# **EnneadTab-For-Revit**

Secret Documentation 2025-03-06

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#### **3D Workset Views**

**Tooltip:** Create 3D workset checking view in your working folder. Each workset will get a 3D view that only have this workset turned on.

If there are no 'Views\_\$Group' and 'Views\_\$Series' in the view parameter, such as the case in using other firm file setup, the tool will not introduce 'Views\_\$Group' and 'Views\_\$Series' to them, the new 3D workset views will be just using revit default '???' group.

[Popular]



# **Batch Format Family Name**

Tooltip: Batch rename family names to follow Healthcare standard naming convention.

#### Format:

CATEGORY\_MainDescription\_FIRM[\_AdditionalInfo][\_HOSTING]

#### Examples:

LITE\_PendantLamp\_EA\_Vitra\_CH DOOR\_Telescopic\_EC\_TwoPanel\_WH FURN\_Chair\_EA\_Tack

#### Components:

- CATEGORY: Category abbreviation or CSI Division No. (e.g., LITE, DOOR, FURN)
- MainDescription: CamelCase, no underscores or spaces (e.g., PendantLamp, Telescopic)
- FIRM: EA (EnneadArchitects) or EC (EwingCole)
- AdditionalInfo: Optional Shape/Brand/Note
- HOSTING: Optional WH(Wall)/CH(Ceiling)/FH(Floor)/FC(Face)



# **Check Linked-View Relationship**

Tooltip: Check all the linked\_views in the project



# **Check Phase Mapping**

Tooltip: Get the phase mapping of mutiple documents.



#### **Collect Textures**

**Tooltip:** Choose a new destination for texture images. Then Collect Textures copies all material texture images to this new location, and updates texture image path.



#### **ColorScheme To Excel**

Tooltip: Use me tp export selected Color Scheme To Excel. You have the option to exclude unused color.

[Popular]



#### **Create Sheets By Excel**

Tooltip: Create new sheets based on data from Excel.

If you need help on what kind of Excel to prepare, you can open a sample excel and begin from there.

[Popular]



#### **Create Worksets**

Tooltip: Create Worksets following the standard Ennead Workset Structure.

You can the options to create any or all from below:

[Popular]



## **Duplicate Area Scheme**

Tooltip: Duplicates a Revit area scheme to a new area scheme with all boundaries and areas.

This tool allows you to:

- 1. Select an existing area scheme to duplicate
- 2. Provide a new unique name for the duplicated scheme
- 3. Choose which views to include in the duplication process
- 4. Automatically transfer all boundaries and areas to the new scheme



## **Export Filled Region Types**

**Tooltip:** Export the filled region color setting to excel so you can use it elsewhere.



#### **Family RePath**

**Tooltip:** Find family file path. And remap the path to a folder you picked. In this folder, families will be organised based on their category.

This will also load the repathed families back to central model.

You have the option to sync and close after the long-boring reloading.

You also have the option to dig inside the nesting family and save them.

[Popular]



# **Family Tree**

Tooltip: Quick display of family tree for current and all nesting family of the current family.



### **Inspect Excel Formula**

**Tooltip:** Are you having trouble trusting the excel when it is past to you from someone else? What if the formula is incorrect and is citing the wrong cell? You could not know it unless you click each one of the cell and see if there is a hidden formula.

Now this formula checker will help you find every hidden formula so you can see for yourself. It highlight the cells as dash.

[Popular]



# **Inspect Local Graphic Override**

**Tooltip:** For views on selected sheets, inspect if there are local graphic override or local hidden objects that is not controlled by template.



# Legend&Schedule; Where?

**Tooltip:** Which Legand and Schedule were used? Where are they? If you have been wondering about those question, this tool can help you with it.

It list all the current locations for the schedules and legend, with a clickable link!



#### **Lines-In-View Locator**

Tooltip: Locate the heavy usage view for detail line and model line in current Revit file.

This is inspired by the orginal pyrevit tool.



#### Links2Worksets

Tooltip: Convert each revit link into its own workset.



#### **List Families**

Tooltip: Lists selected families in organized views.

This script allows listing of both 2D detail items and 3D families in dedicated views.

Detail items are placed in a drafting view while 3D families can be placed in either
a 3D view or floor plan view. Families are organized by category with labels and optional tags.

#### Key Features:

- Supports both 2D detail items and 3D families
- Organizes families by category with clear labeling
- Creates dedicated views for family display
- Optional tagging support
- Handles hosted families with appropriate host elements
- Creates category-specific filtered views

#### Note:

3D families will be visible in all project views. The script creates an internal level far from the main project levels to minimize interference.



# **Merge Object Style**

Tooltip: Consider using Ideate instead



### **Open Sample Excel**

Tooltip: Get a sample excel to fill out data in similar format.

Using those format will make it easy to generate dummy sheets in Revit.

Please note that Chinese translation will require special care when saving excel format.



### **Project Initiating**

Tooltip: A floating window that give you quick access to all kinds of function needed when a new project is starting.

- +Default Workset Creation
- +New Sheet Created From Excel
- +Quick project info filling



# **Property Line From Excel**

Tooltip: Generate detail line from the Excel survey pt data. Best used for property line geneation.



# **QAQC** Reporter

**Tooltip:** Allow you to generate basic QAQC report based on current document, and use human language to chat with the report to get QAQC status.

This tool features openAl in the background for the chatbot part.

[Popular]



#### **Rename Nesting Family**

Tooltip: Scans through project families and their nested components to remove '\*ConflictingName' string.

#### PROCESS:

- Iterates through all families in current project
- Opens each family document
- Checks nested families for '\*ConflictingName' string
- Renames affected nested families by removing the conflicting string
- Loads modified families back to project
- Logs all changes made during the process



# **Repath Dwg Drive Letter**

Tooltip: Pick the old and new drive letters to repath all linked DWGs.



### **Smart Egress Path**

Tooltip:

Update smart egress path maker family data.

[Popular]



#### **Smart Match Grid Extend**

**Tooltip:** Get all floor plans and area plans for each view, find all grids. Then for each end of the grid decide if it should show bubble or not based on the status of same bubble from same level in REF dict.



