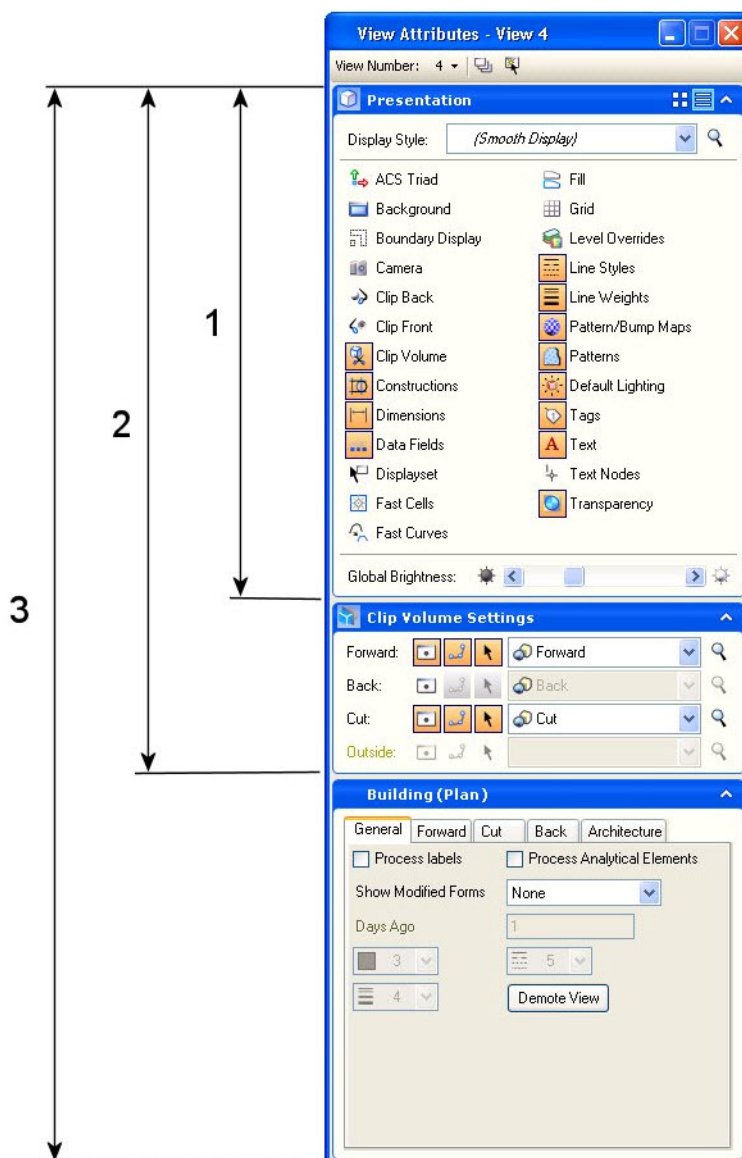


Three Steps to Dynamic View for BIM Applications

The process of creating and using dynamic views can seem daunting to even the most experienced user. The Bentley BIM applications provide tools to somewhat streamline the process. First let's take a look at Dynamic Building Views.

Understanding Building Views

There are at least three types of *Views* used in the Building implementation of Dynamic Views. They are Saved View, Dynamic View, and Building View. It is important to understand each one and their differences. These are reflected in the View Attributes dialog.

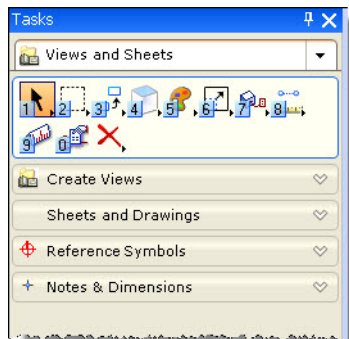


1 The View Attributes dialog with a Building plan view shown .

- 1. A *Saved View* is a well established feature in MicroStation. It allows you to store view parameters and reapply them again later to quickly achieve the same orientation, level on/off state, rendering mode, etc. of your design. Dynamic Views and Building Views build on this concept. The image above shows the View Attribute dialog box for a Building View, which is the most complex. As indicated, Saved View stores the Presentation parameters.
- 2. A *Dynamic View* is a MicroStation Saved View that stores additional information, such as the Clip Volume Settings including the Display Style for the active design file, for the Front View, for the Back View can for the Cut. As indicated in the above image, Dynamic View stores the Presentation and Clip Volume Settings parameters.
- 3. A *Building View* is a Saved View that incorporates the parameters of both the Saved View and Dynamic View and adds information regarding what Drawing Rules are active, if any, whether or not unification is active, whether or not wall centerlines are to be generated and more. As indicated in the above image, a Building Views stores the Presentation, Clip Volume Settings, and Building parameters.

