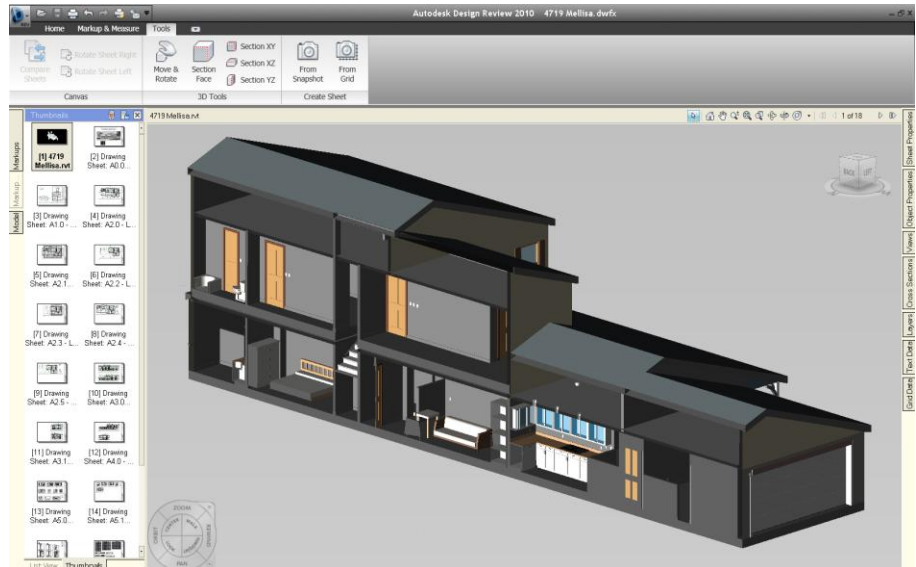


Design Review: Fundamentals

Understanding Autodesk Design Review

Autodesk Design Review improves team collaboration and communication by using design information the way it is intended to be used by the people who need it. Design Review offers an intuitive solution for reviewing and responding to designs and comments throughout a project lifecycle. Design Review along with your other Autodesk Products such as, AutoCAD, Revit, Inventor, Civil 3D and Map 3D join forces to bring you comprehensive and timely revision capabilities. Electronically review, mark up and revise designs throughout your projects lifecycle.

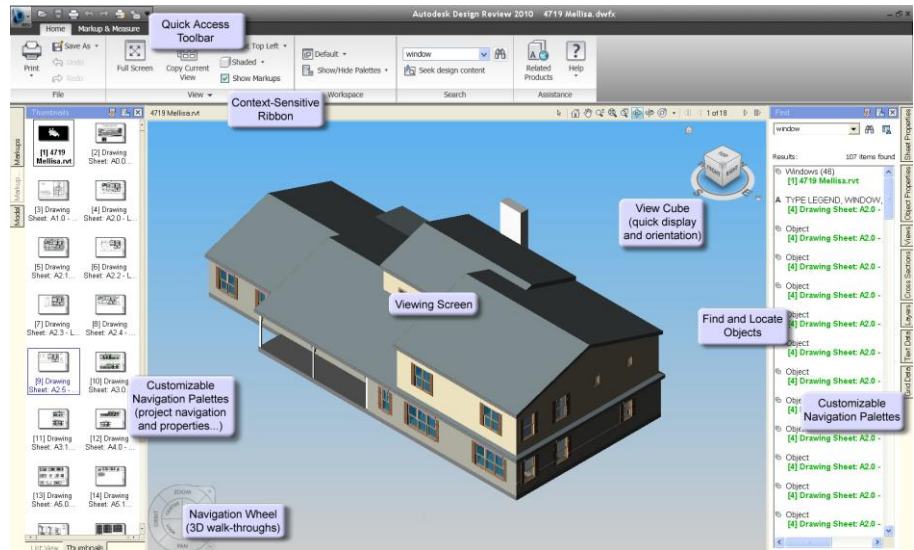


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- Easily publish and share drawings, models, or both from your Autodesk applications. Use Autodesk Design Review to enable non-CAD users to view and analyze a design exactly as the designer intended. Combine multiple PDF, DWF, and DWG files into a single DWF file. Add digital signatures to DWF files to verifiably show that the file hasn't been tampered with or altered since being published.
- Make your design review clear and concise with features like redline, call-out, stamps, and custom symbols. Measure distances, lengths and areas in drawings and models using built-in measurement tools.
- Automatically track project status with complete recording of markups, text annotations, measurements, review status, and additional notes. Easily import markups into the original Autodesk design software when you receive reviewed files. You can also manage markups in Autodesk Buzzsaw, Autodesk Streamline, and Autodesk Vault Manufacturing software, the collaborative project management solutions.