#### **Transfer Parameter Data**

**Tooltip:** Transfer some data from one parameter to another.

When you inherated from older file some parameter is carried over and now you have duplcated parameter container. Use this to cleanup the parameter panel

[Popular]



### **Update DOB Page Number**

Tooltip: For DOB submission in NYC there reuqires a page number on the titleblock.



# **Wall Type Diagram**

**Tooltip:** Generate walltype legand view as well as view filter. The color is picked based on related filled region type, if not avaibale then pick new color for you.



# **Family Browser**

**Tooltip:** A floating window that can help you search the family from AppliedComputing Library.

Disclaimer: EnneadTab only help you find the family, but is not participating in the creation and maintainance of the family library.



# **MetaData Exporter**

**Tooltip:** Process all the family file to generate a metadata file for usage later.



# **How to Use Ennead Library**

**Tooltip:** Click the icon to load the family, some older revit version family will be upgraded during the process. Then you can start to use it.



## **Block2Family**

Tooltip: Converts Rhino blocks to Revit families.

This script processes block data exported from Rhino to create or update corresponding families in Revit. Key features:

- Creates new families from Rhino block geometry
- Updates existing family instances
- Handles transformations (move/rotate) by removing old instances and creating new ones
- Preserves block parameters as family parameters
- Supports both UV projection (flat-modeled) and standing geometry
- Maintains Rhino block IDs for tracking

Input: .sexyDuck files containing block data from Rhino

Output: Revit family instances with matching geometry and parameters

[Popular]



## **Brep2Mass**

**Tooltip:** Based on the brep data exported from EnneadTab for Rhino, create adaptive mass shape as native Revit object.



#### **Content Transfer**

**Tooltip:** A floating window that enables the transfer of view templates, object styles (SubCategory), and materials. The primary distinction between this tool and the default 'Transfer Project Standard' is its selective transfer capabilities.

[Popular]



# **DWG Export Update Layer**

**Tooltip:** Randomize the layer color, and rename the layer to to format below: Category\_SubCategory

This tool does not change other existing setting for this export setting. It makes life in Rhino easier after exporting contents over.



### **Ennead Exporter**

Tooltip: A great helper for your print on deadline. Feastures include:

- -pdf, dwg, jpg export together
- -Package export files to subfolders in destination folder by assigned prefix and file type
- -Prefix for auto numbering
- -Email result as a link to folder.
- -Time esitmation, with increasing accuracy the more you export
- -Identify color setting per parameter on sheet. So you can mix color and BW export together.
- -Option to sync and close files after exporting done.
- -Export sheets by revision mark instead of printSet, and allow selective export without desrupting shared printSet.
- -Export views on sheet seperatedly for dwg.
- -Export from links or open docs.
- -Merge pdf after export.
- -JOKE while exporting.



### **Export SubCategory Material Table**

Tooltip: Export the OST and material table so it can be used in Rhino import when using 'map Revit SubC'.

With this tool, the layer in Rhino can be assigned with similar Revit material based on layer names.

If you have not done already, you can update dwg export layer mapping with EnneadTab first so each SubCategory in object style table become something rhino layer can match.



# **Import Rhino Camera**

Tooltip: Work with Camera exported in Rhino side to recreate the same perspective camera.

It can be useful for Enscape view recreation in Revit.



### **Isolated Export By System Family Type**

Tooltip: Pick category and type for the dwg export. It will isolate elements by types in the view and give individual .dwg file.

The child elements such as shared family will be isolated as well.

Use EnneadTab for Rhino to get things under type parent layers.

Currently handle Wall/Floor/Roof/Column/Stair

This tool primarily deal with the system family category that normally will be difficult to seperate in dwg export.



### Map Rhino Block to Revit Family

**Tooltip:** Transform the Rhino block orientation to Adaptive Revit Family. It will be searching for same name as block name.

The biggest benift is You will no longer be restricted by level based vertical up family. It can be freeform as in Rhino.



#### Move2Origin

Tooltip: Move this family to the internal origin under current orienttation.

There are 3 modes for the operation:

- 1: Family is placed on 3d view, but location is wrong.>>>You select it and move it.
- 2: Family is placed on 3d view somewhere but you don't know where.>>>You select it from listbox and move it.
- 3: The family is just loaded in, it is new, and has not been placed anywhere.>>> You select it from list and move it.

[Popular]



#### **Review On Miro**

Tooltip: Using bluebeam for markup is tricky when your old markup cannot transfer to new PDF background.

Now you have many version of the markup and you need to repeatively markup same content if they are not picked up.

With review Revit on miro, you can export the sheets as images and push them to a dedicated Miro board. New sheets will be marked with blue cross, updated sheets will be marked with orange star.

You are free to reorganize sheets however you want and mark as much as you like. The updated image will find the replace background image and your markup will continously live untill they are picked up.

Note: Due to CBI account restriction, I can only use a personal miro account for it. Feel free to just ask me for a board.



#### Revit2Rhino

Tooltip:

Script for exporting Revit Family Instances to Rhino.

It converts each FamilyInstance's geometry into a \*\*single Rhino block\*\* containing all its Breps (or fallback Meshes). The block definition is annotated with 'RevitElementID'.

This only process current view.

TO-DO: accept layer making



#### **Rhino Drafter**

**Tooltip:** A drafter that allow you to take advantage of Rhino fast editing power. You can operate however you want for crvs and surfaces in Rhino, and transfer those content to Revit detail lines and filled regions with matching linestyle and filled region type.

Some Rhino command to consider:

- +Trim
- +Split
- +Fillet
- +CurveBoolean
- +EditControlPoints
- +Surface trim/split.

It also support nurbs crv or srf with nurbs edge, and it support AreaBoundaryLine and RoomSeperationLine drafting.

[Popular]



#### Rhino2Revit

Tooltip: Convert .3dm and .dwg files into native Revit family elements.