Views and Sheets task interface

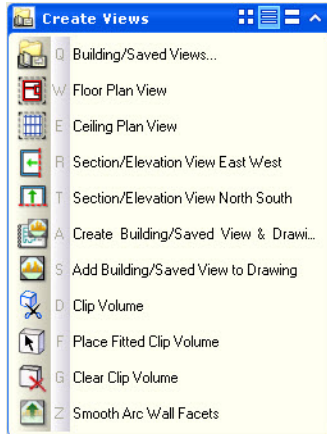
The Bentley BIM applications include tasks interface menus used in the dynamic view process. When Building BIM applications are running, several tasks related drawing composition are arranged in the Views and Sheets task interface.



2 The Views and Sheets Tasks

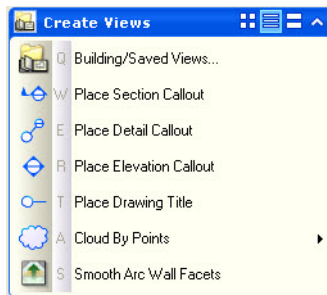
Create Views Task

The Create Views task contains tools used to create Dynamic Building views. Clip placement tools appear when the task is *opened in a 3D model*.



3 The Create Views task as seen in a Design Model.

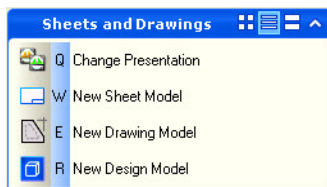
Detailing symbol callout tools appear when the task is *opened in a 2D model*.



4 The Create Views task as seen in a Drawing Model.

Sheets & Drawing Task

The Sheets & Drawing task contains tools used to create sheet, drawing and design models and define sheet boundaries, and to manipulate how reference files are processed.

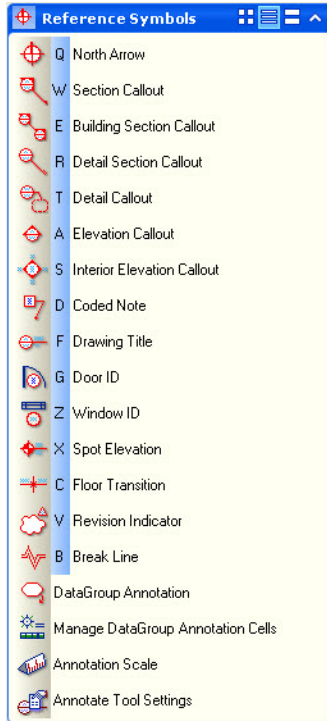


5 The Sheets and Drawing Task.

Sheets & Drawings (except Change Presentation) task tools are native to MicroStation. Please refer to MicroStation help for more information.

Reference Symbols Task

The Reference Symbols task contains tools used to create static drawing symbols, callouts, and text generally used for annotating building drawings.

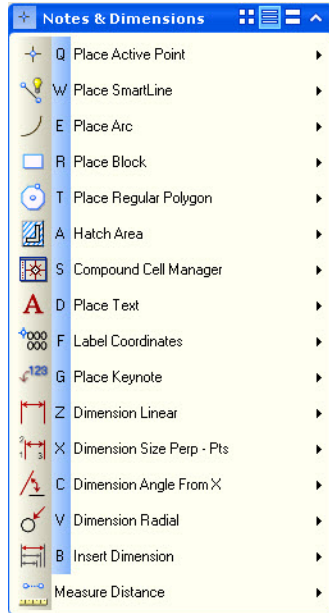


6 The Reference Symbol Task.

Reference Symbols task tools are native to Building foundation. Please refer to Building help for more information.

Notes & Dimensions Task

The Notes & Dimensions task contains tool frames with tools generally used for placing dimensions and notes on building drawings.



7 The Notes and Dimensions Task.

Notes & Dimensions task tools are native to MicroStation. Please refer to MicroStation help for more information.

Design Models, Drawing Models & Sheet Models

A drawing model is a subset of a 2D or 3D design model. It is used to apply annotations, dimensions, callouts, and other drawing components. A drawing model can only be 2D. By default, drawing model view windows have gray backgrounds. See also Design Model and Sheet Model.

Drawing models provide an environment for defining callout generated views. Sheet boundaries define the layout of the paper for plotting a Sheet model.

