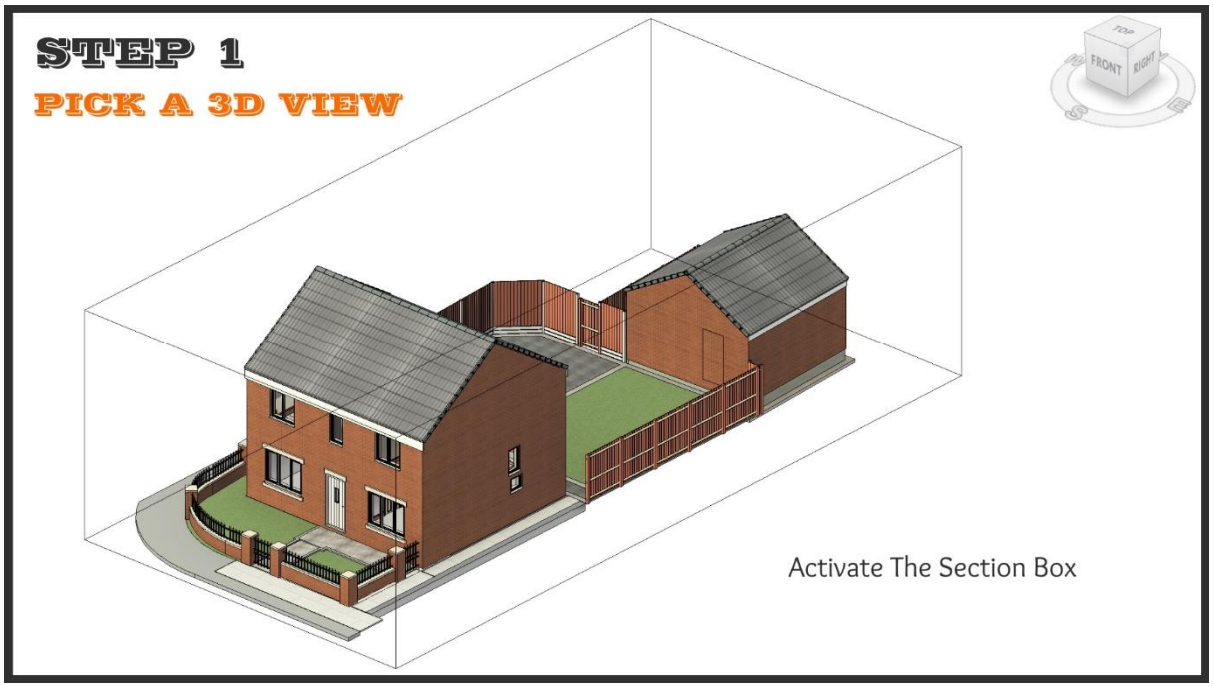
## 4.2 LICENCE NETWORK, YOU DON'T SIGN INTO AUTODESK ACCOUNT TO USE REVIT

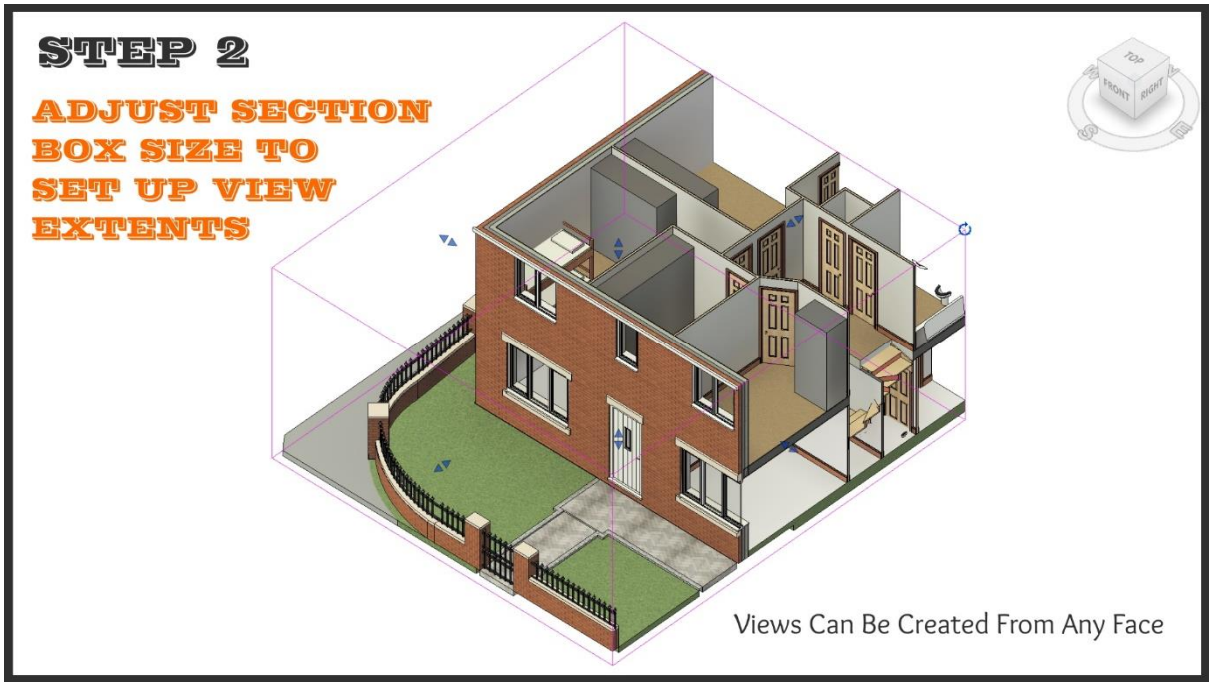
The Network License (LM Tools & Flex net License server) Is an older license control system often used for enterprise size deployments at large organizations. **You do not sign in to an Autodesk account to use Revit**. For the Raking Brace plugin to work you need to download the Network License version of the plug in, which is sold in multiples of 50 seats per license. This License is a **Trust based** license and requires no authentication. The control of seat numbers and deployment must be controlled by the IT administrators Software asset management (license control) software.