Key Features:

- Assign subcategories per file
- Add new subcategories on the fly
- Use source filename as subcategory
- Support major curve conversion (except NURBS curves with control points on different CPlanes)

Best used with EnneadTab for Rhino's Rhino2Revit exporter window.

Format Support:

- .3dm Files:
- Stable conversion to native Revit elements
- Individual control of Boolean, Subcategory, Visibility, Dimensions
- Requires clean source models

.dwg Files:

- More tolerant of model imperfections
- Handles lines, arcs, circles and planar NURBS curves
- Elements from same source file are grouped
- Creates Import subcategories (auto-cleaned)



# RoomOrArea2Diagram

Tooltip: Export Revit Rooms/Areas to Rhino as color-coded diagrams.

This tool creates a simplified diagram representation of Rooms or Areas in Rhino:

- Exports boundaries with filleted corners
- Maintains color coding from Revit color schemes
- Adds text labels for space identifiers
- Creates solid hatches for each space



[Popular]

#### Schedule2Excel

Tooltip: Export and open schedule in excel.



# Srf2Adp

**Tooltip:** Convert surface in Rhino into Revit Adaptive. The sequence of the adaptive corner needs to be defined in previous step at Rhino.



# **Change Family Unit**

Tooltip: Convert between a typical imperial family and metric family by setting up unit.



#### **CurtainWall Location Manager**

Tooltip: Manager your curtain wall locations by converting walls in current plan to abstract line.

You can then modify/confirm the location of CW wall in that diagram and update the actual CW wall with this tool.

Left Click: Process current view Right Click: Process selected views

You also have the option to include EOS lines in the diagrams, as long as the floor type name contain "struc".

You can use working-view-manager to export those Abstract wall diagram views to jpgs and can review those quicker.



#### **DWG Manager**

Tooltip: A floating window that help you manage DWG in the files.

You can find, select, zoom any dwgs with detailed infor on creator, view association, hidden status, workset, file path and file size.

For linked dwgs, you might also open file directly, open folder directly, and repath links to a selected folder.

[Popular]



[Popular]

### **Family Parameter Batch Creation**

Tooltip: Help you get started with many families by adding many useful parameter quickly.



# **Fire Rating Graphic**

Tooltip: Manager fire rating in wall property, and apply/update rating graphic across multiple views.



### Identify Wrong Type Of KeynoteTAG

Tooltip: You should avoid using user keynotes, but if someone already did in the project, you can find them here.

Also, element keynote and material keynote should be used by it repsected types.

If there is mismatch, this tool will attempt to find them. The rule as as such, if there is 'material' mentioned in the type name or family name, and the tag is pointing to a element key data, it will warn you.

The same go for the element keynote types.

User keynote, since no one should really use it, will be highlighted as blue.



### **Isolate Warnings**

Tooltip: In the standalone window, you can zoom in with section box to a region that have a warning.

As you are fixing it, you will see the warning count going down. When you sync baack after all the fix, the EA coins will be rewarded..



#### **KeynoteTAG Reset Color**

Tooltip: Reset all keynote tag local override color to default. It might got its color from the other checking type button.



### **Load Family From Link**

Tooltip: Load family from linked revit file without open those links.



# **Load Multiple Families To Multiple Docs**

Tooltip: Pick many families, and load them to many projects. You can:

- 1 family >> x projects
- x families >> 1 projects
- x families >> x projects
- 1 family >> 1 project

Have bonus option to sync and close after done. And have option to pre-pick shared family loading behaviour. Handy for loading big family at end of day.



### **Manage Working Views**

**Tooltip:** A floating window that give you quick access to review un-sheeted views, ranked by creator, view group, view type and more. View name can be prefixed to make it more informative the author even from project broswer.

The review process can be quick becasue the view have been exported as jpgs and reviewed quickly. You can also directly open actual view, or delete view in the same window after reviewing.

If you want to limit how much to see, you can show only views from you.

[Popular]



### **Merge Family**

Tooltip: Merge a few family types to a target family type:

For instance parameters, the tool tries to record as much information as it can, so after the merging, similar data can be applied back to maintain the graphical consistency.

There is a built-in check that will search for differences in type parameter data. Should differences be found, you will be prompted to decide to continue with merge or cancel.

If you find no ideal target type, you may also choose to create a new type under good family with the bad type data and type name.

This tool will work for most 2D and 3D families, as well as Tags.

[Popular]



# Proj. Parameter Batch Adding

**Tooltip:** Batch adding shared parameters to multiple project files. This can reduce mistake during manual operation of repeating task.

If this shared parameter has been added before, it will not add again. Note that for Revit, the spelling is not important, the GUID is important.



### **Remove Not Placed Area and Rooms**

**Tooltip:** This tool allows you to manage room and area accuracy by identifying and removing elements that are not properly placed in the project.

#### Features:

- Remove unplaced rooms and areas
- Identify unbounded/redundant elements for review
- Phase-specific room inspection
- Find elements with negative areas or missing department assignments

[Popular]



### **Shake All Tags**

**Tooltip:** Sometimes the tag will not update after updating the component info. This can be resolved by shifting the tags up and down to force them to update.

This tool moved all tags on the selected sheets back-and-forth by a tiny amount to force Revit to regenerate the tag and update the display. This makes sure the tags are all reading something.



### **Track Detail Group**

Tooltip: Location the usage of detail groups by view or by group type.

[Popular]



# WorkSet Manager

Tooltip: A floating window that help you correct worksets by category, by host or by type.

Contents inside design option can also change workset as long as they are not in group.



### **App Store**

Tooltip: Sen Zhang has not writed documentation for this tool, but he should!



#### **Assistant**

Tooltip: All resource and documentation to help.

- +Turtorials
- +Youtube playlist
- +Family fomula cheatsheet
- +Bugs reports
- +Feedbacks
- +EA websites
- +Autodesk health websites
- +Rhino and Revit cache folder
- +Decoding the GUID name for BIM360 folder
- +Installation for other enneadtab products
- +Force kill sync monitor record.
- +Training Videos: Scott's Friday training videos.
- +Time sheet helper: Help you remember what you worked on each date.