- Design Model: Elements which represent what is built.
- Drawing Model: 2D space to compose a drawing with global annotation.
- Sheet Model: A publish ready document which includes a boundary, sheet information, and additional annotation

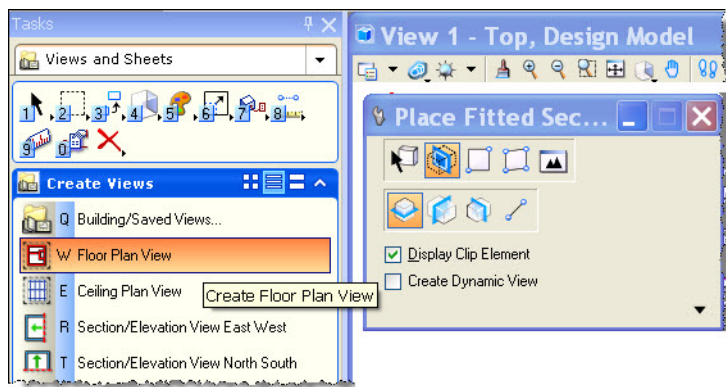
The Three Steps to Dynamic Views

- Create a Clip Volume, adjust the cut plane
- Create a Dynamic View from the Clip Volume
- Reference the Dynamic View to a Sheet

This example starts in the architectural master model file and creates a floor plan.

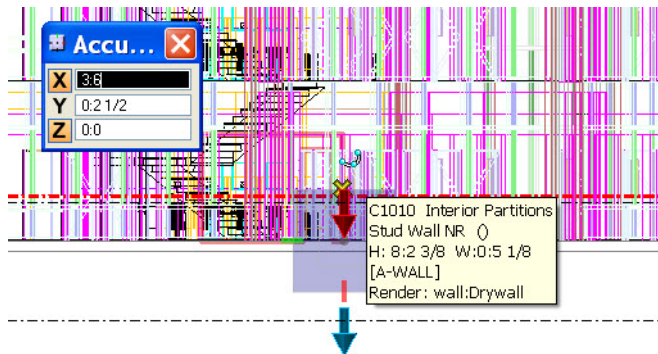
Step 1 – Create a Clip Volume and adjust the cut plane and save the view

- From the Create Views task select the tool Floor Plan View
 - In Tool Settings turn on Display Clip Element
 - In Tool Settings turn off Create Dynamic View



8 Floor Plan View Tool in the Create Views Task.

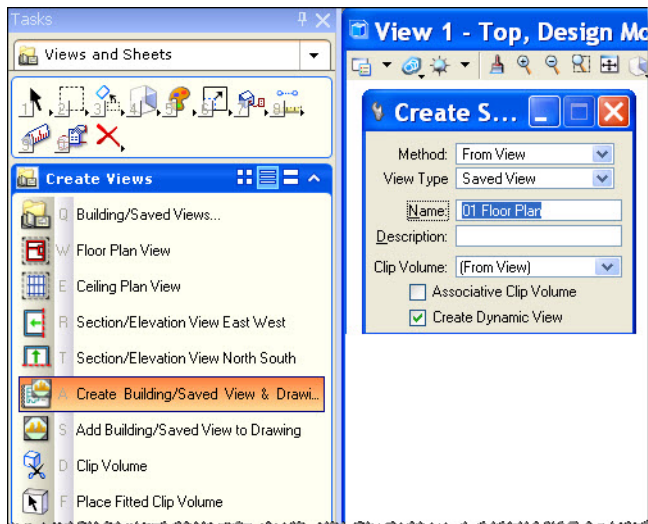
- Select a View
- Move to the Green Arrow that defines the cut plane to an elevation of 3'-6"
 - Element select the clip volume display element if the clip volume boundary and cut plane are not currently displayed
 - Use AccuSnap and AccuDraw to move the cut plane to the bottom of the first floor then offset it 3'-6".