## 5.0 UNINSTALLATION

To uninstall the plug-in, exit Revit, rerun the installer, and opt for the "uninstall" button. Alternatively, navigate to control panel > programs > programs and features (windows 10/11) and uninstall the application as you would any other from your system.

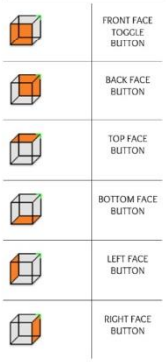
## 6.0 QUICK START

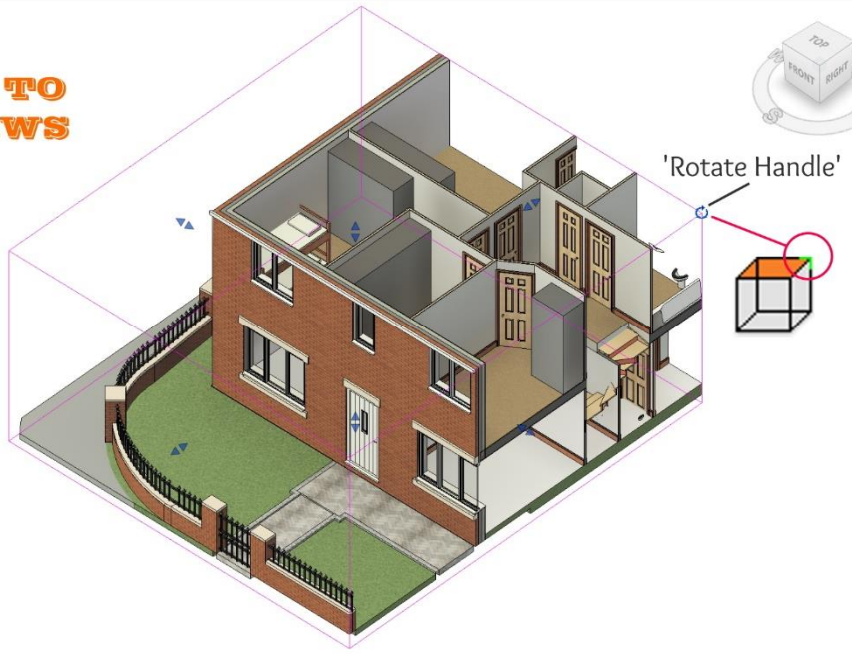


# STEP 3

## PICK FACES TO CREATE VIEWS

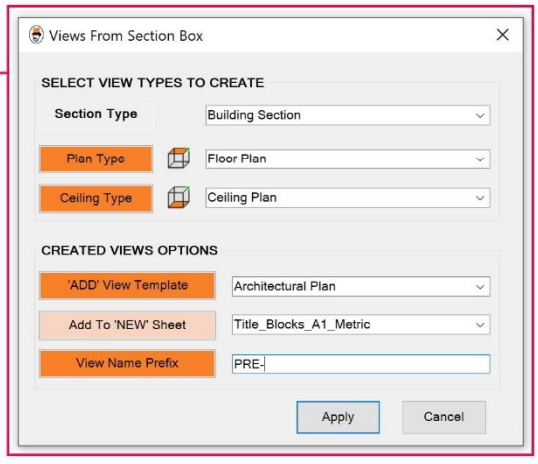




# STEP 4

## SELECT OPTIONS TO APPLY TO NEW VIEWS

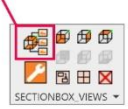

Match 3D View

Tab Windows

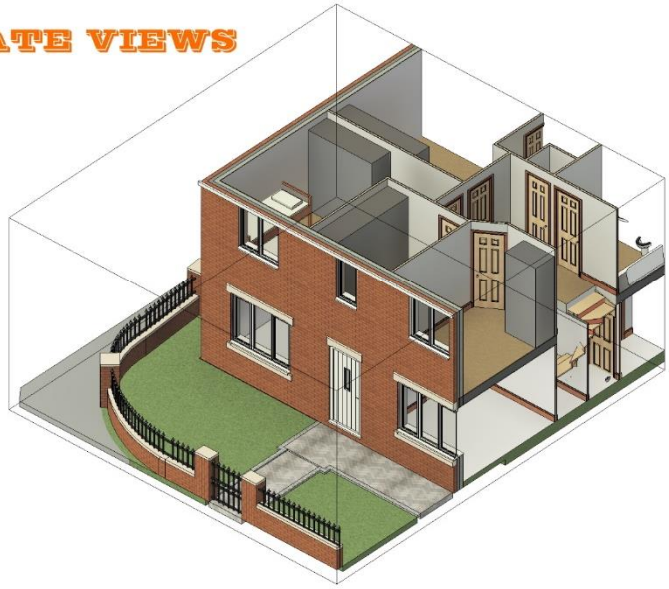


# STEP 5

## 'CLICK' TO CREATE VIEWS



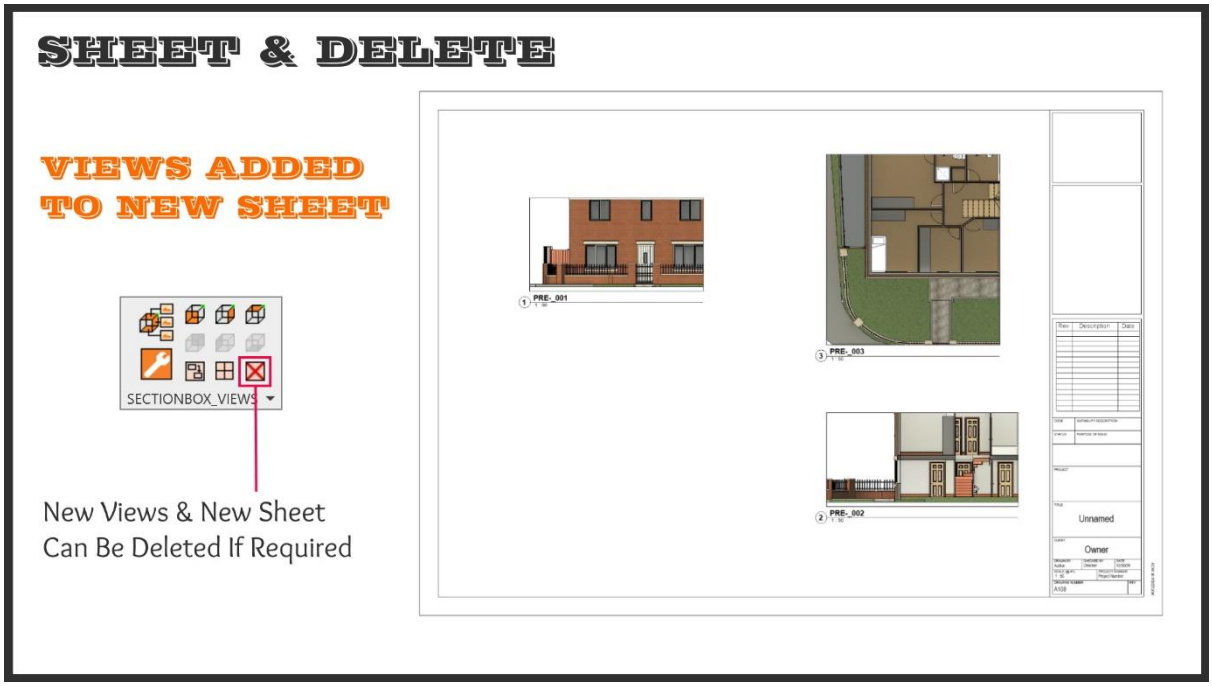

Views Are Created For The Selected Faces Applying The Chosen View Options




## ORIGINAL 3D VIEW VS NEW FLOOR PLAN VIEW

# ORIGINAL 3D VIEW VS NEW SECTION VIEW

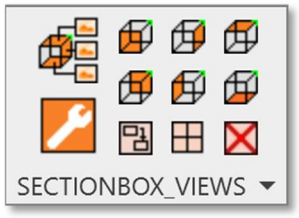

# ORIGINAL 3D VIEW VS NEW SECTION VIEW




Watch The videos at the Autodesk App Store [Autodesk App Store]

or on the Raking brace website [www.rakingbrace.com]

