2019-01-09 - K4 Dynamic Kase Tool

Nick Place
Last modified just a moment ago

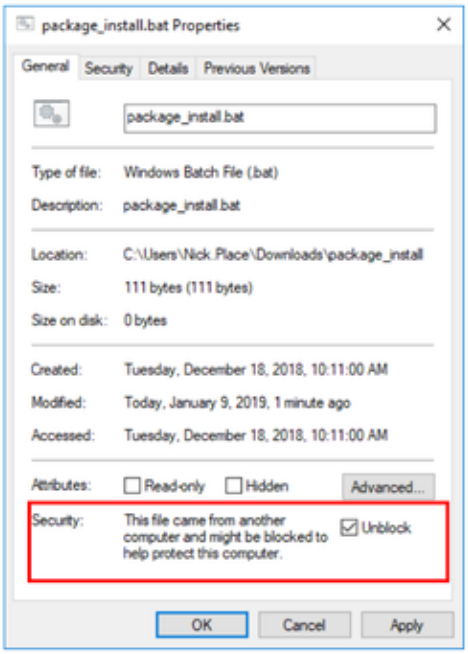
PROBLEM:

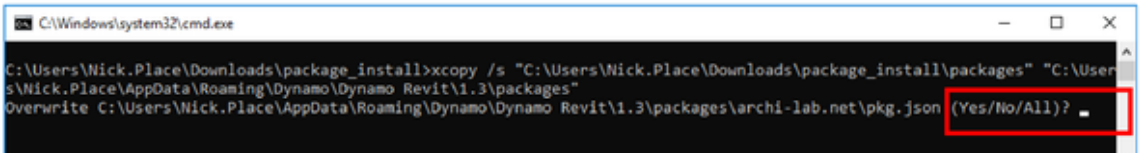
You need to explore alternate cladding design schemes, but manually pulling panels from the parts library through the Revit environment can be cumbersome and time-consuming.

SOLUTION:

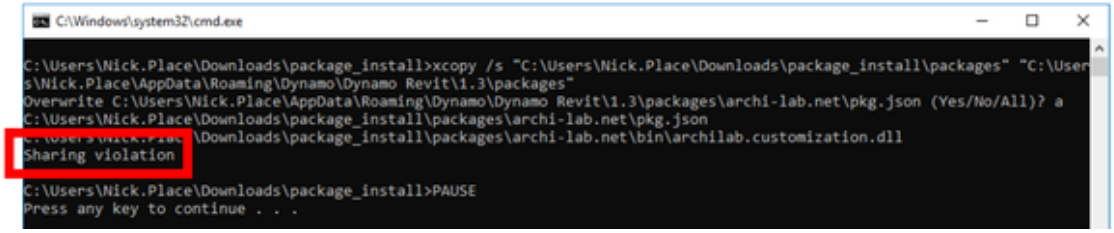
We are going to use Dynamo script to automate the process and save you time.

WHAT DO YOU NEED?

Dynamo Version	Dynamo 1.3.2
Packages Needed	Download archive here to your downloads folder and "Extract All" to it's own folder. Rightclick on package_install.bat and go to "properties". From there, check the "unblock" checkbox and hit "ok".  Run package_install.bat by double clicking to install all packages automatically.

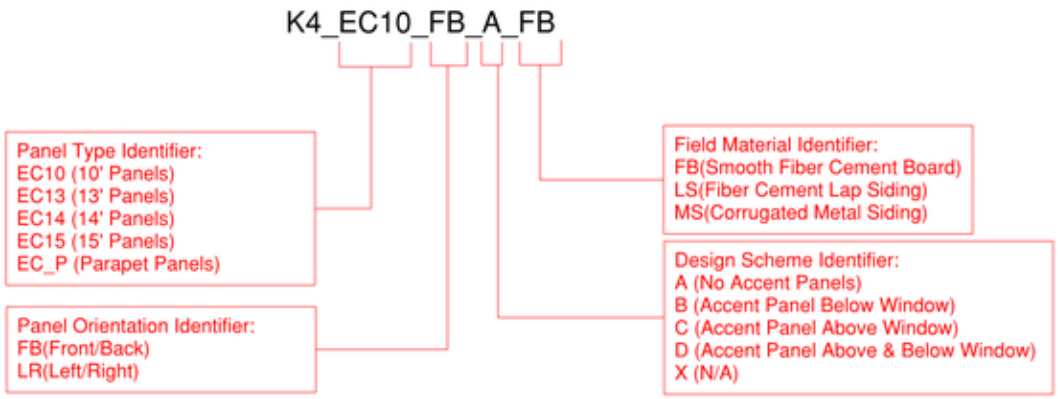


If you get a "sharing violation" the files are currently open. Try closing Revit and retry. If the sharing violation persists, please restart and run batch file again before opening Revit.

