CERTIFICATE COURSE IN BIM MODELLING

Architecture Track

Certificate Course in
BIM Modelling (Architecture Track)

Topic Overview

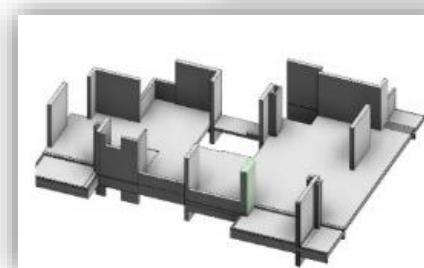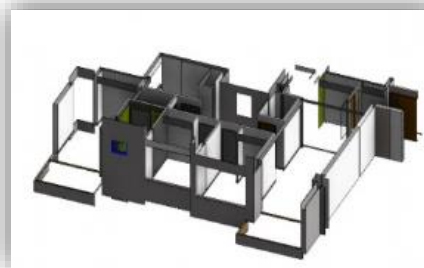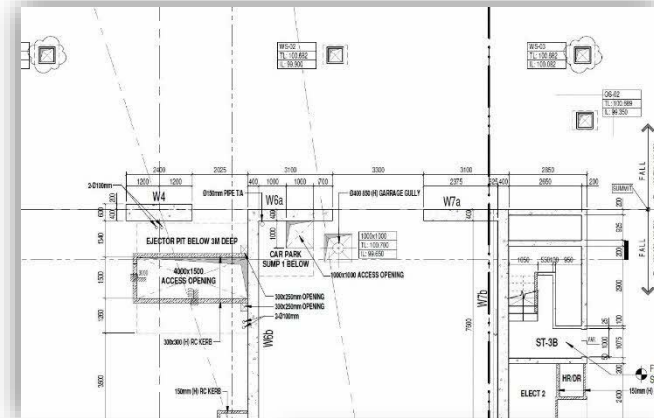|	Day 1	Day 2	Day 3	Day 4
AM	BIM Fundamentals & Revit Interface	BIM e-Submission Guidelines & Template Overview	(Assignment – 3D part finish)	(Assignment – 2D Documentation, Family)
	Starting a BIM project: Project template, Insert files, Project base point, Grids & Levels, Create views	Basic 3D modeling : staircase, railing, roof, ceiling		
PM	Site & Mass Modelling	(Assignment – 3D part)	Family editor interface & simple family creation	
	Basic 3D modeling : Wall, floor, ramp, doors & windows		Basic 2D elements: rooms, area, annotation, dimension, tags, schedule, sheets, titleblock, exporting files.	

DAY 1

REVIT FUNDAMENTAL

What is Revit ?

Revit is a single application built for **Building Information Modelling** with features for Architectural design, Structural Design, and MEP (Mechanical, Electrical & Plumbing. Revit and other applications made for **BIM** help in design, simulate, visualize, and collaborate in order to capitalize on the advantages of the interconnected data within the BIM Model.

Revit File Extensions

.RVT = Revit Project File
.RFA = Revit Family File
.RTE = Revit Template File

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REVIT INTERFACE

Step 1

Step 2

Step 3

Start New Project:

- Step 1: At Models Category >> Click "New"
- Step 2: New Project Dialog-Box >> At the Template file > Dropdown the list & select Architectural Template or Click "Browse.."
- Step 3: Choose Template Dialog-Box >> Choose the

