

EnneadTab-For-Revit

Secret Documentation
2025-03-07

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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.

[Popular]



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.



[Popular]

ColorScheme To Excel

Tooltip: Use me to 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:



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



[Popular]

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.



Keynote Assistant

Tooltip: Keynote Assistant - Enhanced keynote management tool for Revit

This tool extends the functionality of the pyRevit keynote manager with additional features specific to Ennead's workflow. It provides a comprehensive interface for creating, editing, and managing keynotes within your Revit project.

Technical Information:

- Revit keynotes use UTF-16 LE encoding
- Keynote data structure follows the format: key | description | parent_key
- Hierarchical organization:
 - * Top-level keynotes have no parent key
 - * Child keynotes reference their parent via parent_key
 - * Hierarchies can be nested to any depth (A -> B -> C)
 - * For example:
 - A | xxx |
 - B | xxx | A
 - C | xxx | B
 - D | xxx | A
 - A -> B -> C
 - A -> D

pyRevit Features:

- Create and manage keynote categories and entries
- Maintain hierarchical organization of keynotes
- Search and filter keynote database
- Place keynotes directly in the active view
- Import/export keynote data
- Track keynote usage within the project

Advanced Functionality from EnneadTab TO-DO in additional_utils.py:

- Batch operations for keynote management
- Parent key renaming with automatic child references update
- Actual translation function by openAI
- Extended data storage for additional keynote properties, such as product, source, color, spec, etc.
- This data will be stored in project schema or parameter parsing so it can travel with the project. Consider Revit Schema or json parsing.
- Export capabilities as new formatted EXCEL file for both INTERIOR and EXTERIOR sticky linking in Revit.

This implementation maintains compatibility with the core pyRevit functionality while adding Ennead-specific enhancements.



Legend&Schedule; Where?

Tooltip: Which Legend 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!

[Popular]



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 original 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 openAI 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 inherited from older file some parameter is carried over and now you have duplicated parameter container. Use this to cleanup the parameter panel

[Popular]



Update DOB Page Number

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



Wall Type Diagram

Tooltip: Generate walltype legend view as well as view filter. The color is picked based on related filled region type, if not available 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.

[Popular]



Ennead Exporter

Tooltip: A great helper for your print on deadline. Features 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 estimation, 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 disrupting shared printSet.
- Export views on sheet separately 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 separate in dwg export.

[Popular]



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 benefit 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 orientation.

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 repeatedly 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 continuously live until 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)

[Popular]



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]



Family Parameter Batch Creation

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

[Popular]



Fire Rating Graphic

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

[Popular]



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 respective types.

If there is mismatch, this tool will attempt to find them. The rule 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.

[Popular]



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 browser.

The review process can be quick because 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.

[Popular]



App Store

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



Assistant

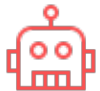
Tooltip: All resource and documentation to help.

- +Tutorials
- +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 availability

+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



AI 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 horizontal 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 generation.



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 least one model line as reference, 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 browser.

[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.

[Popular]



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: Pick 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 EI 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.

[Popular]



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 slightly 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: Attempt 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 ForgedId 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 temporarily.



Temp Graphic Test

Tooltip: Sen Zhang has not written 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 symbal 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 shcedule 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 issuing 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 across 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 tagging 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? Because 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 coorrect 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, because a QAQC sheet schedule should be able to see every sheet, including the ones 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 categories, 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 separately 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 as 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, attempt to auto dimension distance 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 separation line overlay warning.

As you are fixing it, you will see the warning 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 consultant 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 to 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 need 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.



DEPRECATED:Detailed Program Chart Update

Tooltip: Basic area summary 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



(Deprecated)Format Egress Doors

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



(Deprecated)Format Egress Stairs

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



(Deprecated)Format New Area

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

Make sure all areas have department data.



(Deprecated)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.



(Deprecated)Format New Sheets

Tooltip: Make sure all sheets have a default Print_In_Color value.

Make sure all sheets show in shecule



(Deprecated)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, strcutre 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 fulfilled by Colin



Test Encoder 2025

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