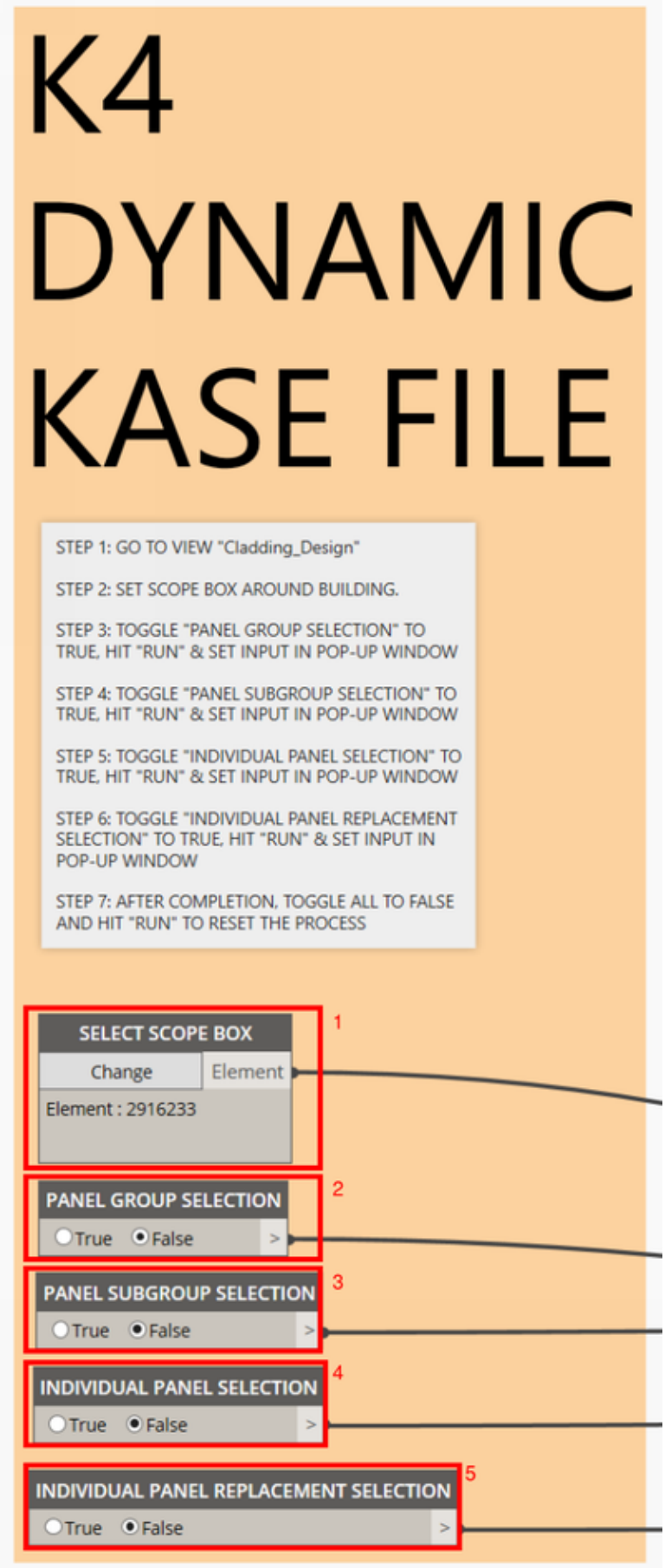


DYN Files, or Scripts	Download this file to a folder. K4_Dynamic_Kase_Tool_v2.0.dyn
Folder	A folder where you want to store your Dynamo scripts.

K4 PANEL NAMING CONVENTIONS:



STEP BY STEP:



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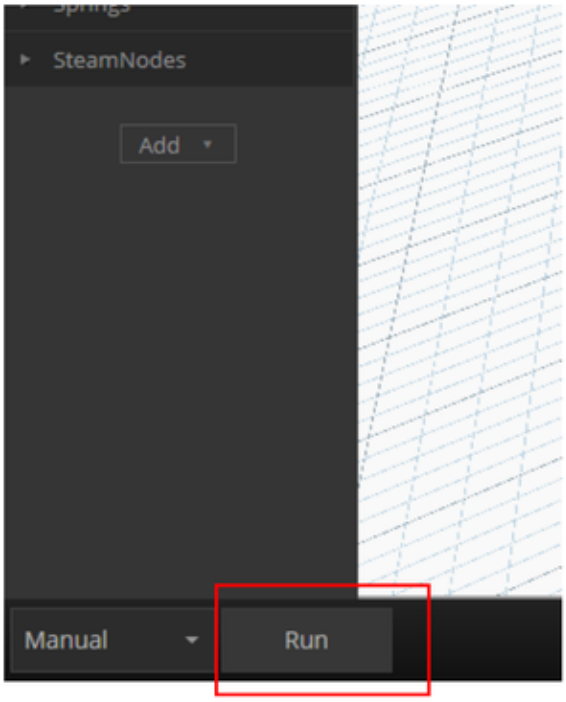
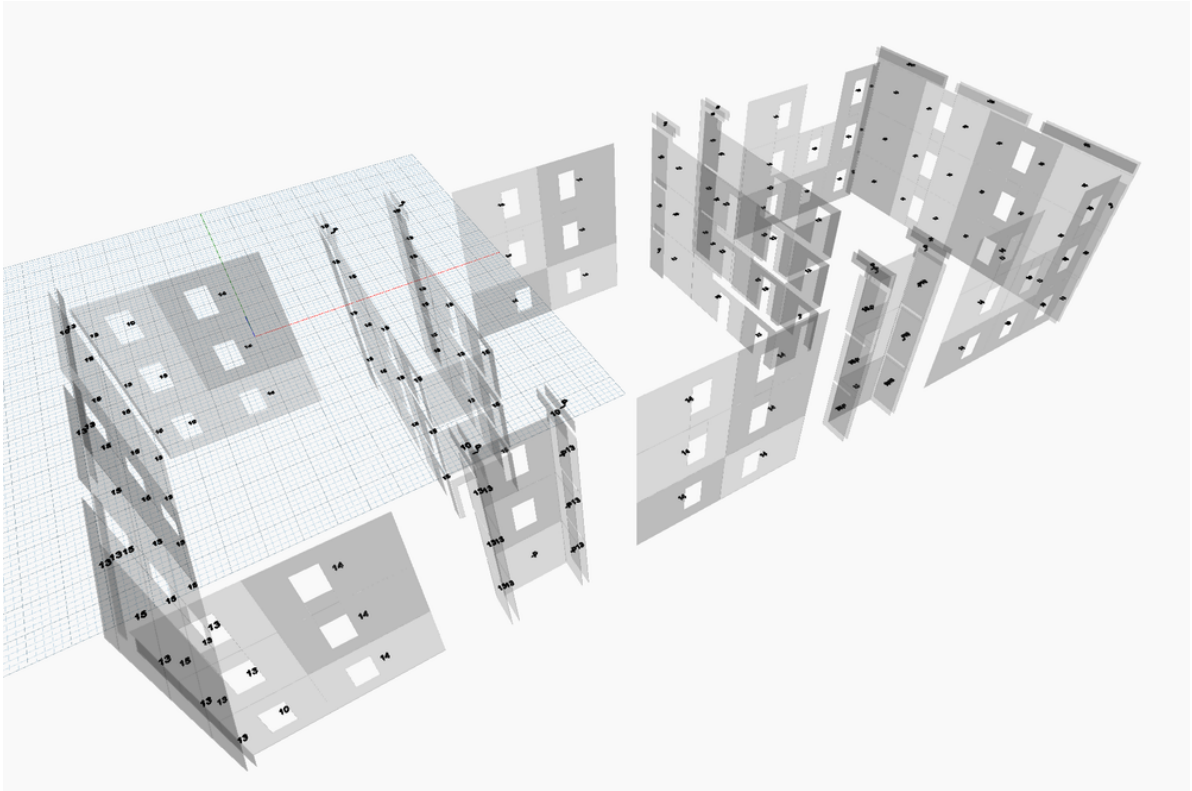
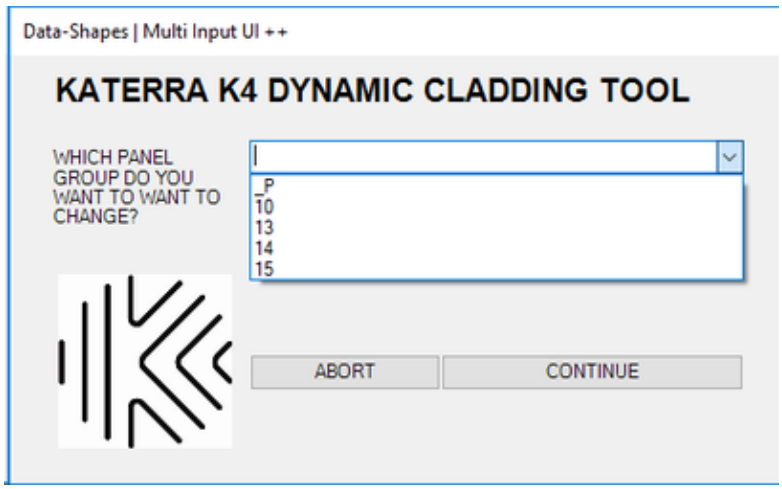
- Hit the "Run" button in the lower left-hand corner to initiate the script.