Working In Cloud (BIM360)
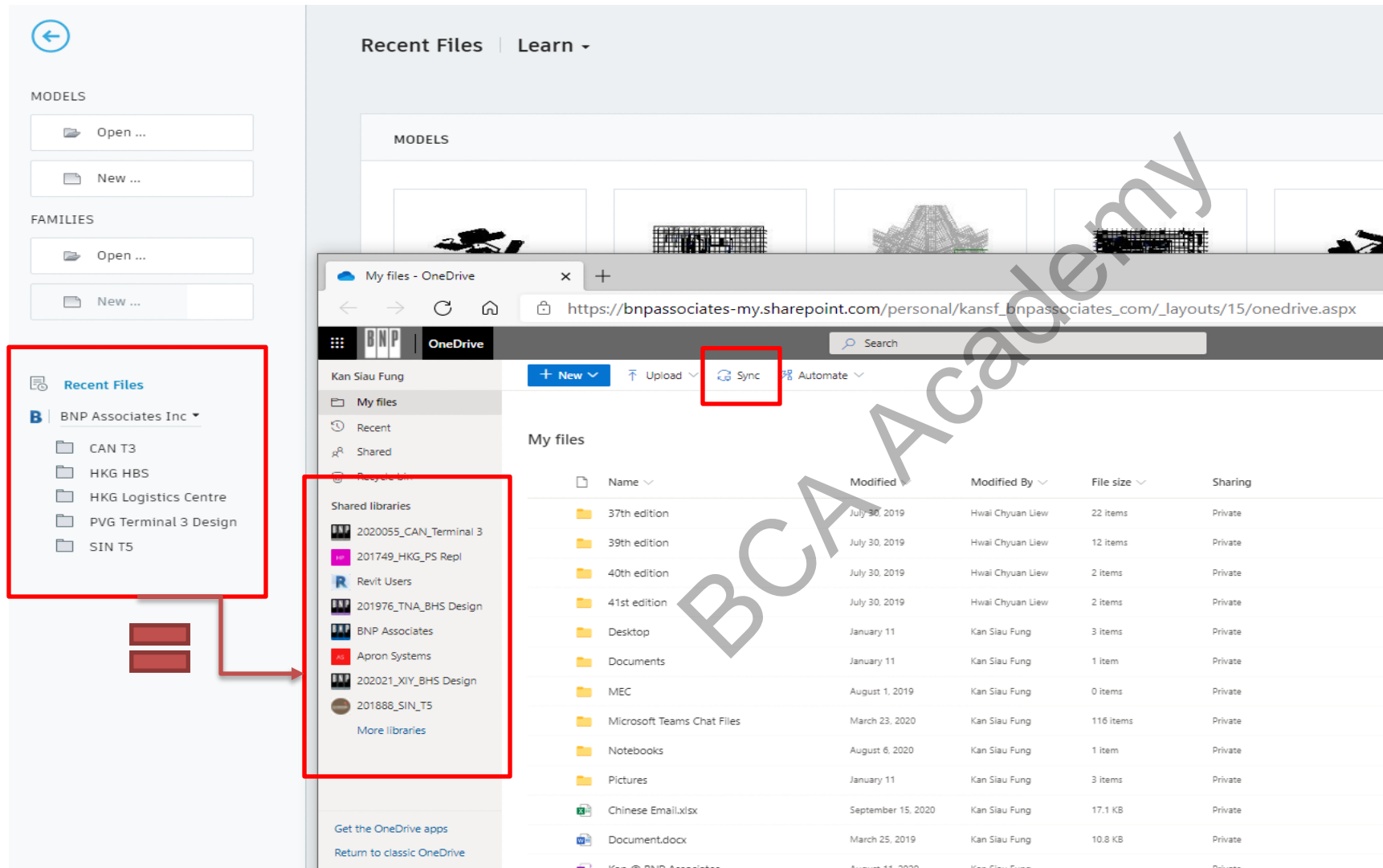
Working in Cloud

- Register BIM 360 account
- Create a project
- Upload your Revit working file to cloud
- Select the project folder
- Click "Sync" to your PC / Ladtop