#### **Beer Tab**

Tooltip: Go get a drink!



#### **ChatGPT**

Tooltip: Fire UP ChatGPT in Revit.

It can answer any questions you might have.



# **Display Revit Warning History**

Tooltip:

This shows the history of warnings for file(s) that had been recorded by EnneadTab

Left Click: Check current document.

Shift Click: Check results from a selection of projects.



#### **Documentation Hint**

Tooltip: Quickly print all the [Did you know] documentations.



## **EnneadTab Setting**

Tooltip: All basic setting for the EnneadTab for Revit.

- +Tabs avaliablity
- +Tab Color.
- +Switching between Lite and Pro version.
- +Notification Setting.
- +Duck Setting.

etc



#### **MiniBank**

Tooltip: A floating window that check the Ennead Minibank record for user ranking and recent event.



#### **Open Ecosystem Folder**

Tooltip: Jump to the ecosystem folder where you can inspect all the magic.



#### Reload EnneadTab

Tooltip: Reload entire UI so can get newer buttons.....



#### Soft Reload

Tooltip: Just download the new repo and unzip. This will not reload the Reevit for UI change.



#### **Tell Me Version**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



# **Unit Test**

Tooltip: Test the core modules



#### **Al Translate**

Tooltip: Translate sheet names, view names, and maybe one day annotations.

[Popular]



### Align H. Curtain Grid To Detail Lines/Levels(Elevation)

Tooltip: Move the horitiontal curtain grids on a curtain wall to nearest intersecting Detail Lines/Levels.

Do this on elevation view.



#### Align V. Curtain Grid To Detail Lines/Grids(Plan)

Tooltip: Move the vertical curtain grids on a curtain wall to nearest intersecting Detail Lines/Grids.

Do this on plan view.



# **Apply Panel Radius**

Tooltip: Pick curtain panel type and apply host wall radius to panel radius on parameter defined by user.

[Popular]



#### **Batch Cut Elements**

Tooltip: Good for batch cutting many curtain panels at once with same void.

[Popular]



# **Color-Code Design Option**

**Tooltip:** Give elements in selected design options a color in selected views, so you can visualize what is inside each option.



# **Detail Line By Excel**

Tooltip: Generate detail line from the Excel survey pt data. Best used for property line geneation.



# **Dim Text Helper**

Tooltip: A floating window that give you quick access to add dim text below your selected dim or dims.

You can use any of the popular dim text, or use your own by typing in the user bar.

You may also pick the relative position on the text to the default numbering.(Up, Down, Prefix, Surfix)

[Popular]



#### **HealthCare Helper**

Tooltip: This will be the foundation for all future health care tools



#### Join All Column/Floor

Tooltip: Sen Zhang has not writed documentation for this tool, but he should!



# Open Doc(s) Siliently

**Tooltip:** Open many docs siliently, meaning any warning will be swallowed so the opening will not be stopped, and a summery is returned at final stage.

Also support audit and no-workset opening option.



# **Orient Scopebox**

**Tooltip:** Need at leat one model line as refference, and one scopebox to play with. Becasue the initial oriteation of the scopebox can be unpredicatable so i cannot ganrantee it finish in one go, but by large it can find the angle within 3 clicks.



#### **Reset Join/Cut**

Tooltip: Sen Zhang has not writed documentation for this tool, but he should!



# See You Again

Tooltip: Schedule current revit(s) to reopen as current files.

You can set to reopen in a few minutes, or 8 am tomorrow, or next monday morning.

This si especially helpful for team taking long time to open files everyday.



### Set FilledRegion Border Style

**Tooltip:** Set the filled region border line to a specific line style. You cannot access this tool while inside group editor, but you can still access each filled region by tabing and then use this button.



### **Super Renamer**

Tooltip: A floating window that give you quick access to all kinds of renamer function.

- Add/Remove a prefix for selected views.
- Change Views/SHeets to upper case.
- Format view names based on detail number and sheet number.
- Rename family on spot without going thru the project broswer.

[Popular]



# Sync All Open Proj and Close

Tooltip: for every open document(except family document), it sync with central. Then Close

[Popular]



# Sync All Open Proj

Tooltip: for every open document(except family document), it sync with central



# **Tag Aligner**

Tooltip: A floating window that give you quick access to align tags horitiontally or vertically after picking a ref tag.



# **Toggle Contents**

Tooltip: Control some pin and unpin status, or hide un hide status, or bubble head.

You can play with many different categories to control.



### **Open App Store**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



## **Ownership Inspect**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



#### **Pick Absolute Similar**

Tooltip: Plck one element, and this tool will pick all the elements that are absolutely similar to the first one.

#### Notes

- Requires valid FamilySymbol that exists in current document
- Will exit gracefully if selected element is not found



#### **Prefilter Selection**

**Tooltip:** Just like the prefilter selection in Rhino, this allow you to narrow down selection beofre heavy window selection and post filter.

Very helpful when the drawing is very crowded.

You can enable multiple category at same time.

Let Sen.Z know if you would like to add more to the category list.



#### **Search Command**

Tooltip: Commandline for Revit

Find those button function you might not know where to find.

The search result is ranked as follow:

- -Tool name begins with user input text.
- -Tool name contains user input text.
- -Tool help documentation contains user input text.

The main info panel shows the button icon image, which panel to find it, the full documentation, any hyper link to El post and Youtube Demo video if available.

You can also directly activate the tool with the 'GO' button or 'Enter' key.

You also have the option to search only EnneadTab buttons or Native Revit buttons.

On top left corner there is a minimize button, so you can keep it small when not using it.

[Popular]



### **Toggle Warnings**

Tooltip: Show warnings in the active view.



# What Happened?

**Tooltip:** A floating window that give you information of the creator, editor and owner of selected elements and active view.



# 01\_Family Path BIM360

Tooltip: Order by GD



### **Check Design Option(Depreciated)**

**Tooltip:** See what is inside your design option by colorize them.



#### **Discover Line Pattern**

Tooltip: Find the line patterns that are similar in definition but silightly different.