Autodesk Design Review New User Interface

- The User Interface:
 - Ribbons
 - Content Palettes
 - Shortcut Menus
 - Find and Locate
 - View Cube
 - Navigation Wheel
 - View Window



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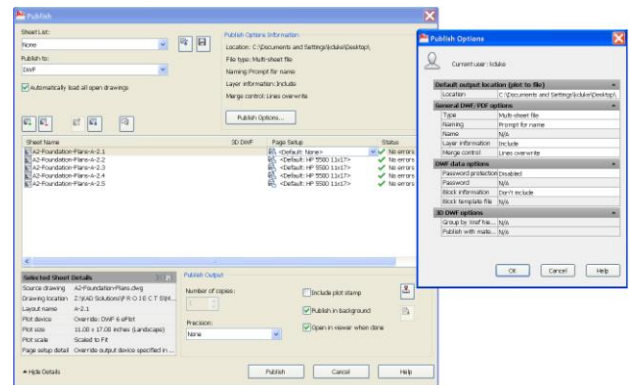
Publishing and Creating a DWF

Publishing from AutoCAD

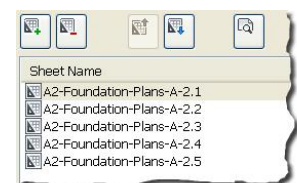
1. In AutoCAD 2009/2010, select File > Open > select a file.
2. Make sure your file has the correct page set-up and pen settings. This will ensure a proper look and feel for your DWF once published: File > Pages Setup Manager

Note: All the options for publishing a DWF or DWFx file:

- File>Publish
- File>Plot (be sure to use *DWF6 ePlot.pc3* or *DWFx ePlot.pc3*)
- Output tab>Export
- File>Export (choose *.dwt* or *.dwfx* extension)



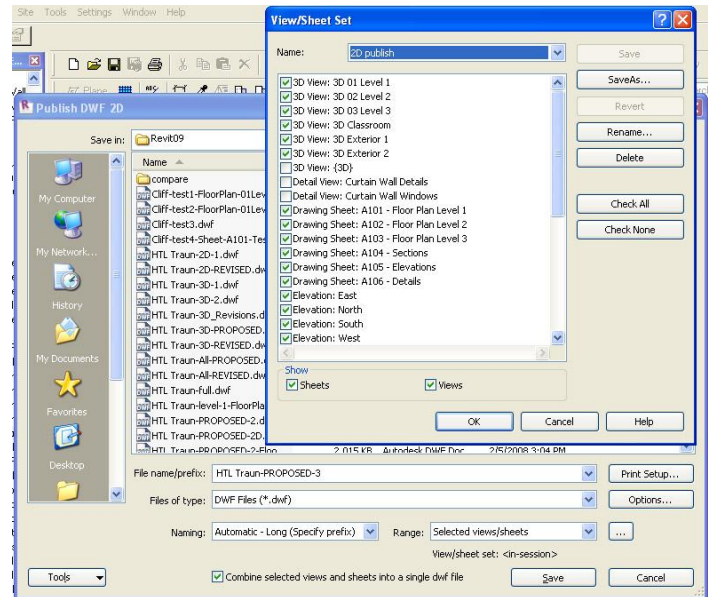
1. Publish 2D sheets by selecting File > Publish. This will open the Publish DWF dialog.
2. In the Publish to: pull down choose *dwt*; now click Publish Options (set your options for type, location, password and more...) then click OK
3. In the sheet name list, add or remove sheet layouts by selecting the Add/Remove icons or right click on the sheet name and choose: Add Sheets... or Remove
4. Set your Page Setup for each sheet layout in the page setup pull downs
5. Now Publish the DWF by choosing



Note: To learn more about the other options in the publish dialog box refer to the *AutoCAD Fundamentals* course offered by *Imaginit Technologies*