Revit Interface
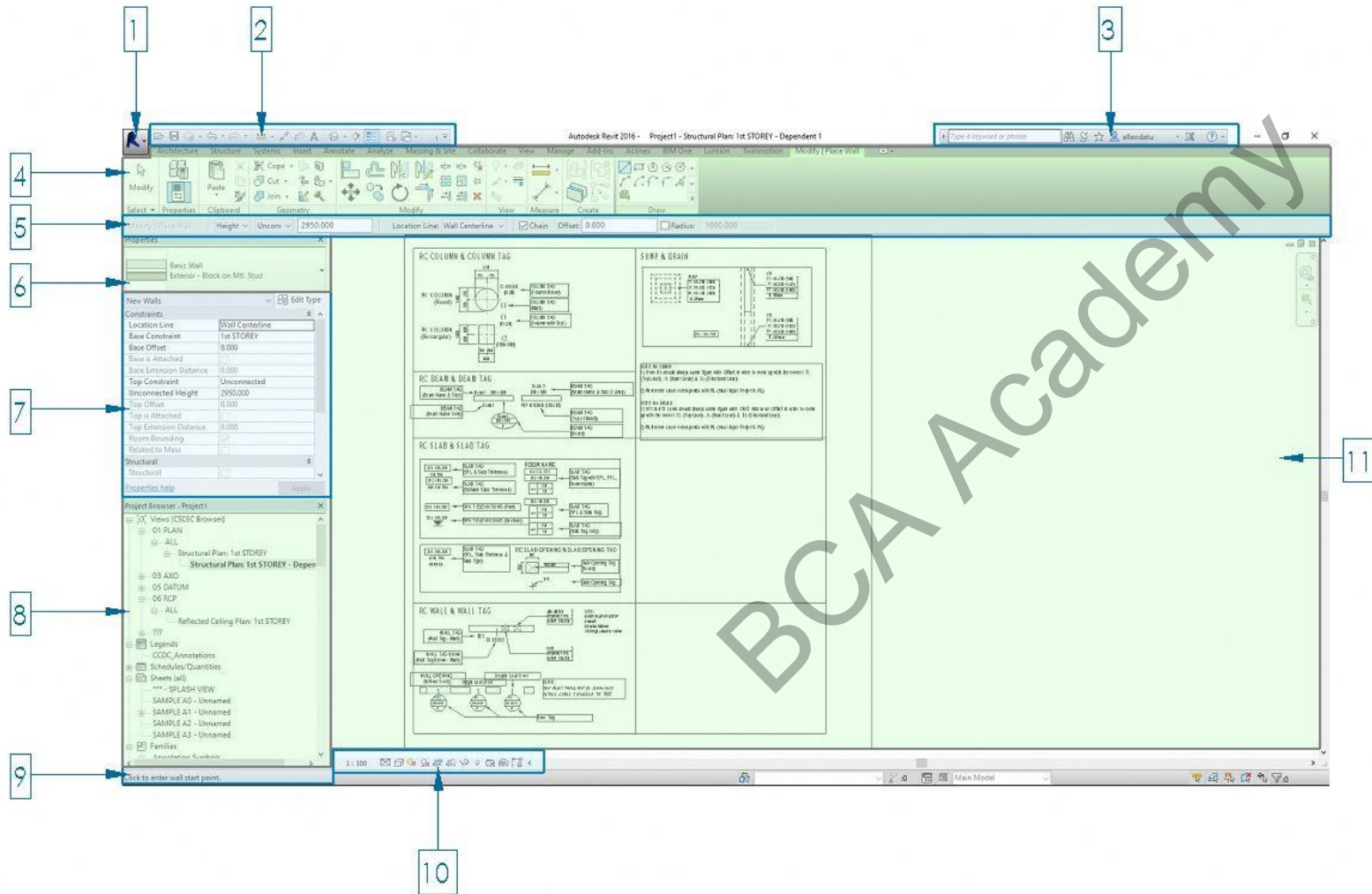
1. **Application Menu**
2. **Quick Access Toolbar**
3. **Info Centre**
4. **Ribbon**
5. **Option Bar**
6. **Type Selector**
7. **Properties Pallete**
8. **Project Browser**
9. **Status Bar**
10. **View Control Bar**
11. **Drawing Area**

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Revit Interface

Click: Select
Click + Hold: Select an area
Click + Ctrl: Add to selection
Click + Shift: Remove from Selection
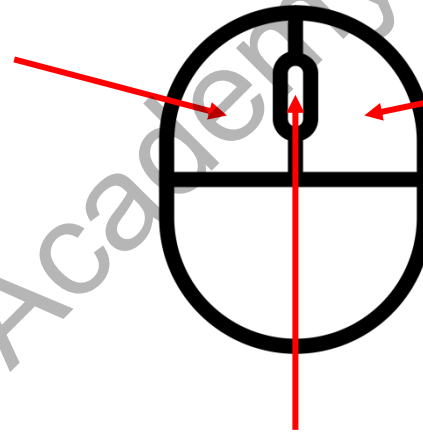
Context menu

Scroll: Zoom
Click + Hold: Pan
Hold + Shift: Orbit
Double Click: Zoom to fit

Revit Interface

1. Application Menu

The application menu provides access to common file actions, such as New, Open, and Save. It also allows you to manage files using more advanced tools, such as Export and Publish.

2. Quick Access Toolbar

The Quick Access toolbar contains a set of default tools. You can customize this toolbar to display the tools that you use most often.
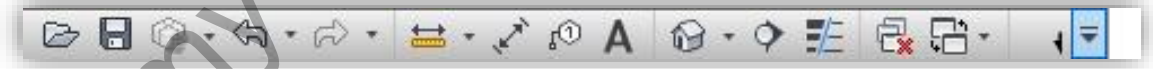
3. Info Center