9 The images shows using AccuDraw to adjust the cut plane for the first floor plan.

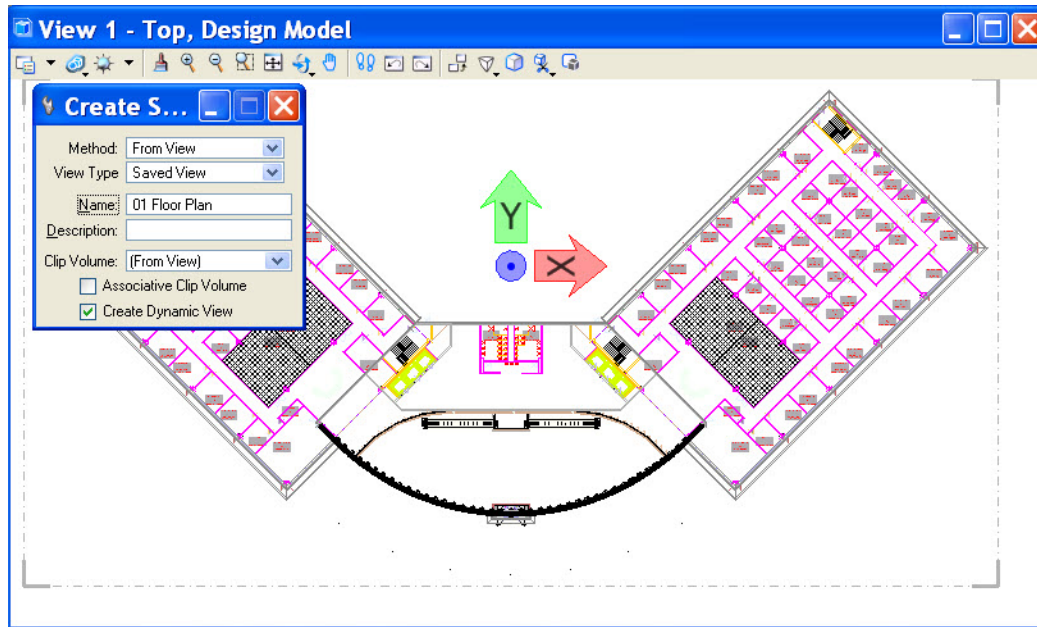
Step 2 – Create a Dynamic View from the clipped view

- Select the Create Building/Saved View & Drawing tool in the Create Views task
 - In Tool Settings set the Method to From View
 - In Tool Settings set the View Type appropriately
 - In Tool Settings name the view, e.g., 01 Floor Plan
 - In Tool Settings turn on Create Dynamic View



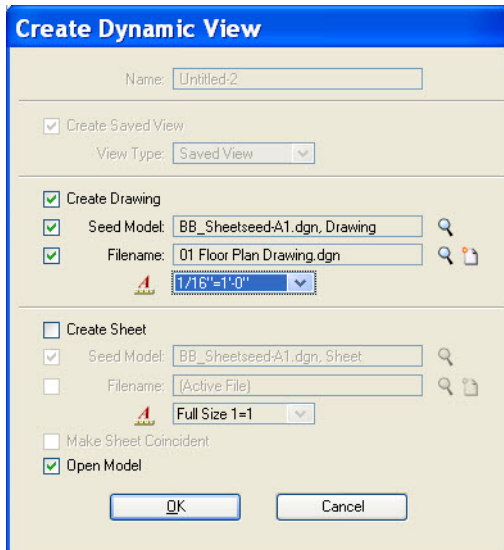
10 The Create Building/Saved View & Drawings tool in the Create Views task.