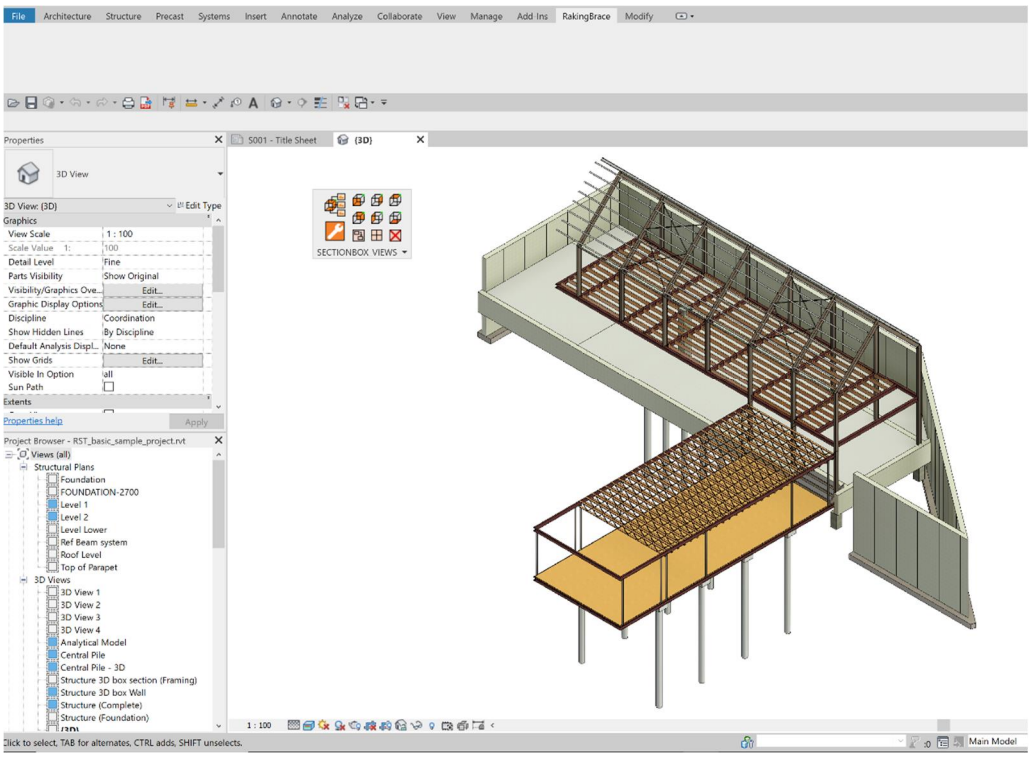
## 7.0 DETAILED USAGE



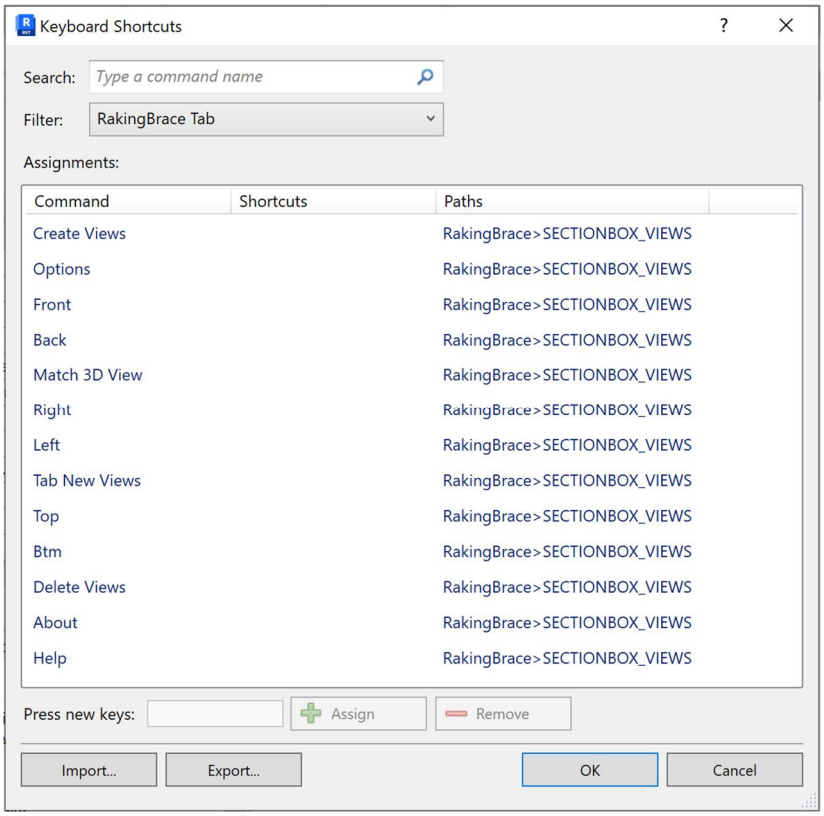

Open up a 3D view of your model. The 'Section Box Views' tab will be shown activated as below

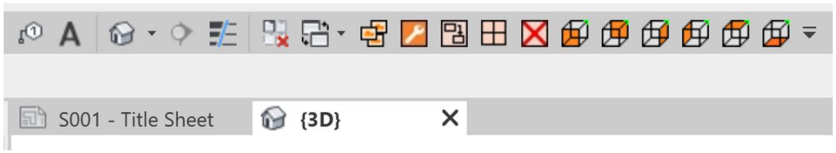

N.B. If in any other type of view is active the 'Section Box Views' tab will be shown deactivated

The 'Section box Views' tab can be dragged off the ribbon and placed floating in your preferred location