Publishing from Revit Architecture

1. In Revit Architecture 2009, select File>Open > select a file.
2. Make sure you are in the *Default 3D view*. This view will be an initial view within Design Review. Or you can set up a new camera. View > New > Camera.
3. Publish a 3D DWF file: File > Publish DWF > 3D DWF choose a location for the file and save
4. Publish 2D sheets by selecting File > Publish DWF > 2D DWF. This will open the Publish 2D DWF dialog.
5. Be sure to select “Combine selected views and sheets into a single dwf file”, and that Range: is set to “Selected views/sheets”. This is where you select all sheets you want in your DWF file.
6. Select the Print Setup button, and set up the sheet sizes, and other print parameters for the DWF sheets.
7. Now Publish the DWF by choosing “Save”
Note: Do not actually publish the file, as it may take some time.
8. Be sure to merge the 2D DWF sheets and the 3D DWF together into one file. To do this, you can open both files, and drag the 3D DWF model thumbnail into the thumbnails of the 2D sheets thumbnails.



Open and Review

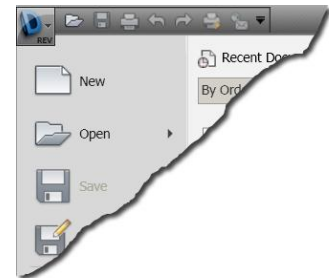
1. In Design Review, select the *Design Review Button* at the top left of the screen File > Open > select a file.
2. If the file has multiple pages you can use the *List View or Thumbnail Palette* to choose which page you want to view by simply left clicking on it
3. Select on the page that shows the *3D Model*
4. Now select the *Model Palette*, you should see a list of objects now listed in the model palette window

Note: As you expand and select the names of objects in this window the objects will then be highlighted in your model

5. You can also right click on the object names in the *Model Palette* window
6. Right click > and choose *Hide Others* (all the objects except the one you have chosen should disappear)
7. While the object is still selected go to the *Object Properties Palette* and view in depth properties about the object

Note: Model objects only work in DWF's composed from BIM related software (2D DWF consist of Layers not objects)

8. After viewing your objects > right click in the *View Screen* and choose *Show All Objects* (all your objects should now be visible again)



Viewing in 3D

Navigation Wheel Viewing

1. The *Navigation Wheel* is designed to make viewing multiple viewing styles easy to locate and use from a single source, these styles include zoom, orbit, pan, center, look, walk, up/down, and rewind
2. If the *Navigation Wheel* is on screen hover over it and choose > Try Me
3. If the *Navigation Wheel* is not viewable on screen > hold down the shift key + W this will toggle the *Navigation Wheel* on and off



Note: To use the functions of the *Navigation Wheel* you must left click over the viewing style you want to use and hold down on the left mouse button (the *Navigation Wheel* will only work in a 3D view)

Mouse Viewing

1. Click and hold the Wheel Button on your mouse to pan your view from side to side
2. Scroll the Wheel Button up or away from you to zoom in on your view
3. Scroll the Wheel Button down or toward you to zoom out on your view
4. Hold Shift and click and hold the Wheel button on your mouse to orbit around your view

View Cube

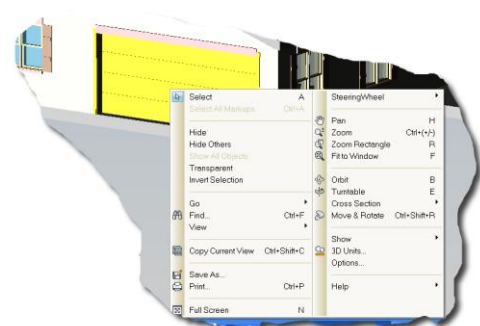
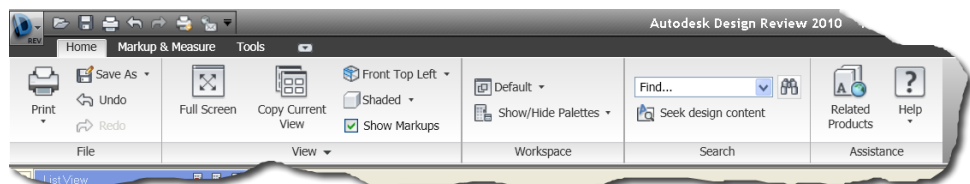
1. The *View Cube* can be used to view preset camera angles around your model
2. Hover the mouse over an area of the *View Cube* and click on the highlighted area to go to that preset view
3. The *Home* button in the top left will re-orient the view back to the default preset view
4. The pull down in the bottom right has more options such as Home, perspective, and more