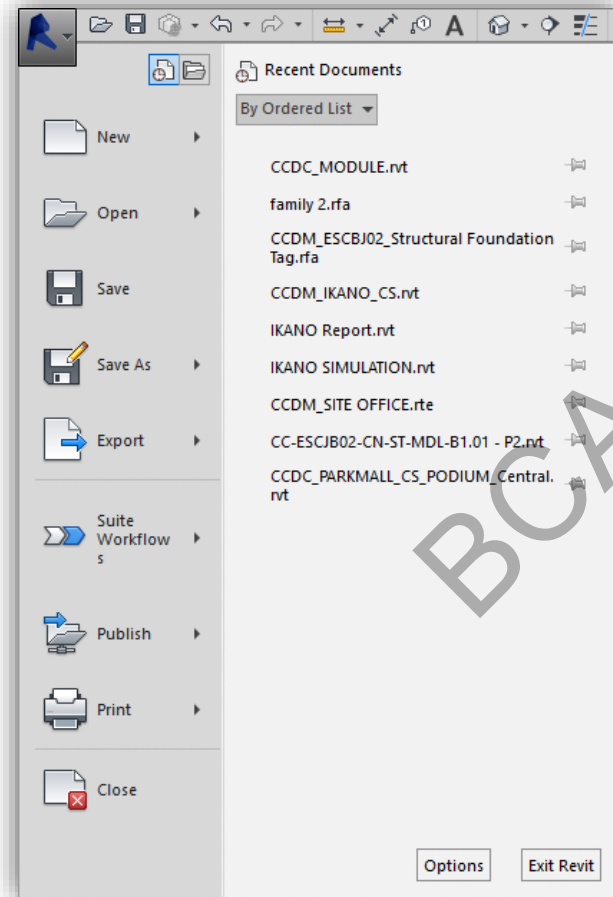Info Center consists of a set of tools on the right side of the title bar that enable you to access many product-related information sources.

Depending on the Autodesk product and the configuration, these tools might differ. For example, in some products, the Info Center toolbar may also include a Sign In button for Autodesk 360 services or a link to the Autodesk Apps Store.

Revit Interface

4. Ribbon

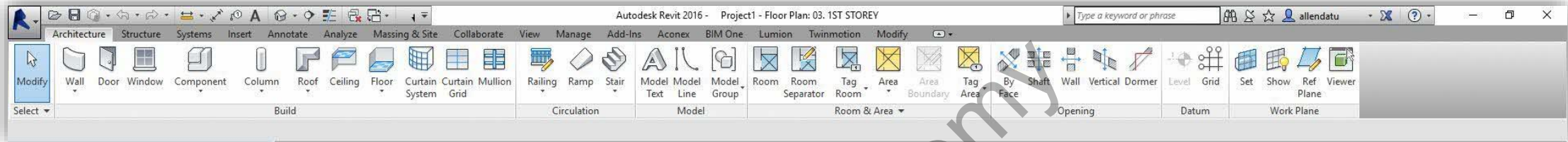The ribbon displays when you create or open a file. It provides all the tools necessary to create a project or family.

*As you resize the window, you may notice that tools in the ribbon automatically adjust their size to fit the available space.
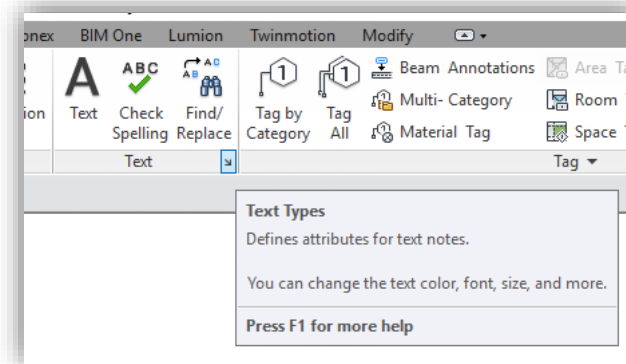This feature allows all buttons to be visible for most screen sizes.

Expanded Panels

An arrow next to a panel title indicates that you can expand the panel to display related tools and controls.
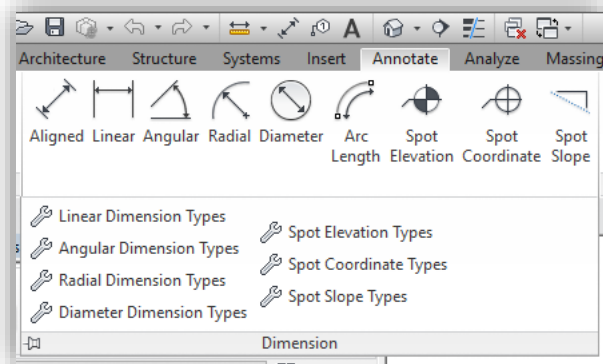
Dialog Launcher