### **Export GIF From Archive Model**

Tooltip: Attempt to export the same axon view from archive files



#### **Find Louvers**

Tooltip: Filter selection for panels with 'is\_double pane spandrel' and 'is\_louver lower' checked.



#### Floor Drafter

Tooltip: TO-DO: this has potential, should revisit when there is a demand



#### **GUI Match Pink**

Tooltip: Attemp to match sketch element. DO NOT USE, see newer api for eketch class.



# **Hide Section in Elevation by Orientation**

Tooltip: Hide the wall section marks in elevations if its defined orientation does not match the orienation of the elevation.

This will resolve the issue of seeing wall section mark from the other side of the building, but you cannot change view depth per design reason.



#### **List All Unit Ids**

Tooltip: List all Forgeld for units



### Modify LineStyle in Group(For A.Chi)

Tooltip: WORK IN PROGRESS, attempt to edit the linestyle usage that is bound to groups.



#### Refomula Label

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



#### **Rename All Fam**

Tooltip: Batch rename Revit families by replacing '\_INT' and '\_EXT' suffixes with '\_EA'.

Key Features:

- Processes all families in the current document
- Handles naming conflicts automatically
- Provides detailed progress feedback
- Logs failed rename operations



#### Rename Level

Tooltip: Remove '\_' in level names, and replace 'C' to 'E'



## **Replace Keynote With Symbol**

**Tooltip:** Find and replace user keynote with annotation symbol.



### **Show Category Temporarily**

Tooltip: for selected sheets, and selected categories, turn on the categories temperarly.



# **Temp Graphic Test**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



#### **Transfer Sheet Order**

Tooltip: Get the sheet order parameter value to a new format.



#### rename Grids

Tooltip: Replace \_ with - in grid names



### rename scopebox

Tooltip: Rename scopebox by removing all '\_' in scopebox name



### resize\_wall\_tags

Tooltip: Resize wall tags leader length to a user defined model space distance.



# sum\_area\_from\_link

Tooltip: Sum all the area from link.



# test\_coloner

Tooltip: Test to clone from url using LibGit2Sharp.dll



# test\_get\_rvt\_link\_data\_in\_template

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



### test\_schema

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



# test\_temp\_graphic

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



# (OLD)Excel2Diagram

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



### **Align Key Plams**

Tooltip: Align all keyplan to one source location viewpotty.



#### **AreaPlan to RoomPlan**

Tooltip: Convert all area boundary line to room seperation line, area to room in current view



# Assign Linked Views to PlanSet 7

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



### **Excel2Diagram**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



#### **Fillet Area Corner**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



### **Load Color Template**

Tooltip: Update color scheme with office template excel version

J:\1643\2\_Master File\B-70\_Programming\01\_Program & Analysis\2024-04-11 Color Scheme\_LHH.xls.

NOTE: excel should be saved with .xls instead of .xlsx format

Also note, the column header should be as such:

- A: Department(Section Name)
- B: Department Abbr.
- C: Department Color
- D: Program(SubSection Name)
- E: Program Abbr.
- F: Program Color

ANYTHING ELSE IN THE EXCEL FILE WILL BE IGNORED, including the hex code text on color cell and red, green, blue value number

Those manual color text cannot be trusted on the long run.



#### **Match Phase Sheet Layout**

**Tooltip:** Use me to batch align viewports over many sheet. It search the matching rule by detail number, then apply same title offset and title line length. This is built or LHH phasing diagrams and works way better than Ideate for this senario.



### **Phase Diagram Layout update**

Tooltip: layout viewport on sheet based on the phasing and level name



#### **Rename Views**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



# **Smart Match Grid Graphic**

Tooltip: This use the grphaical extend setup on all main LifeSafety view as guide to set all plan view grid visual.

It is the best invention since ketchup.



#### Text Area --> Area

Tooltip: Get the text type parameter value to area value by removing the 'SF' in the value and convert to float type



### **Update Keyplan**

Tooltip: Auto pick keyplan based on the first doc view phase



# **Update Life Safety Info**

Tooltip: Update the life safety information data



# **Update WWR chart**

Tooltip: Update the window wall ratio chart by reading filled region in groups



# capitalize\_data

Tooltip: Make all area data capitalized



### change\_para\_key\_group

**Tooltip:** Change parameter keygroup of LifeSafetKey



## grid\_magic\_name

Tooltip: Format grid name



# publish\_360

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



# shift\_phase

Tooltip: shift the created phase from 7 to 6



# update\_delta\_area\_graphic

Tooltip: update the delta area graphic



# update\_grid\_bldgld

**Tooltip:** Update grid bldgld with its scopebox information



# update\_level\_relative\_value

Tooltip: Update the relative value of the level so one level can display two set of datum.



# **Open Favorite Views by Set**

**Tooltip:** Open many views by picking from print sets.



#### 2124\_Replace Room Tag

Tooltip: Replacing one type of roomtag on many sheets to another type.

This process is not the same as merging. It is just doing selected replacement.



#### **Align Viewports**

Tooltip: Align selected viewports to the right handside, with view title coming to right as well.



#### **Find All Door Not Tagged**

**Tooltip:** Find doors from this project that are not tagged yet. You can pick sheets to process. Only plan views will be considered.

Requested by J.H.Park



#### Find dup BEA room number

Tooltip: Find room with duplicated BEA room number per phase.



### **Offset View Crop**

Tooltip: Expand or shrink view crop on multiple viewports.



### **Set Filled Region Boundary Linestyle**

Tooltip: Set the filled region border line to a specific line style



# Randomly Reduce Panel Selection to 5 pack, requested by Chiwhei

**Tooltip:** Randomly deselect from selection input.



#### 01\_remove not placed area(Legacy)

Tooltip: Legacy, now in review panel



#### 02\_fill in default discount ratio if has not been filled

Tooltip: Doc string not set



### 03.0\_Assign Bldg ID data by Scopebox

Tooltip: xxx



# 03.2\_change furnichure level by bldg id

Tooltip: Relocate the furnichure level of the selected elements by building ID



#### 04.1\_efficiency block data filler

**Tooltip:** Get the data reading based on the rule from Efficiency schedule, process them and fill to the graphical symbol data calculator on sheets, which shows the workstation seat count, net area and gross area, and what is the efficiency rate of this level.



