

Automatically Create Reference Planes from CAD

Monday, May 22, 2023 10:45 AM

How to run Dynamo script for creating Reference Planes from CAD Links.

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The process below outlines the steps for creating reference planes from a AutoCAD link using a Dynamo script.

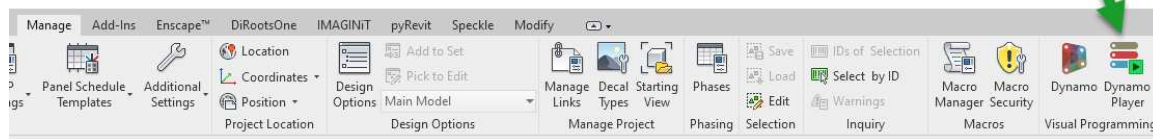
Supported Revit Years: 2022, 2023

Script Name: Reference Planes from CAD

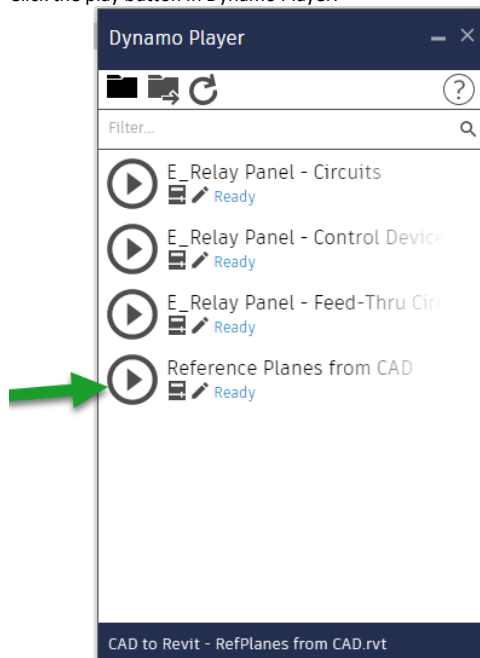
<input type="checkbox"/> Name	Date modified	Type	Size
2019	5/2/2023 11:48 AM	File folder	
2020	5/2/2023 11:48 AM	File folder	
2021	5/2/2023 11:48 AM	File folder	
2022	5/22/2023 10:37 AM	File folder	
2023	5/22/2023 10:37 AM	File folder	

Note: It is recommended to run this automation before you create other reference planes.

1. With your project model open, go the Manage tab and click on Dynamo Player:



2. Click the play button in Dynamo Player:



3. Choose the AutoCAD links that you would like to use to create the reference planes:
Note: If there are multiple instances of a link the automation may not create the reference planes correctly.