Some panels allow you to open a dialog to define related settings. A dialog-launcher arrow on the bottom of a panel opens a dialog.
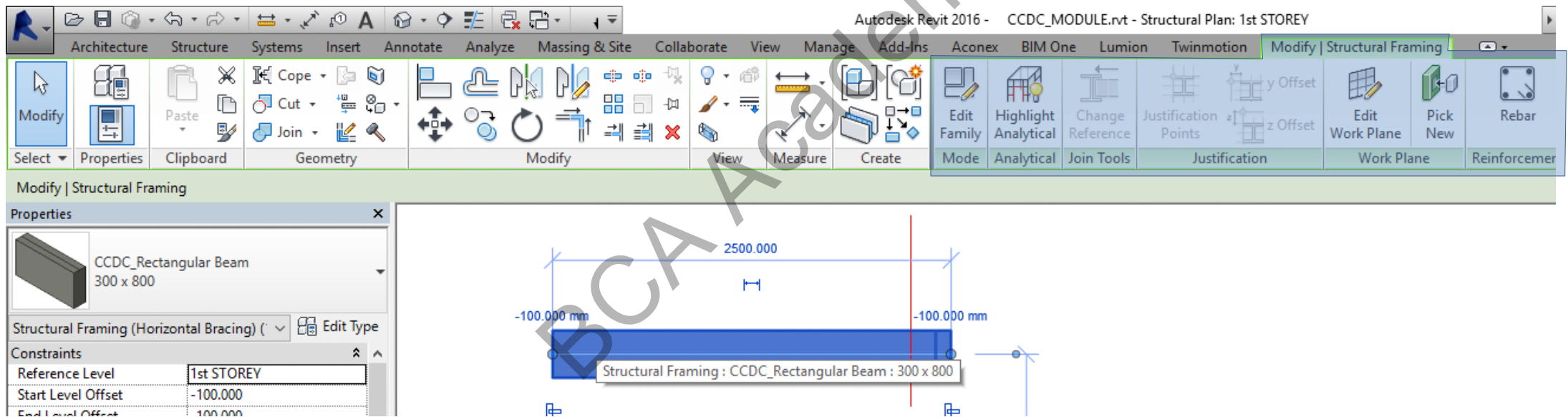

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Revit Interface

4. Ribbon

Contextual Ribbon Tabs

When you use certain tools or select elements, a contextual ribbon tab displays tools that relate to the context of that tool or element. The tab closes when you exit the tool or clear the selection.
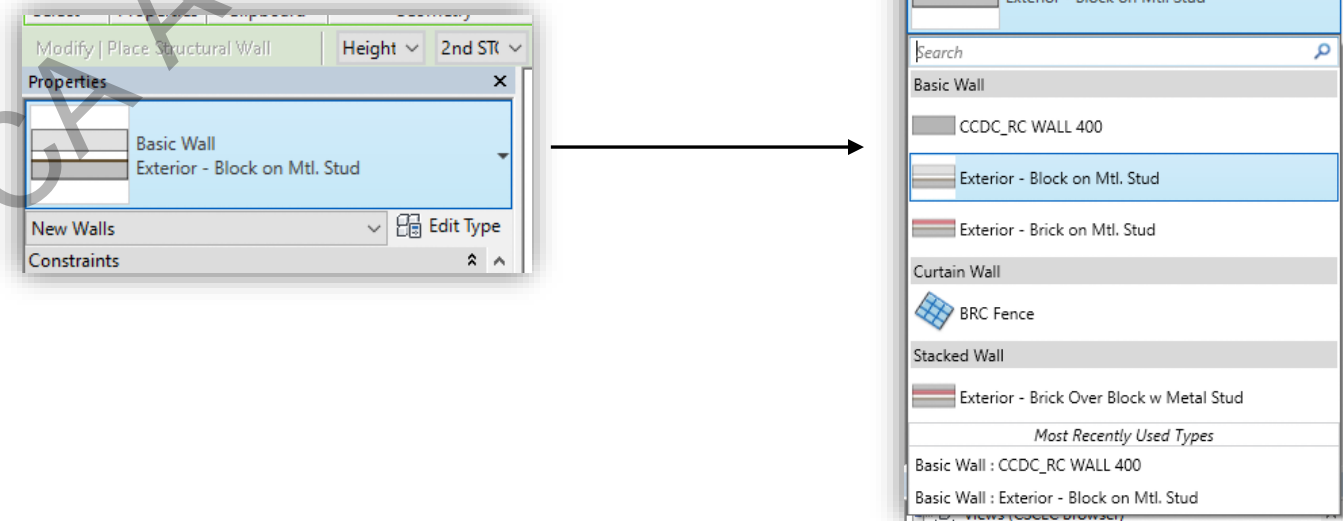
Revit Interface

5. Option Bar

The Options Bar is located below the ribbon. It displays conditional tools dependent on the current tool or selected element.
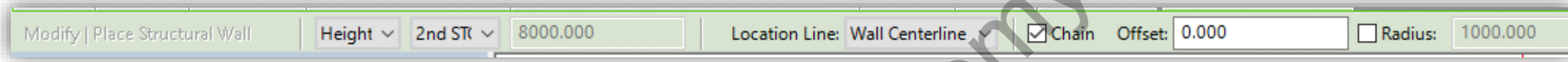
6. Type Selector