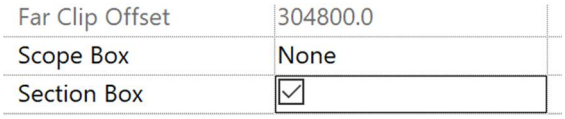
The Apps buttons may be assigned to keyboard shortcuts



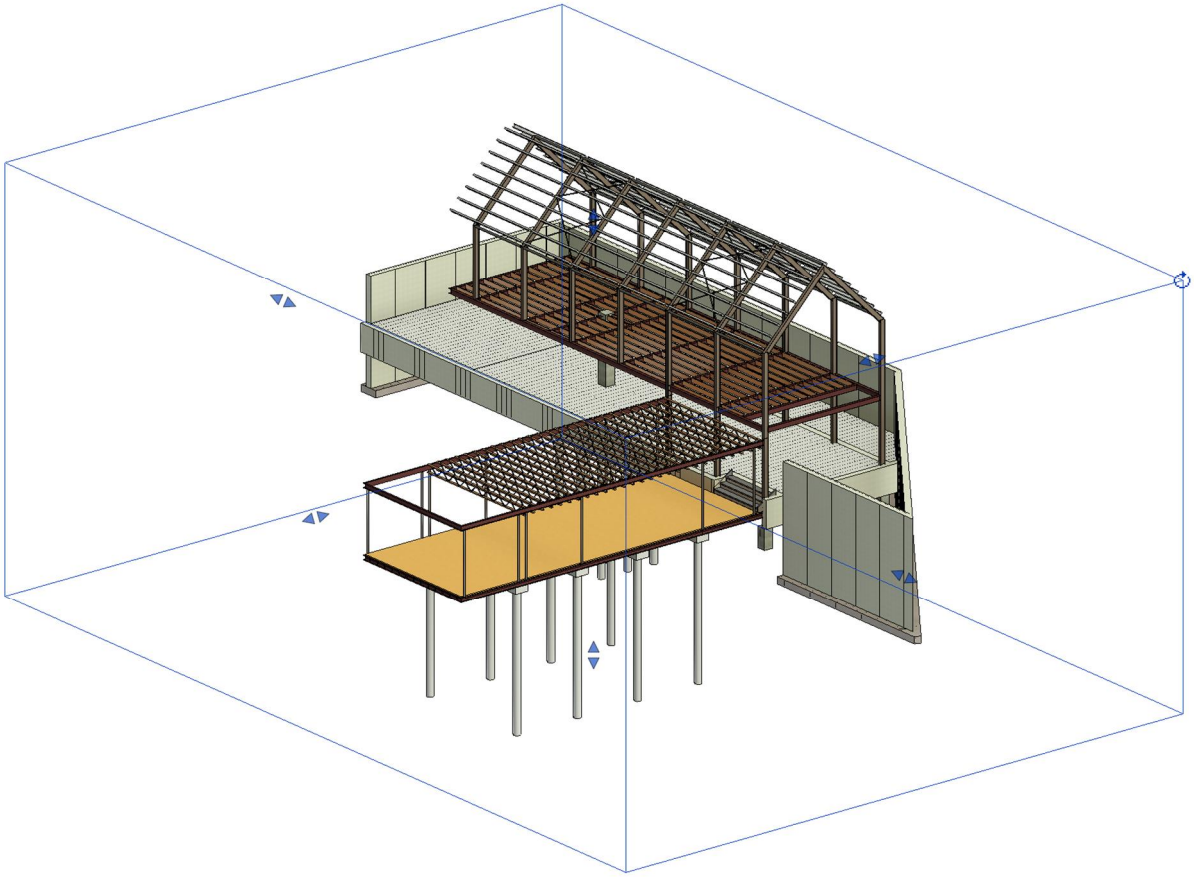

Or the buttons maybe added to the quick access tool bar (Recommended)

(TIP: Add the 'tile windows' command to the quick access tool bar, this can be utilized directly after tabbed view creation to compare views the created views.)