#### 05\_area to excel 2.0, N3 Only

Tooltip: Gather the data of GFA area plans and publish it to Excel in the format requested by the client.



#### 06\_fix keyplan

Tooltip: Batch apply keyplan instance parameter to many sheets.



#### 07\_sheet, floor, level and grid plot number

**Tooltip:** Assign plot ID to all sheet, floor, level and grid elements in project. This is critical for having a accurate sheedule from linked file.



#### 08\_prefix views

**Tooltip:** Prefix user input text before view names. Good for organizing workings such as slab edge drawings and GFA drawings.



#### 09\_add node to surf, N3 spehere only

Tooltip: Set surface divider number on selected face.



#### 10\_By List: multiple panel radius by host wall

Tooltip: pick panel types to be fixed, it will update the 'R' or 'r' parameter based on the curved host wall



#### 11\_prefix grids

Tooltip: Prefix grid name with 'temp'



#### 12\_turn on elevator note and update data

**Tooltip:** Turn on elevator notes about the base level and top level of the elevator model, its usage mark, and when was the last time this scheck was run.



#### 15.1\_fix color\_room department 2.0

Tooltip: Find the room department that is using names other than agreed name list. And attempt to fix it.

Name list location:

I:\2135\6\_Team\CH\2022-03-05 Color Scheme\Room Department Script.txt



#### 16\_fix color\_area department

Tooltip: If area department is not part of user allowed list, find them and replace them.



#### 17\_fix color\_area office layout function

Tooltip: Get areas with department assignment outside predefined name list. And attempt to fix them.



#### 18\_set bullit point by/to revision on sheet

**Tooltip:** Transfer the data between issing parameter and titleblock revision schedule. Also can transfer issue data from last round to current round.



#### 19\_[PDF and DWG and JPG exporter] <-----

**Tooltip:** The original flavour auto-exporter. It export pdf and dwgs and jpg, package them to different folders, and control the print by issuing parameter. The paper size and color setting is picked automatically by sheets parameter.



#### 20\_copy material from link, load family(beta) from link

Tooltip: Copy graphical property of material from link, but keep the keynote data untouched.



#### 21.1\_Open Many Bili Proj

Tooltip: Open many Bili projects together.



#### 23\_frit gradient

Tooltip: Apply grediant frit pattern to the ADP family instance.



#### 24.1\_Show/Hide Markups and Office layout 2.0

**Tooltip:** For office markup elements (internal textnotes, sketch dims, etc), the tool goes thru the entire file and find them on each view, then it either hide and show them based on your choice.



#### 25\_remove near or overlapped area or room tags

Tooltip: Remove area tag or room tags that is visually very close on same view.



#### 26\_align dim acroos sheet

Tooltip: NOT IN USE



#### 27\_TAG MANY VIEWS---

**Tooltip:** Select views from project browser, remove tags that are too close to other tags( if they are taging the same element).

It then tags Objects with user selected type



#### 28\_Set/Reset Empty Titleblock.

**Tooltip:** Some LDI prefer a totally empty titleblock. Unfortunately, the revision schedule cannot be turned on/off by parameter control. SO this tool, will remove the sheet revisions, and store that information at the issue parameters. Then the titleblock can be turned empty. After the export, the tool can be used to recover sheet revision schedule.

Why not switch to another empty titleblock family? Becasue when switching, non-shared-instance-parameter will reset. So you will lose any local setting.



#### 29\_transfer area to other scheme

**Tooltip:** Get the area boundary lines and areas from one area scheme to another.



#### 3.3\_recreate room on correct level

**Tooltip:** Get the rooms that does not have associate level matching building id, then try to recreate this room in the coorect associate level. This is a common problem in early SD/DD where rooms are created in similar height levels and the information locked to it.



#### 30\_remove dup area boundary line

Tooltip: Remove duplicated the area boundary line for each view.



#### 31\_what is in design option?(Legacy)

Tooltip: Legacy, now you can do better in color code design option



#### 33\_check monitoring status(Site File only)

**Tooltip:** In the revit file with copy/monitor status, compare how many levels and grids have two way monitor status and how many have one way monitor.

This usually happens when somewhere in the life cycle one side the element is recreated/deleted or massively renamed, which means other link file need to catchup. This takes you further than the native copy/monitor review.



### 34\_uncheck view note and translation from template

**Tooltip:** Unbind the checkbox for view note and translation parameter from the view templates.



#### 35 Elevation and Grid orth-direction

Tooltip: Check if all of your grids and elevations is orthoganal.



#### 36\_repeat ADP

**Tooltip:** For selected ADP componenets that have been placed. Run 'Repeat' Command for all of them. This saves you huge time on waiting for recalculating patterned placement.



### 37A\_set protected element(grid, level, scopebox)(NOT IN USE)

Tooltip: NOT IN USE



#### 37B\_set protected element without name(NOT IN USE)

Tooltip: NOT IN USE



#### 37C\_review protected elements(NOT IN USE)

Tooltip: NOT IN USE



### 38\_Purge SubC

**Tooltip:** Purge Subcategory(Danger)



#### 39\_wall max\_height

Tooltip: Find the geometrical max height of walls and store that data at 'Element\_Max\_Height\_Report' parameter



#### 40\_Floor to Filled region

**Tooltip:** Recreate a filled region using the same shape as the floor.



#### 41\_ check if sheet on schedule

**Tooltip:** Force to make all sheets check this 'Appears In Sheet List'. You are suggested to always use other method to filter sheets in schedule, becasue a QAQC sheet schedule should be able to see every sheet, including the onces not for documentation.



#### 42\_inspect material keynote, material, family and object style

Tooltip: Inspect the material keynote, material, subCategory relationship and where there are being used.