The Type selector tab on the Properties Pallete, let's you choose between all the created types of the selected family or system family


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Revit Interface

7. Properties Pallete

When you start Revit for the first time, the Properties palette is open and docked above the Project Browser on the left side of the drawing area. If you subsequently close the Properties palette, you can reopen it using any of the following methods:

- Click Modify tab > Properties panel (Properties).
- Click View tab > Windows panel > User Interface > drop-down Properties.
- Right-click in the drawing area, and click Properties.
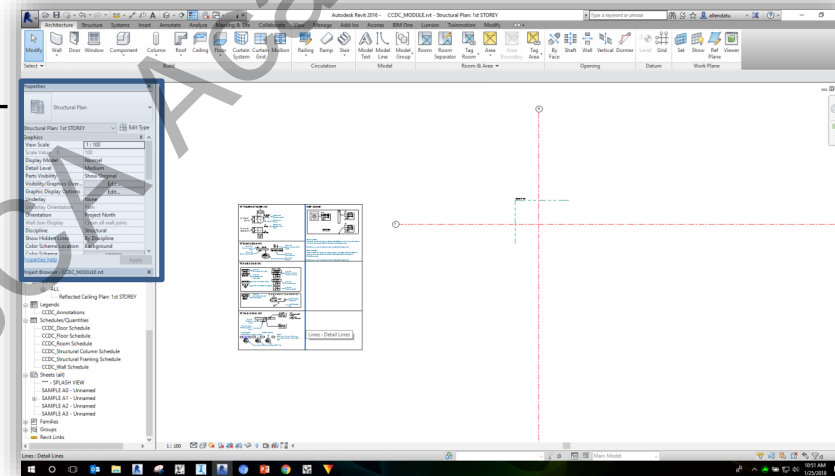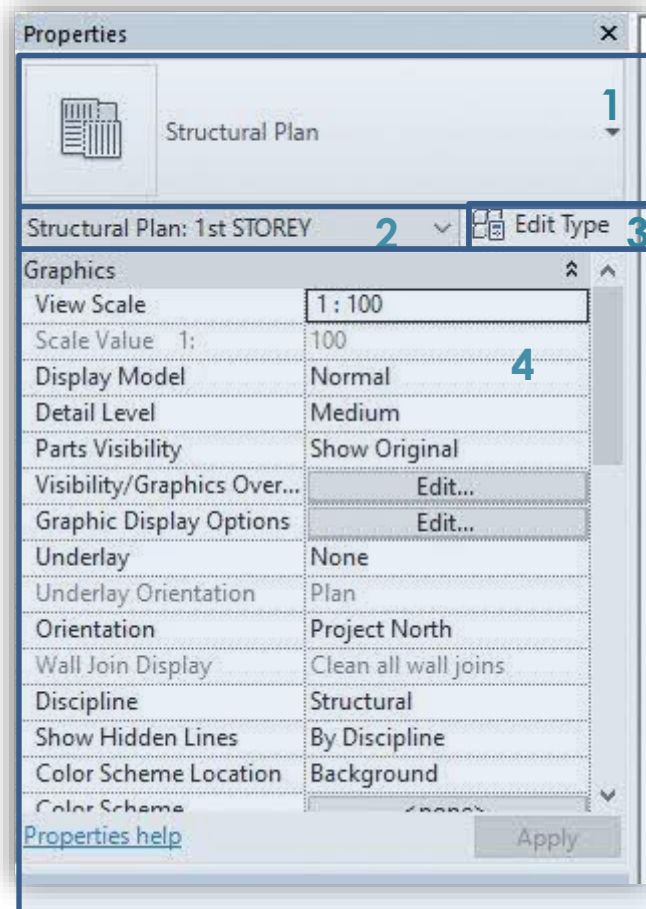
1. **Type Selector**
2. **Properties filter**
3. **Edit Type button**
4. **Instance properties**

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Revit Interface

8. Project Browser

The Project Browser shows a logical hierarchy for all views, schedules, sheets, groups, and other parts of the current project. As you expand and collapse each branch, lower-level items display.