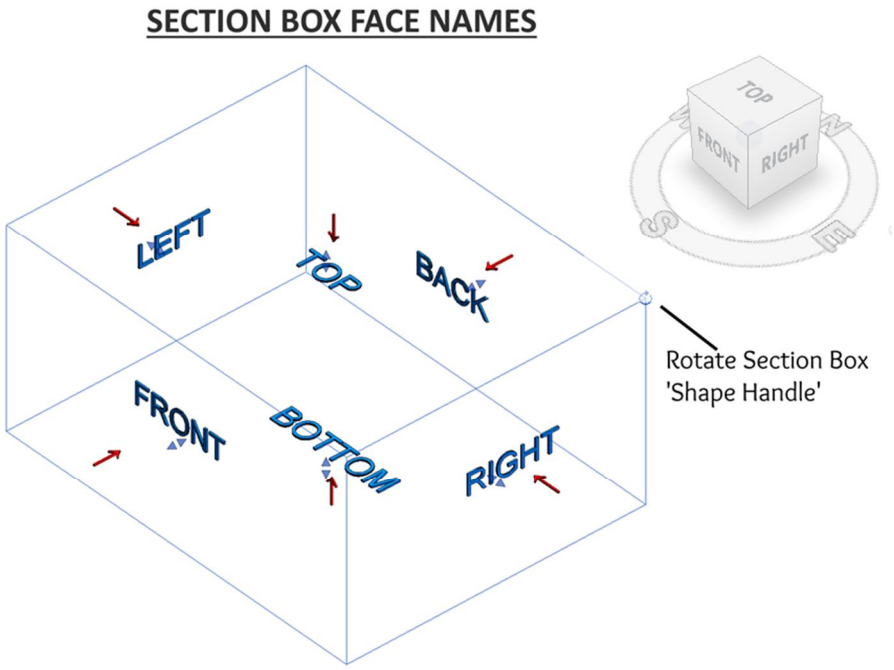



Make sure the section box is active and visible in the 3D view

Use the section box to isolate & cut elements creating the view required.
Set the section box extents to isolate and cut the perfect view.



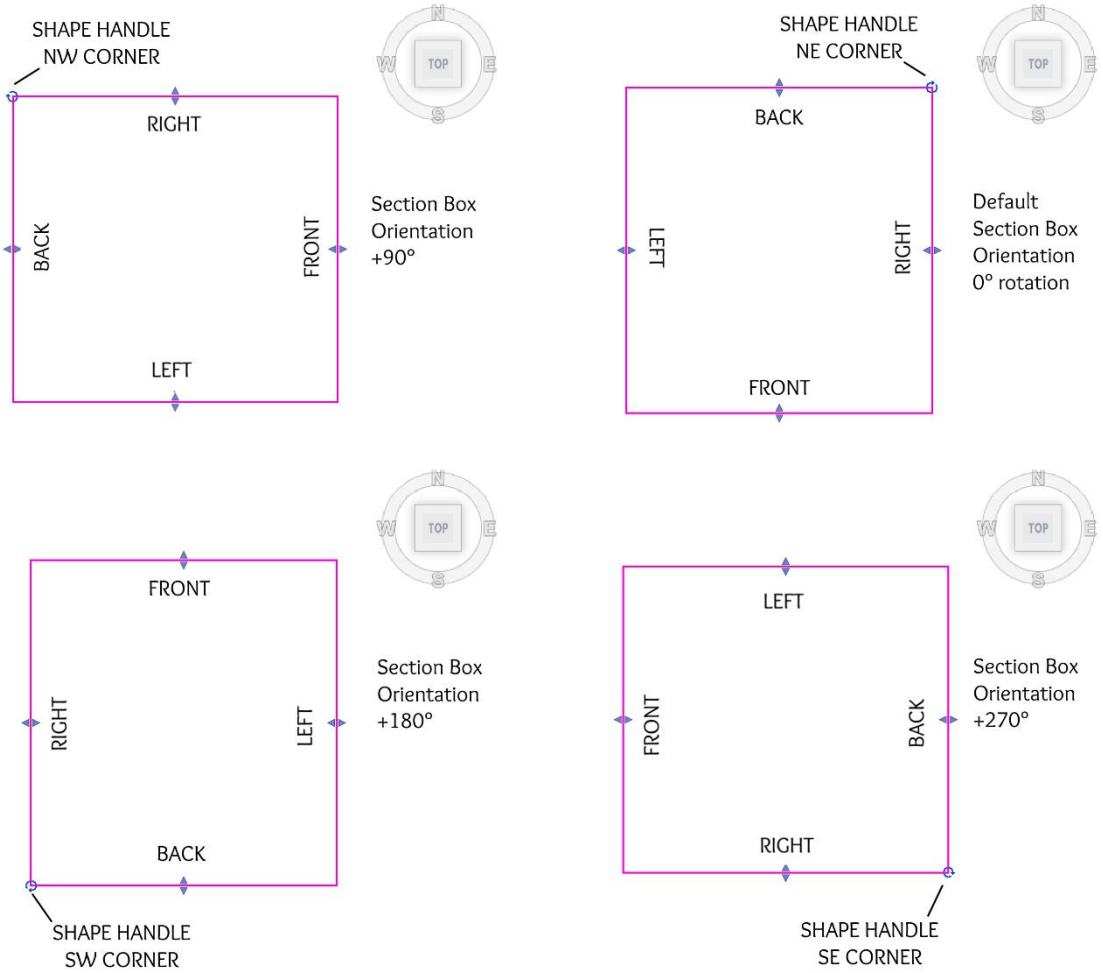
Views can be created from any face of the section box. The view created will be in the direction of the arrows shown below as if looking directly at that face (see below).




When a user selects a section box in a 3D view a small rotate 'shape handle' appears on one of the top corners. This shape handle is a fixed reference. The faces above are named due to their position relative to the section box rotate 'shape handle'. N.B. the shape handle sits on the intersection of the corners of the Top, Back and Right-side faces in the North East Corner of the section box when in its default orientation.

The green corner on the icons of the 'face' toggle buttons represents this shape handle.