Data-Shapes | Multi Input UI ++

- ☐ 2350002178aflr - 1st FLOOR.dwg
- ☐ 2350002178aflr - 2nd FLOOR.dwg

< [scrollbar] >

☐ Select all ☐ Select none

Set Values

4. Choose the appropriate layers you would like to use to make the reference planes:

Data-Shapes | Multi Input UI ++

Wall Layers

- ☐ A-EXT-WALL
- ☐ A-EXT-WALL-EXISTING
- ☐ A-WALL
- ☐ I-HINT-LOWWALL
- ☐ I-HINT-WALL

< [scrollbar] >

☐ Select all ☐ Select none

Non-Wall Layers

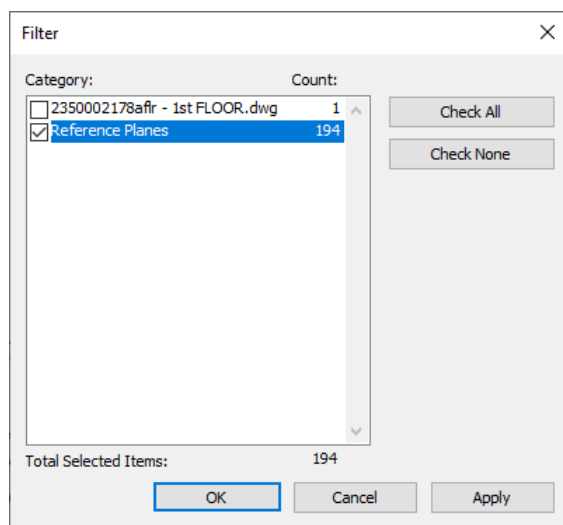
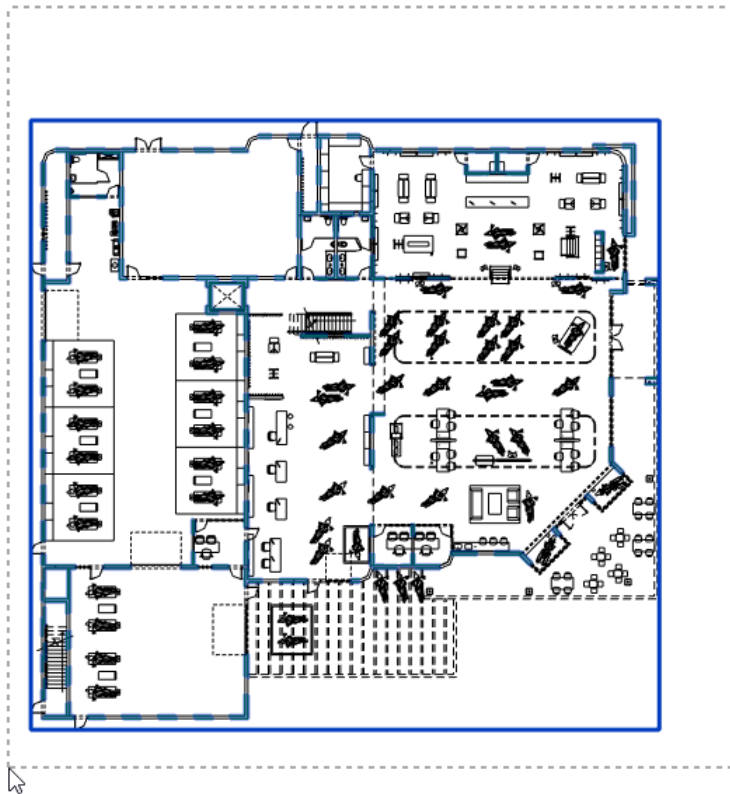
- ☐ 0
- ☐ A-ANNO-DIMS
- ☐ A-CLG-GRID
- ☐ A-CONC.-SLAB
- ☐ A-DETAILS
- ☐ A-DIMS
- ☐ A-DOORS
- ☐ A-EQUIPMENT
- ☐ A-FIXTURES
- ☐ A-FURNITURE
- ☐ A-FURNITURE TAG