- To open the Project Browser, click View tab > Windows panel > User Interface drop-down > Project Browser, or right-click anywhere in the application window and click Browsers > Project Browser.
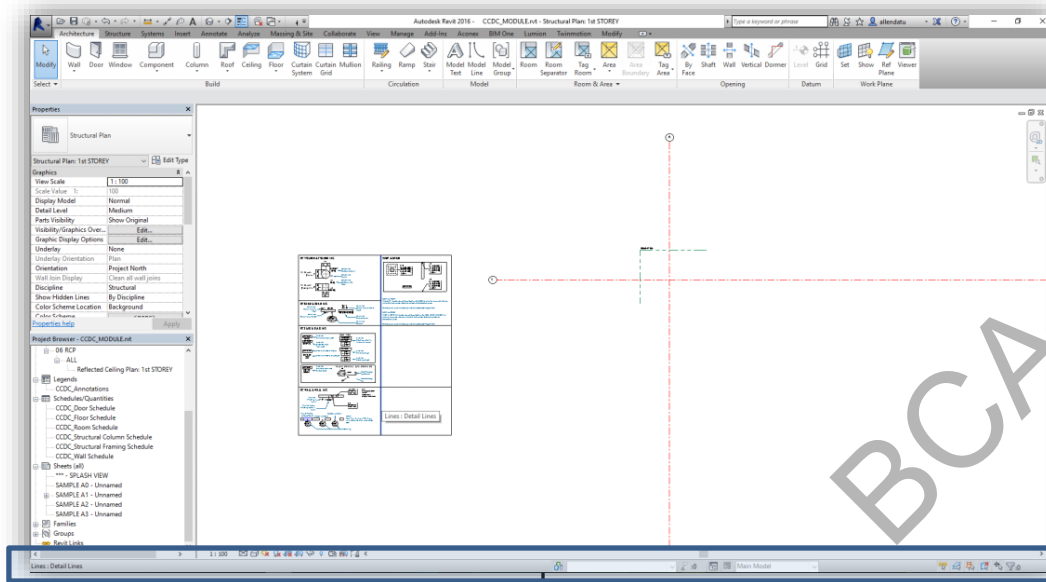

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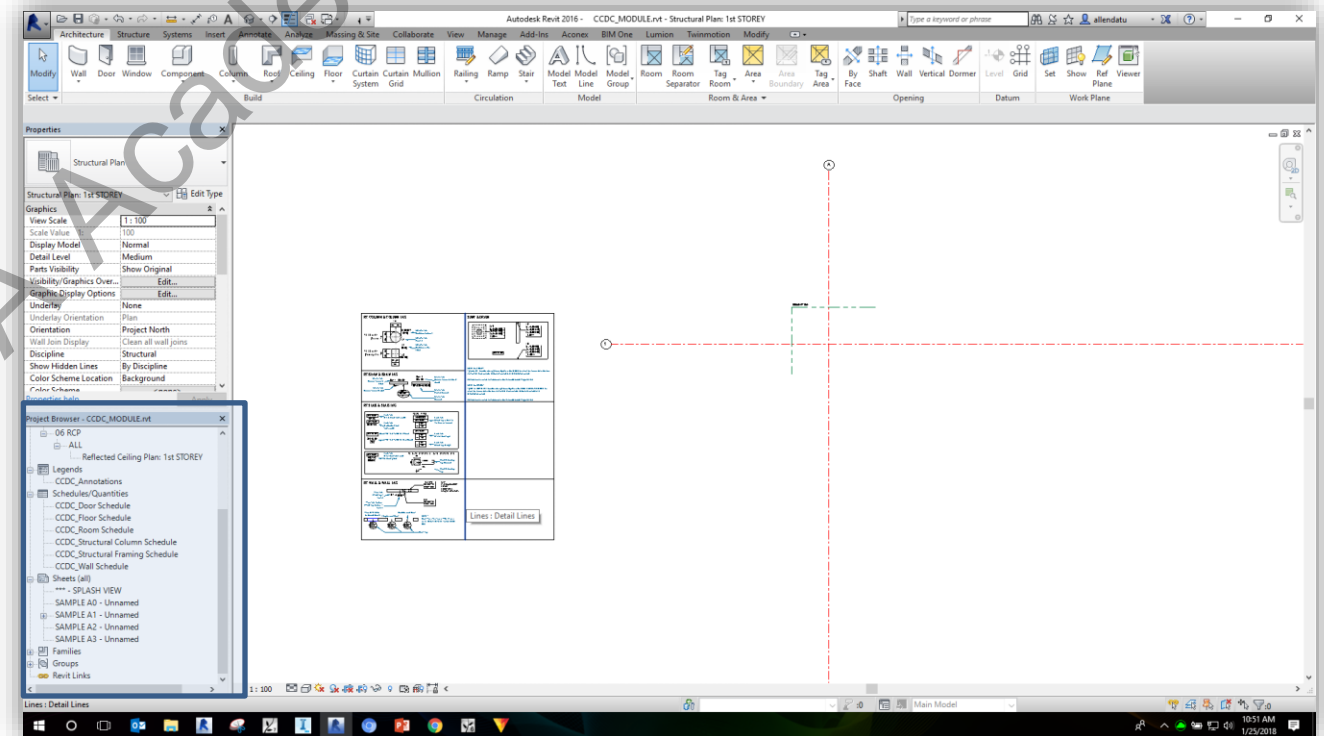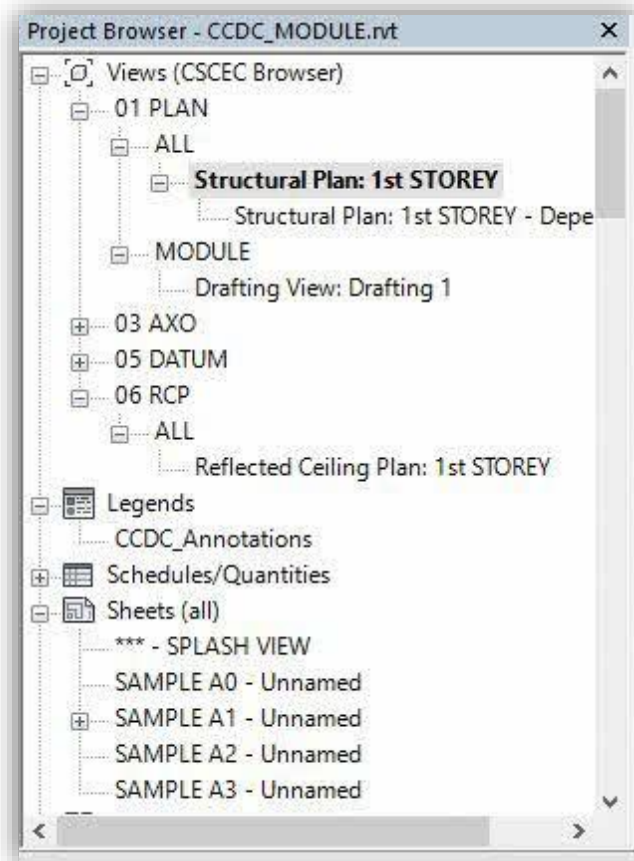
Revit Interface