#### 44.1\_update internal dim selection set

**Tooltip:** Find the dims of internal dim type, and update the selection filter set for filter control.



#### 44\_set/recover no color elevation/sections/plans

**Tooltip:** For many cateogries, set or recover the color and surface pattern status so the dwg can have non-solid hatch. Many LDI prefer the dwg this way, while EA pdf would prefer to show full foreground and background surface pattern.



#### 45\_transfer material color background

Tooltip: Make material foreground graphic to background graphic



#### 46A\_move elements south 4500 thru copy/delete(NOT IN USE)

Tooltip: NOT IN USE



#### 46B\_move elements south 4500 thru move(NOT IN USE)

Tooltip: NOT IN USE



### 47\_Isolate export type for Wall/Floor/Roof/Column/Stair(Legacy)

Tooltip: Legacy, now in Output panel



#### 48\_load many families to many docs

Tooltip: Legacy, not under Family Panel



#### 49\_Export No Sheet View as Jpgs(Depreciated)

Tooltip: Depreciated



#### 50\_Delete view based on jpgs in folder(Legacy)

Tooltip: Legacy, now in view panel



### 51\_rename detail num

#### Tooltip:

This function renames views in Revit based on their associated level and name. It first selects the views to be renamed. It then loops through each view in the selection and extracts the associated level and key from the view name. The key is used to identify the type of view, and is used in the new view name. The associated level and key are combined to form a new detail number for the view, which is set as the view's "Detail Number" parameter. If the associated level cannot be extra



#### 52\_Assign Walltype Filter

Tooltip: Batch create walltype filters with defined color to many view templates.

This is handy when doing the colored wall type diagram elevation.



#### 53\_Make walltype legend(Legacy)

Tooltip: Legacy, now do it in output panel



### 54\_Create Shared Para(Legacy)

Tooltip: Legacy, now do output panel



### 55\_Add field to schedule(Depreciated)

Tooltip: Depreciated



#### 56\_Create revisions(Depreciated)

Tooltip: Depreciated



#### 57\_break composite floor

**Tooltip:** For composite floor element, recreate the finish and structrue slab as seperate element. It will use the source footprint for both outcomes.



#### 58\_Copy selected template to other open doc

Tooltip: Copy selected view templates to other open models.



#### 60\_detect\_FOG

Tooltip: Detect the FOG of curtain to the nearest palleral grid line.

The result is ranked by how off the distance are to the nearest whole number.

It also provide links to the problem curtain wall, and will attempt to create a working view to help you fix them.



### 61\_Import Rhino camera(Legacy)

Tooltip: Legacy, now in view panel



#### 62 check sheet value

Tooltip: Check esential sheet value has been assigned.



### 63\_Get model GUID

Tooltip: Get the GUID for current model. This is the identifier on BIM360 server.



#### 64\_3D workset views(Legacy)

Tooltip: Legacy, now do it in view panel



#### 65\_replace\_dim\_text

**Tooltip:** Replace the dim text that is below the dim number in current document from A to B.

For example, changing from 'FOG' to 'F.O.G.'



#### 66\_bundle Rhino(NOT IN USE)

Tooltip: NOT IN USE



#### 67\_mark preserve color fillregion and detail item type

**Tooltip:** Sometimes you want to set certain filled region and detail item to be graphically controlled seperately from the category graphic. So you can use filter to assign special graphic. But the setting inside the type parameter might not be reflected on the type name. So this tool will lookup for those conditions and append '\_preserved color' in type name os it is easier to be found.



#### 68\_stair\_end\_with\_riser(Checker)

Tooltip: Check if the stairs are ending with a riser.



### 69\_stair\_end\_with\_riser(Fixer)

Tooltip: Try to fix stairs that has end with a riser checked.



### 70\_FRW Dims(NOT IN USE)

Tooltip: NOT IN USE, attemp to auto dimension distence between FRW windows



#### 71\_check\_level\_id

Tooltip: Print out all levels, ranked by elevation, to show level names and its level id data



#### 72\_fix\_area\_view\_title(NOT IN USE)

Tooltip: NOT IN USE



#### 73\_find\_EOS\_in\_FOG\_family

Tooltip: Find the modular marker family that have the EOS instance parameter turned on/off.



#### 74\_bring\_size\_from\_old\_door

Tooltip: Get door size data from old file. Apply to current file by matching GUID.



#### 75\_Fix Wall And Room sp\_line Overlap

**Tooltip:** In the standalone window, you can zoom in with section box to a region that have wall and room seperation line overlay warning.

As you are fixing it, you will see the wanring count going down.



#### 76\_load 2D family from container link(Legacy)

Tooltip: Legacy, now in family panel



#### 77\_Create/Update detail item from CAD

**Tooltip:** For each selected dwg file, create new detail item family and load in the dwg, save family as the same name as the dwg, then load the family to project.

This batch process is handy when your consaltant gives you dozens of CAD drawing and you need to convert all of them to detail item family.

You should also checkout EnneadTab for CAD for some CAD batch processing related tto this workflow.



#### 78\_Mark RFR

**Tooltip:** Mark detail items on this QAQC view with info about how many of this instance have been placed on other views of the document. And if more than one, which view.

Handy after you brought in many contents from container file on day one and one day ten, you want to know how many have been deployed on the document.



#### 79\_map\_instance\_property(legacy)

Tooltip: Legacy, now under family panel



#### 80\_tag\_room\_too\_high

Tooltip: Get rooms that is overlapping other rooms, and tag them in views from selected sheets.



#### 81\_find\_section\_mark\_not\_from\_sheet

**Tooltip:** Locate sections in the viewport of the sheet that is referring to views from other sheet. For system drawing, most detail section mark should refer to current sheet.



# 82\_Link Dummy Callout To View From Link

**Tooltip:** Assign a stable ID when creating the dummy reference. So even if future session, the dummy callout can still find the desired view data in the link file, and update the view detail number and sheet number shown on the small circle.



#### 83\_Update Linked Dummy Callout

**Tooltip:** Update the view detail number and sheet number data based on the linked dummy callout. You need to have the related link loaded for it to find the linked view.