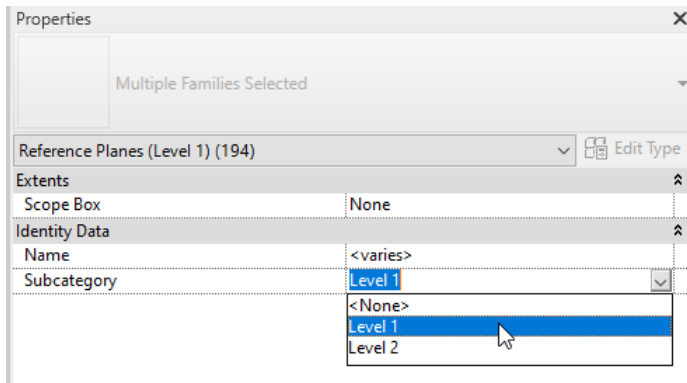
< [scrollbar] >

☐ Select all ☐ Select none

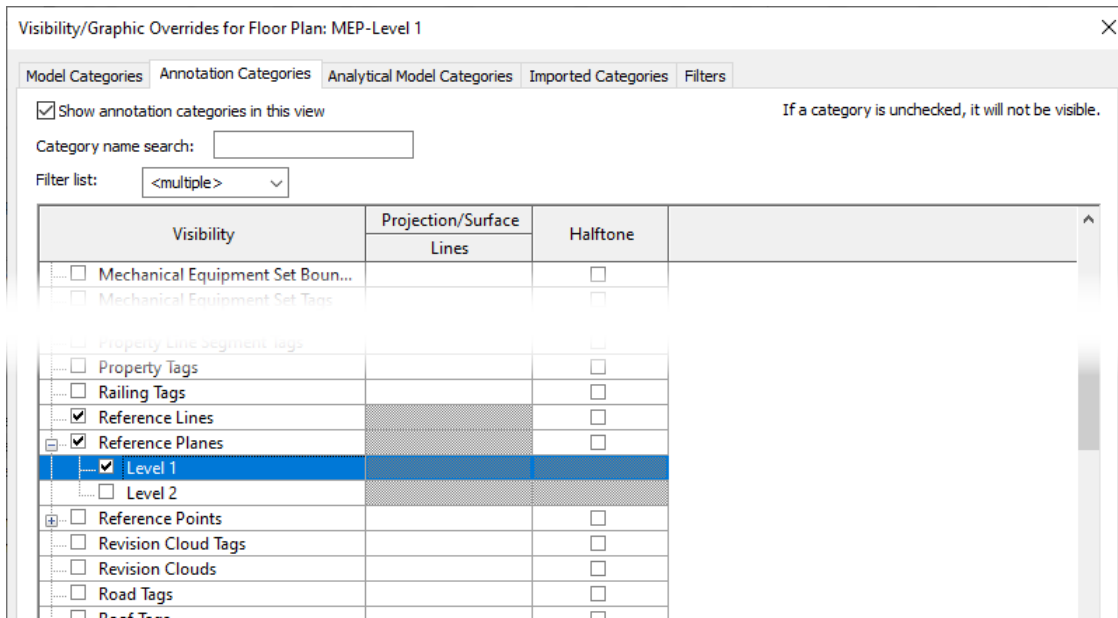
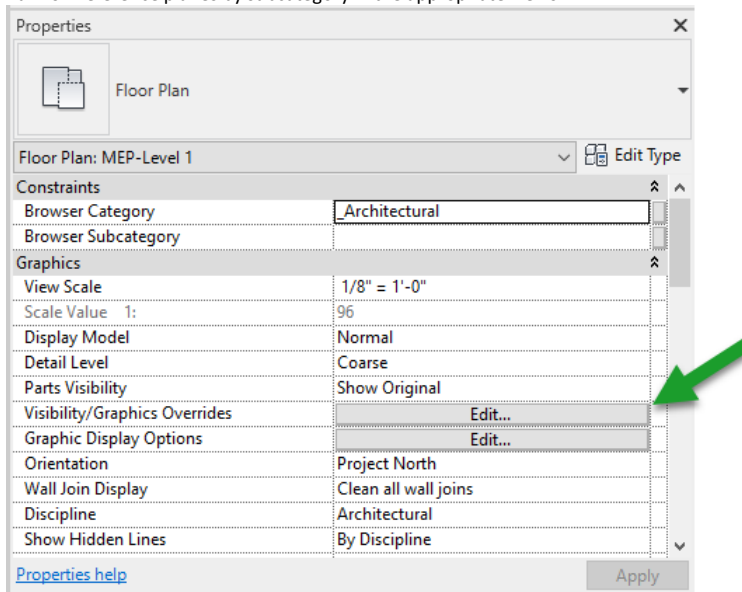
Set Values

5. Open the 1st floor/lowest level where you expect to see the reference planes and switch all reference planes to an appropriate subcategory:
 Note: The script will create subcategories based on the number of links you selected. Example: Level 1, Level 2





7. Turn off reference planes by subcategory in the appropriate views:



Repeat these step for every level.