9. Status Bar

The status bar provides tips or hints on what to do. When you highlight an element or component, the status bar displays the name of the family and type.

The status bar is located along the bottom of the application window.

Click to select, TAB for alternates, CTRL adds, SHIFT unselects.   :0   Main Model   :0
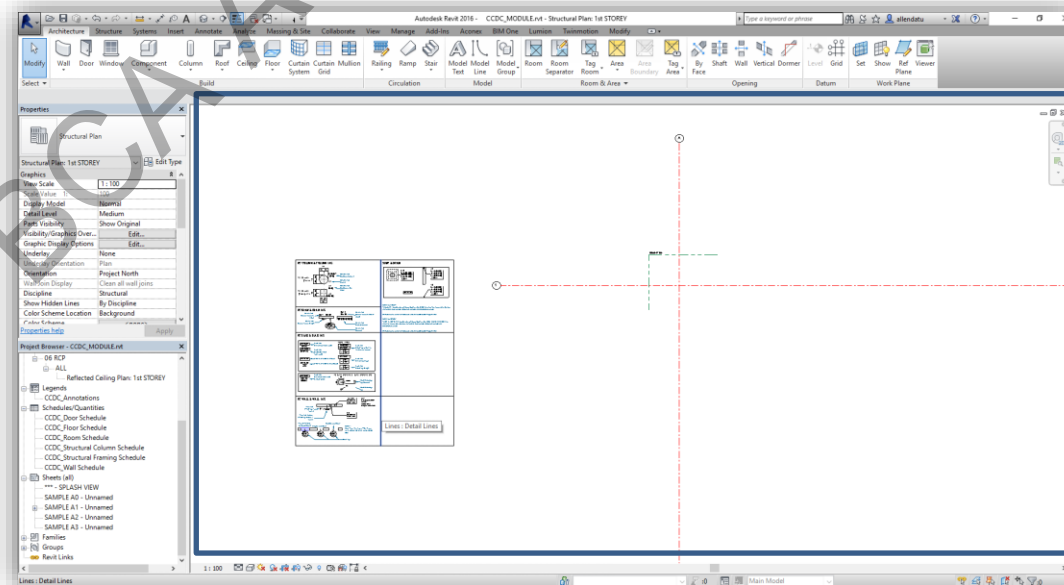
Revit Interface

10. View Control Bar

The View Control Bar provides quick access to functions that affect the current view.

The View Control Bar is located at the bottom of the view window above the status bar and includes the following tools:

11. Drawing Area

The drawing area displays views (and sheets and schedules) of the current project. Each time you open a view in a project, the view displays in the drawing area on top of other open views.

Drawing Area

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Starting a Project…