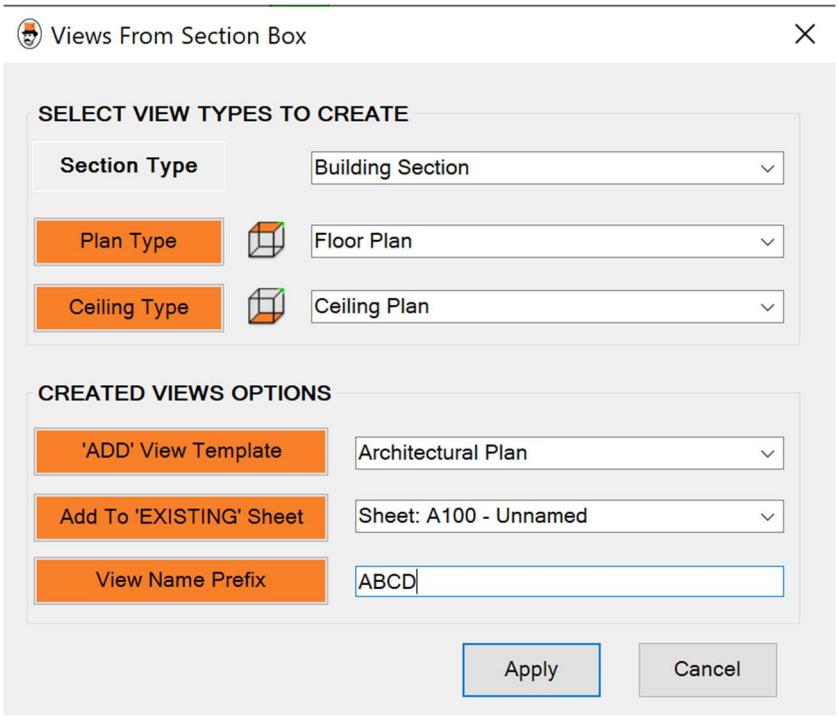
We can determine which view will be created by selecting the section box to see the shape handles location. If the section box is rotated to create views, the correct face to select can be determined from the looking at the section box from above and determining what corner the rotate shape handle occupies. See below




The toggle buttons refer to a specific face of the section box Top, Bottom, Front, Back, Left, Right (as shown).
Hover over these buttons to see their names. Select the toggle buttons for the required views

Open The Options window by pressing the options button

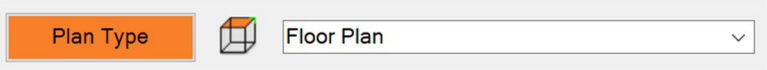
Select the options required. The Window is split into two sections ‘Select View Types To Create’ & ‘Created View Options’. Orange color indicates a button is active.

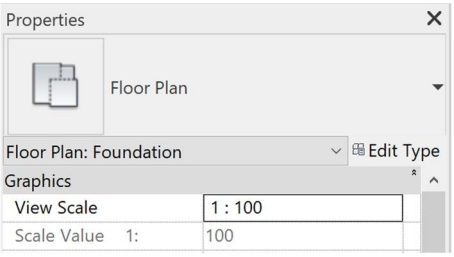


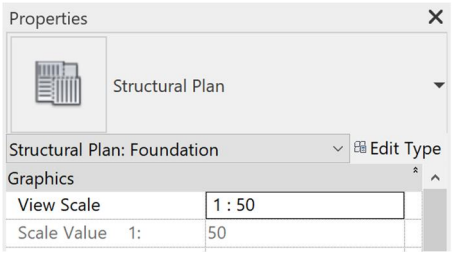

View types for the views created need to be selected first.

The default view type created is a ‘view section’ these can be created from any of the six faces of the section box Including the top and bottom faces. The ‘**Section Type’** dropdown is always active. Select the section type from the dropdown from which the views will be created.

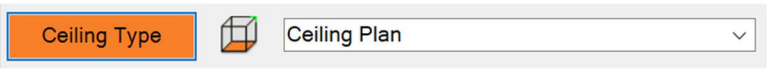
We can override the creation of a view section from the top face by Activating the **'Plan Type'.** Select the Plan Type (Floor plans and structural plans are listed) from the dropdown from which the views will be created.

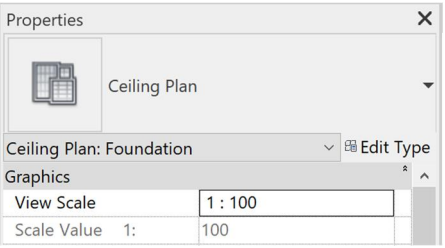



We can override the creation of a view section from the bottom face by Activating the **'Ceiling Type'.** Select the ceiling type from the dropdown from which the views will be created.




After a View type selection has been made select the view options required.

Add a view template. The Add view template button has three clickable states, off, '**ADD View Template'** and '**APPLY view Template'**, successive clicks will activate the different modes.


**'APPLY view Template'** only applies the view templates properties without adding it to the view


Select the view template from the dropdown to Add or apply.

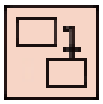
There is a fourth state which indicates this drop down is overridden by the **'Match 3D view'** button on the main ribbon tab.


**'Add to EXISTING sheet'.** Select an existing sheet from the dropdown menu, new views will be added to that sheet

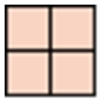

**'Add to NEW sheet'.** Select a view 'sheet type' from the dropdown menu, a new sheet will be created from this type & new views added ti this new sheet.


**'View Name Prefix'.** Adds a prefix to all the created views


**'Match 3D'.** Selecting this toggle button provides a simple & quick way to match the look of the 3D parent view. Created Views Will Adopt The Visual Style Of The Parent 3D View, Including View Templates, Scale, Detail Level, Visual Style, Category Overrides, Element Overrides, View Filters and Hidden Elements.



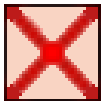
**'TAB Views'.** Select this toggle button to a open all created views and add as view tabs.