#### 84\_sheet\_translator

Tooltip: DO NOT USE, use newer AI translator



#### 85\_adjust\_line\_pattern\_definition

Tooltip: Adjusting the line pattern definition to remove very similar but different definition, WIP



#### 88\_find\_empty\_tag

Tooltip: Find keynote tags that is current empty.



#### 89\_identify\_level\_for\_cw\_panel

Tooltip: Find the nearest level by boundingbox lowest Z, then apply vent level as Comments



#### 92\_adjust\_fin

Tooltip: Adjust fin height by intersecting detail line.



#### Alias not set

Tooltip: xxx



#### Note: toolbar version 12.1

Tooltip: If 2135 toolset not working for you, restart you revit to receive current update



#### (Un)Register Area Comment Updater

**Tooltip:** Registration tool for automatic Area comment updates from Excel data. Monitors area elements for changes and syncs with external data.



#### **Colorize Pills**

Tooltip: Colorize the diagram pills, requested by Gayatri



#### **DEPRECIATED: Confirm RGB**

**Tooltip:** Even when you type in the RGB value in excel, that might get changed by someone in the future and cannot be trusted. I suggest to NOT include RGB value in the excel so there is only one source of truth, but if the team REALLY nned to have RGB value in excel written out, run this to confirm the color of cell is matching the number in excel



#### **DEPRECIATED: Load Color Template**

Tooltip: Update color scheme with office template excel version

J:\2151\2\_Master File\B-70\_Programming\03\_Colors\Color Scheme\_NYULI\_Active.xls.

NOTE: excel should be saved with .xls instead of .xlsx format

Also note, the column header should be as such:

A: Department

B: Department Abbr.

C: Department Color

D: Program

E: Program Abbr.

F: Program Color

ANYTHING ELSE IN THE EXCEL FILE WILL BE IGNORED, including the hex code text on color cell and red, green, blue value number.

Those manual color text cannot be trusted on the long run.



#### **DEPRECIATED: Query Main Excel**

**Tooltip:** Use the shaed excel file to read the correct naming for department and program type. Provide solution to batch fix.



### **DEPRECIATED: Detailed Program Chart Update**

**Tooltip:** Basic area summery checker that update the data in special calculator.

This is also hooked to the sync event for this project. Request by Gayatri



#### **DGSF Area Data Name Check**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



#### **Match Container**

Tooltip:

Use container file as base to compare BIM data to other major NYULI docs for consistency.



#### **Pick Name**

Tooltip: Pick your pill, then assign name from a list. Request by Gayatri



#### **Set Linked View**

Tooltip: Set linked view for projects by a map.



### **Show Parking Mark**

Tooltip: Sen Zhang has not writed documentation for this tool, but he should!



#### **Transfer In Excel Target**

Tooltip: Extract program information from Excel and transfer target value based on program name.



# **Update Dummy Patient Room**

Tooltip: Update the data for dummy patient room so its data is correct in schedule.



# **Update Material Setting**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



# **Update Parking Data**

Tooltip: Update tehe parking dataso it make sense in schedeul.

Note: this tool is to be run so first all parking stall update instance parameter. For the Site file it do the additional super summery.



# **Get Special Selection**

**Tooltip:** Based on the special brep defined in Rhino file, highlight specific panel instances in the current document.



### **Checker Board Selection**

Tooltip: Get checker board A/B selection from the curtain wall, requested by Furui



#### (Depreciated)Format Egress Doors

**Tooltip:** Make sure all door with Egress Id is accounted in the calculator collection.



#### (Depreciated)Format Egress Stairs

Tooltip: Make sure all egress stair has consistent width on run, and push that to calculator stair width



#### (Depreciated)Format New Area

Tooltip: Make sure all areas have at least a valid discount data.

Make sure all areas have department data.



#### (Depreciated)Format New Rooms

Tooltip: Make sure all room 'Rooms\_\$LS\_Occupancy Manual' is at-least zero.

Also transfer the name of the life safety key to the title so you can see it on tags.



#### (Depreciated)Format New Sheets

Tooltip: Make sure all sheets have a default Print\_In\_Color value.

Make sure all sheets show in shecule



#### (Depreciated)Update Stair Capacity Calculator

**Tooltip:** Gather the room life safety data from rooms of each level can sum and feed into the Stair Capacity Calculator for capacity required.



### All Cap Sheet Name and View Name

Tooltip: Make sure all sheet names and view names are capped.



#### **Auto Detail Num**

Tooltip: Set the smallest detail number on sheet viewport to be 10.



#### CAP\_ALL\_ROOM\_NAME

Tooltip: Make all room name as full CAP



#### **Excel Sheet Creator**

Tooltip: Create new sheets based on data from Excel



#### **Factory Internal All-In-One Check**

Tooltip: All In One Checker



#### Line2Structure

**Tooltip:** Convert line in Rhino into Revit Structure frame. Become a archi-column, structre column or frame needs to be defined in previous step at Rhino.



#### **Remove Sheet Name Prefix Underscore**

Tooltip: Remove the sheet name underscore prefix.



#### Set Revision By BlackSquare

**Tooltip:** Transfer the data between issing parameter and titleblock revision schedule. Also can transfer issue data from last round to current round.



#### **Transfer Old Room Data**

Tooltip: Transfer room occupancy load data from old parameter to new parameter. See detail in script



#### **All In One Checker**

**Tooltip:** Basic area summery checker that update the data in special calculator.

This is also hooked to the sync event for this project.



# **Assign Mirrored Panels**

Tooltip: For Ethan's beautiful diagram.



# **Check DWG Export Layer Mapping**

Tooltip: check NYU CAD export layer mapping rule



# **Update Life Safety**

**Tooltip:** This tool updates life safety parameters in a Revit project, ensuring compliance with occupancy and egress requirements.



# **Welcome Sparc**

**Tooltip:** Sen Zhang has not writed documentation for this tool, but he should!



# **Associate Parameter To Family**

**Tooltip:** Associate parameters to family, to be fillfulled by Colin