- In a *Top view orientation* select the view

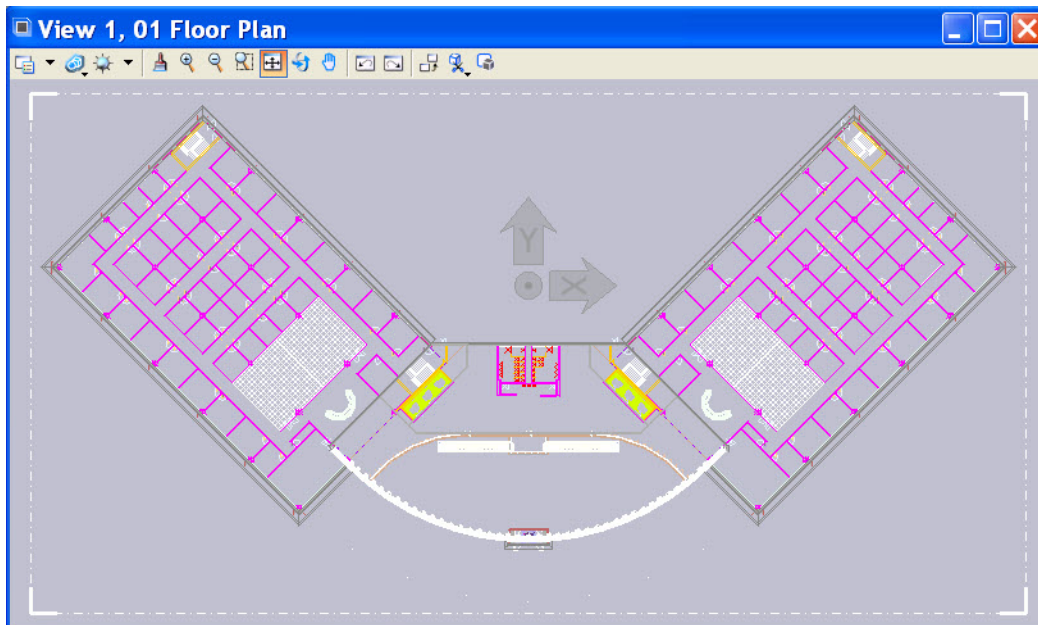


11 The image shows creating a saved view from a top clipped view.

- The Create Dynamic View dialog opens
 - Turn on Create Drawing
 - Turn on Filename and select the new icon to name the file, e.g., 01 Floor Plan Drawing.dgn
 - Set the Annotation Scale
 - Turn on Open Model
 - Click OK
 - The newly created Drawing Model (with a grey background) opens



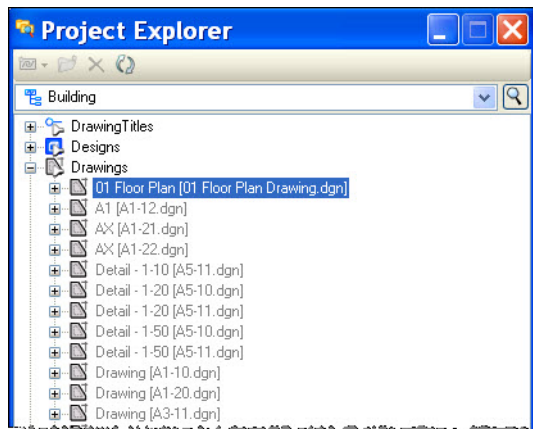
12 The Create Dynamic View dialog.



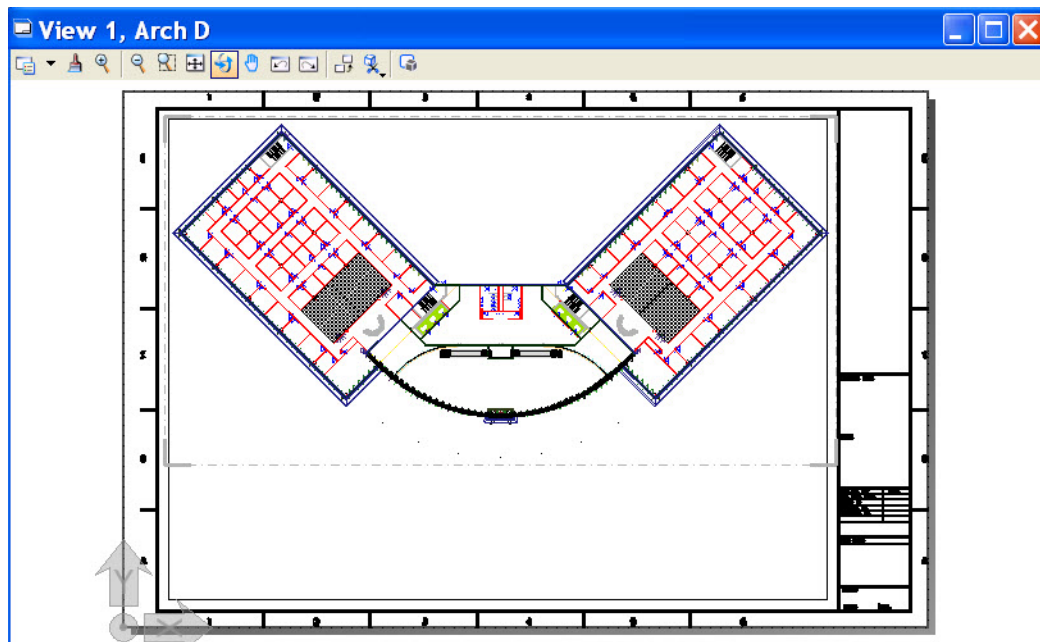
13 The image shows the 01 Floor Plan drawing model.

Step 3 – Create a sheet file and reference the Drawing Model.

- Create a sheet file
- In the sheet file go to Project Explorer, File > Project Explorer
- Expand the Drawings folder
- Drag the newly created 01 Floor Plan drawing from Project Explorer into the A-101 sheet
- The Attach Source File dialog presents itself, set to interactive and select OK
- Set the Detail Scale to 1/16"=1'-0"
- Set Nested Attachments to Live Nesting and set Depth to 3



14 Project Explorer



15 Sheet A-101