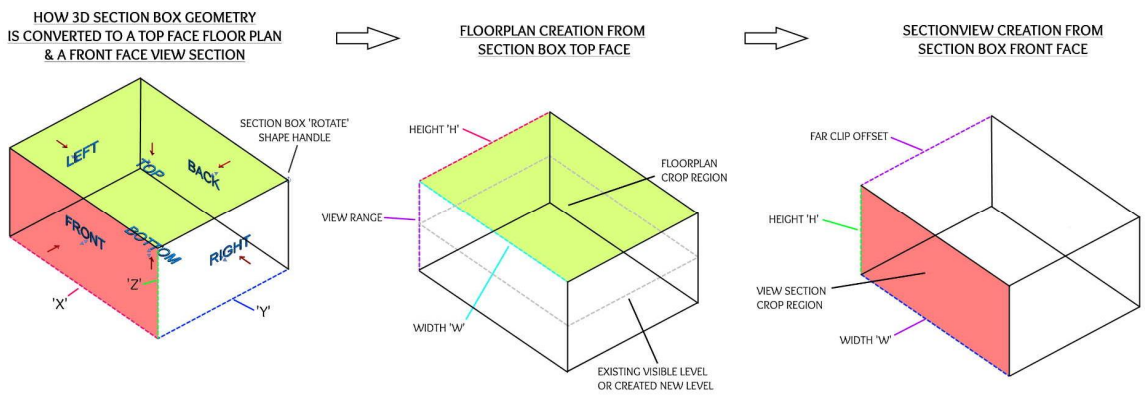
(TIP: Use Revit's built in 'tile views' button to compare all views side by side)

Once all Options have been selected. Activate the Create views button. The selected views are created

**‘Delete Views’.** New Views and New Sheet can be deleted selecting this button. Utilize this button to create temporary views in your work process.



## 7.1 MORE ABOUT VIEWS: HOW IS A 3D SECTION BOX TURNED INTO A VIEW?



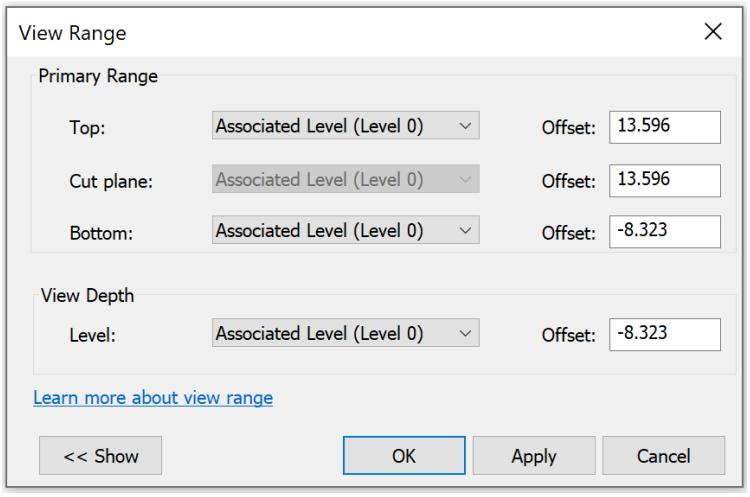

### 7.1.1 SECTION VIEWS

Section views Can be created from any face of the 3D section box including top & bottom face. A created section view's crop box is set to match the width & height of the 3D section box's selected face (looking directly at that face). The views 'far clip offset' is set from the depth of the 3D section box front to back (looking directly at that face).

If top and bottom faces are selected, the crop box of the created views will always align the edge which represents the back face to the top of the screen.

(TIP: If you select the section box in the 3D view and then go back to the section view you can see the outline of the section box.)

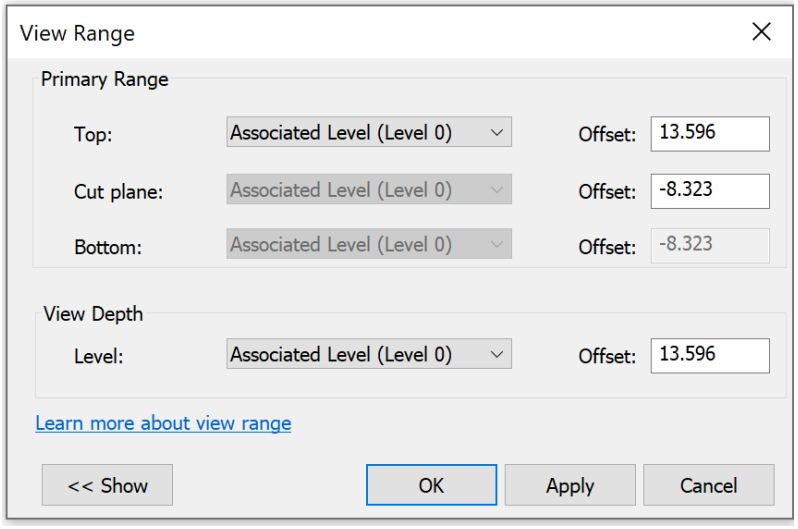
### 7.1.2 FLOOR PLAN VIEWS




Floorplan views can be created from the top face only looking in a downward direction. A created floor plan view's crop box is set to the width & height of the 3D section box's

selected face (looking directly at that face). All floorplans are associated with a 'parent' level (Level 0 in the example figure above)  the top, cut, bottom & view depth planes of the view range are set with reference to this parent level. The level that is within the section box volume & closest to the midpoint of the sections box's vertical height will be the 'parent' level used for the floorplan creation.  The view range top plane & cut plane are set to the 'top' face of the section box selected. The bottom plane & view depth are set to the opposite face.
If no level exists within the volume of the box a new level is created at the midpoint and this will be used as the parent level. Only 'visible' levels in the 3D view are analysed. Thus, if required we can force the new plan views 'parent' level to a specific level by hiding the other levels within the volume of the section box. The created floorplan will have its work plane set to the views 'parent' level so as to aide in speedy modelling.