Notes: You can also hover over the N, S, E, and W symbols to rotate the view on the center axis (The *View Cube* is also only available in 3D views)

Find and Locate Objects

1. Click on the *Home* tab of the *Ribbons* and go to the Search panel
2. Click in the "find" text box and type in the name or key word for an object
3. The *find* dialog box will open and list all the objects that match your description
4. Click on any of the object names listed and Design Review will highlight and zoom in on that specific object in the *Viewing Window*
5. Right click the object in the *Viewing Window* to access the right click *Shortcut Menu*



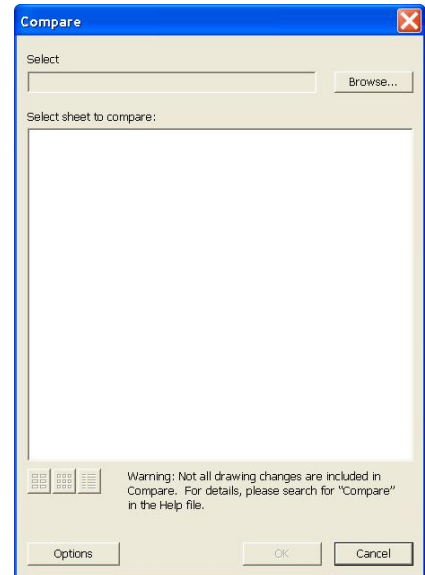
Design Review Tools

Compare Tool

In this section you use Design Review again as the reviewer and approve the changes that were made by the designer, using the Compare tool.

Note: *The Compare tool works only on 2D sheets.*

1. In your original dwf choose Tools > Compare Sheets. The compare dialog box will open.
2. Click Browse, and choose the comparison file with the new changes
3. Multiple sheets may open in the file. Be sure to select the sheet that aligns with the sheet you are on.
4. Click *Options* to change the colors for additions and deletions. (Choose colors that do not conflict with colors on your sheet.)
5. Click *OK*.
6. Once the compare process is complete, additions, deletions, and modifications to drawing geometry are displayed with highlighting and overlaid on the original drawing geometry.



Creating Sections

1. While in a 3d *Model View* choose Tools > Section Face
2. Click on a face of an object in the *Viewing Window*. This will create a section based on the face you have chosen
3. A "Triad" symbol should appear as represented in (Fig.1)
4. Hover over the *Triad* symbol in different areas to control the way the section will cut your model
5. After positioning the section cut, left click in the *Viewing Window* to set and turn off the section cut symbols
6. Choose the *Cross Sections Palette* to the right of the screen, this will list all the sections that you have in your Model (Fig.2)
7. Right Click on any of the section names to see the Shortcut Menu and manipulate the section to your new preferences (Fig.2)

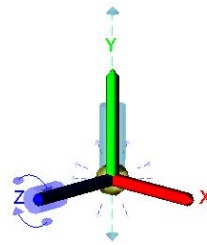


Fig. 1

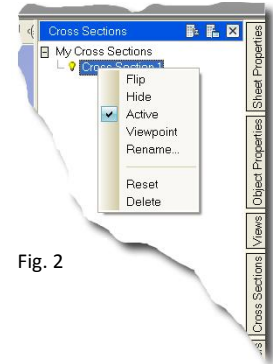


Fig. 2

Sheet Creation

1. While in any view zoom into the area that you want to create a new sheet from
- Note:** *This is like creating an enlarged view on its own sheet*
2. Choose Tools > From Snapshot, The *Snapshot Window* should appear in the *Viewing Window*
 3. Hover over the edges of the *Snapshot Window*; > Left click and drag to change the size of the *Snapshot Window*
 4. Once the window is situated to your liking; choose the *Camera Button* at the bottom left of the *Snapshot Window*

Note: *The Snapshot Window can be positioned on top of any program running on your computer (While multiple programs are running, follow step 2, then just minimize Design Review or open the program you want to take a snapshot from)*