### 7.1.3 REFLECTED CEILING PLAN VIEWS




Reflected ceiling plan views can be created from the bottom face only looking in an upward direction. A created ceiling plan view's crop box is set to the width & height of the 3D section box's selected face (looking directly at that face). All floorplans are associated with a 'parent' level (Level 0 in the example figure above)  the top, cut, bottom & view depth planes of the view range are set with reference to this parent level. The level that is within the section box volume & closest to the midpoint of the sections box's vertical height will be the 'parent' level used for the floorplan creation.  The view range bottom plane & cut plane are set to the 'bottom' face of the section box selected. The top plane & view depth are set to the opposite face.
If no level exists within the volume of the box a new level is created at the midpoint and this will be used as the parent level

Only 'visible' levels in the 3D view are analysed. Thus, if required we can force the new plan views 'parent' level to a specific level by hiding the other levels within the volume of the section box. Please note when comparing the 3D section box view from the bottom face to a

created reflected ceiling plan they will not look the same, as a reflected ceiling plan is a reflected version of this view.

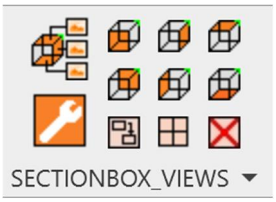
WARNING: SOME FAMILIES IN FLOORPLAN VIEWS MAY NOT 'CUT' CORRECTLY THIS IS A FAMILY PARAMETER SETTING NOT AN APP ISSUE.

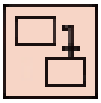
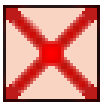
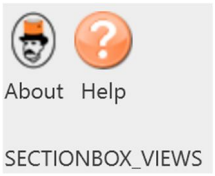
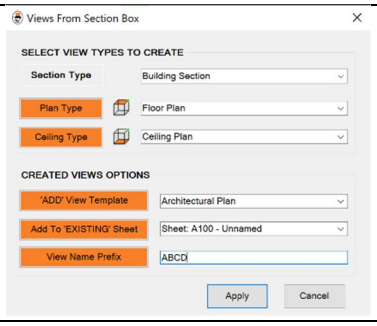
There is a setting in many Revit families e.g. structural framing & structural columns which 'OVERRIDES' how the element will show when cut in a floorplan, and replaces the floorplans 'cut plane' with a predefined one set in the family itself i.e. if a diagonal bracing is cut by our section box the floorplan may show the entire bracing element. This setting is the 'SHOW FAMILY PRE-CUT IN PLAN VIEWS' property, to get the created plan view to look exactly like the 3D view this box must be un-ticked in the family OR you can create a section view from the top or bottom planes of the section box instead of a floorplan & this will look correct.

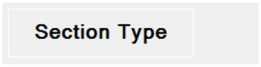
| Other | |
|---|---|
| Always vertical | ☑ |
| Cut with Voids When Loaded | ☐ |
| Symbolic Representation | From Project Settings |
| Shared | ☐ |
| Show family pre-cut in plan views | ☑ |

Specify Precut Display for a Family in a Plan View REVIT 2025

## 8.0 RIBBON TAB CONTROLS (TABLE)

| REF. | RAKING BRACE RIBBON | COMMAND | COMMAND DESCRIPTION |
|---|---|---|---|
| 8.1 |  | RIBBON TAB | See Below |
| 8.1.2 |  | CREATE VIEWS BUTTON | Creates New Views From The Selected Three_D Section Box Faces. Select Faces Using The Toggle Buttons, & Set Options Prior To Launching The Create Views Command |
| 8.1.3 |  | FRONT FACE TOGGLE BUTTON | Create View From Front Face Of Section Box. This Is A Toggle Button. (Green Corner Represents Rotate Shape Handle On A Selected Section Box) |
| 8.1.3 |  | BACK FACE BUTTON | Create View From Back Face Of Section Box. This Is A Toggle Button. (Green Corner Represents Rotate Shape Handle On A Selected Section Box) |
| 8.1.3 |  | TOP FACE BUTTON | Create View From Top Face Of Section Box. This Is A Toggle Button. (Green Corner Represents Rotate Shape Handle On A Selected Section Box) |
| 8.1.3 |  | BOTTOM FACE BUTTON | Create View From Bottom Face Of Section Box. This Is A Toggle Button. (Green Corner Represents Rotate Shape Handle On A Selected Section Box) |
| 8.1.3 |  | LEFT FACE BUTTON | Create View From Left Face Of Section Box. This Is A Toggle Button. (Green Corner Represents Rotate Shape Handle On A Selected Section Box) |
| 8.1.3 |  | RIGHT FACE BUTTON | Create View From Right Face Of Section Box. This Is A Toggle Button. (Green Corner Represents Rotate Shape Handle On A Selected Section Box) |

| | | | |
|---|---|---|---|
| 8.1.4 |  | MATCH 3D VIEW BUTTON | Match Three_D View, Created Views Will Adopt The Visual Style Of The Parent Three_D View, Including View Templates, Scale, Detail Level, Visual Style, Category Overrides, Element Overrides, View Filters & Hidden Elements* |
| 8.1.5 |  | TAB NEW VIEWS BUTTON | Created Views Will Be Opened And Added To Windows TABS |
| 8.1.6 |  | DELETE VIEWS BUTTON | Deletes The Last Set Of Created Views |
| 8.2 |  | RIBBON TAB DROP DOWN MENU | See Below |
| 8.2.1 |  | INFO BUTTON | Licence Information , App Version Information, Web Site Link |
| 8.2.2 |  | HELP BUTTON | Opens The Help Documentation On The Raking Brace Website |
| 8.1.7 |  | OPTIONS BUTTON | OPENS THE OPTIONS WINDOW (SEE BELOW) |
| 8.3 |  | OPTIONS WINDOW | See Below |

| | | | |
|---|---|---|---|
| 8.3.1 |  | SECTION TYPE SELECTION | |
| 8.3.2 |  | PLAN TYPE SELECTION | |
| 8.3.3 |  | CEILING TYPE SELECTION | |
| 8.3.4 |  | ADD/APPLY VIEW TEMPLATE | |
| 8.3.5 |  | ADD TO EXISTING OR NEW SHEET | |
| 8.3.6 |  | VIEW NAME PREFIX | |