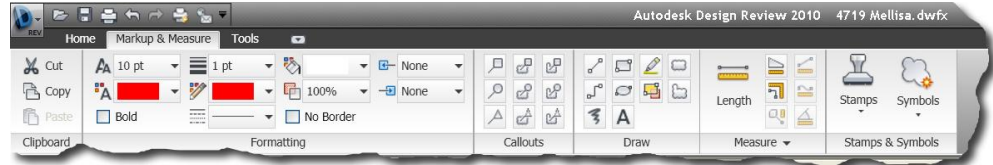


Markup and Measure

Measure

1. Choose Markup and Measure > Length
2. Select the first edge of an object in a 3D Model View or the first endpoint on an object in a 2D view
3. Now select the second edge or endpoint to create the measurement

Note: This will work in a 3D Model View or in a 2D Sheet View



Area

1. Choose Markup and Measure > Area
2. Select a point at the corner of the area you want to calculate
3. Now continue around the perimeter selecting each corner of the area
4. Once finished selecting the points hit the Esc key to finish the command

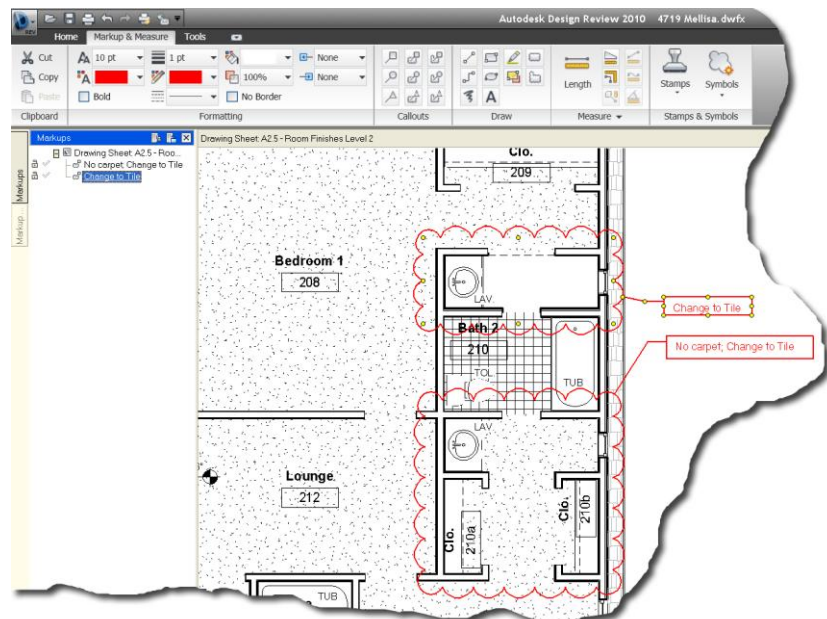
Note: This will only work in a 2D View

Markup

1. Choose Markup and Measure > Callouts
2. Select the desired *Callout*
3. You can now select the multiple options on the formatting *Panel* which include:
 - a. Text Formatting
 - b. Polycloud Formatting
 - c. Leader and Text Box Formatting
4. After selecting the type of *Callout* you want to use
5. Place the callout by:
 - a. Choosing the start point of leader and then endpoint of leader then type in required text for The *Rectangle (Circle, Triangle) Callout*
 - b. Choosing the starting corner of your rectangle, opposite corner of rectangle and then endpoint of leader, then type in required text for *Rectangle (Circle, Triangle) Callout With a Rectangle Cloud*
 - c. choose starting point of polycloud, pick each corner of desired polycloud shape, connect last point with first and then endpoint of leader, then type in required text for *Rectangle (Circle, Triangle) Callout With a Polycloud*

6. After creating a *Callout* press the Esc Key > Select the Callout use the formatting panel to change the formatting of the Callout

Note: At any time throughout your review process (Choose the Markups Palette and you can see a list of all the Markups in the project > select any Markup and the View associated with that Markup should automatically open, zoom, and select the desired Markup)



Printing

1. Choose the Design Review icon in the top left > print (shortcut = ctrl+p)
2. The print dialog box will open
3. Now you can change the settings of the print per your project
4. Settings include: printer, paper size, print range, page handling, scaling and alignment, orientation, print color, and performance tuning

For advanced Design Review techniques refer to Design Review Advanced (Tips and Tricks), Coming Soon