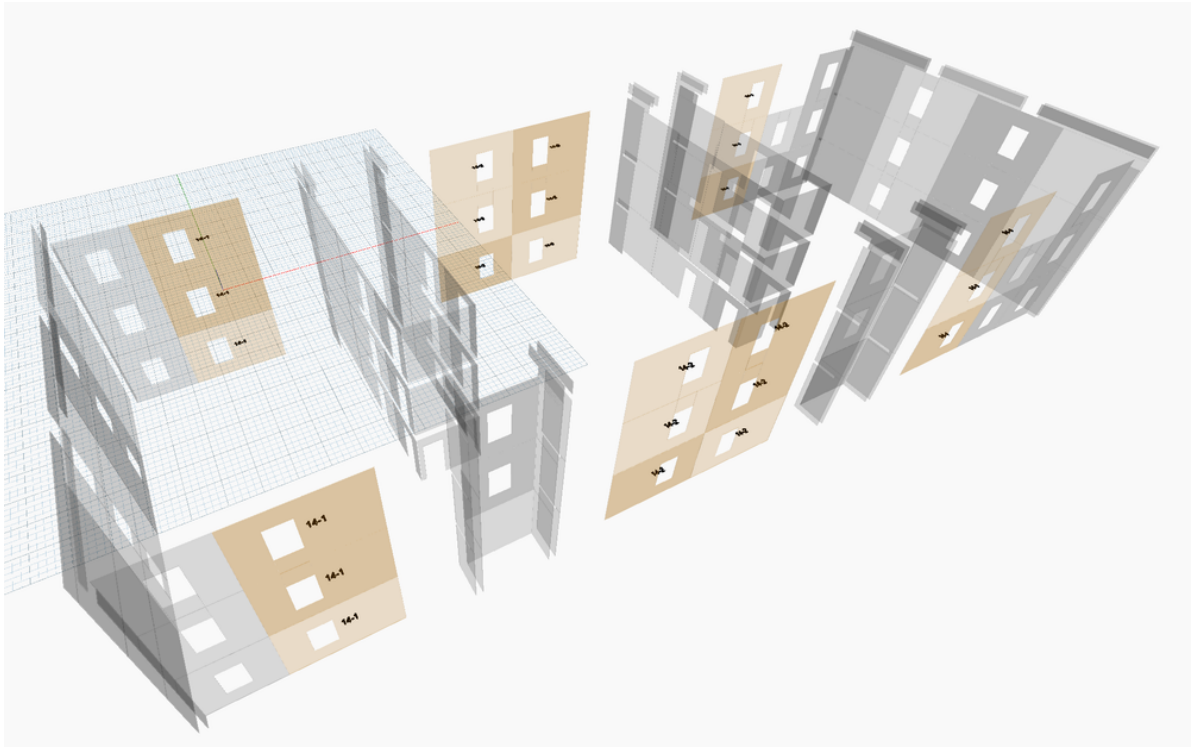
- This will generate a display of all cladding panels currently on the building in the Dynamo environment, labeled with length or "type" identifiers for the panel groups (10, 14, _P, etc.). Press Ctrl + B to toggle between the graph view and 3D preview environment. Orbit around the preview model with RMB(right mouse button) to determine which panel group you want to edit. Toggle back to the graph when you've made a decision.



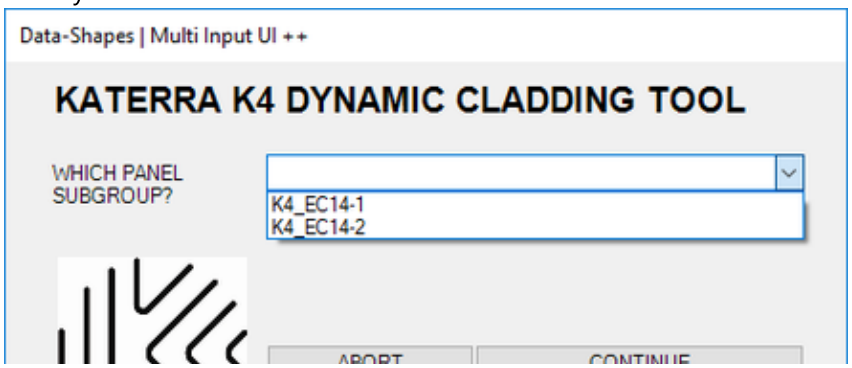
- Toggle "Panel Group Selection" box **(2)** to True and press the "Run" button and a popup window will



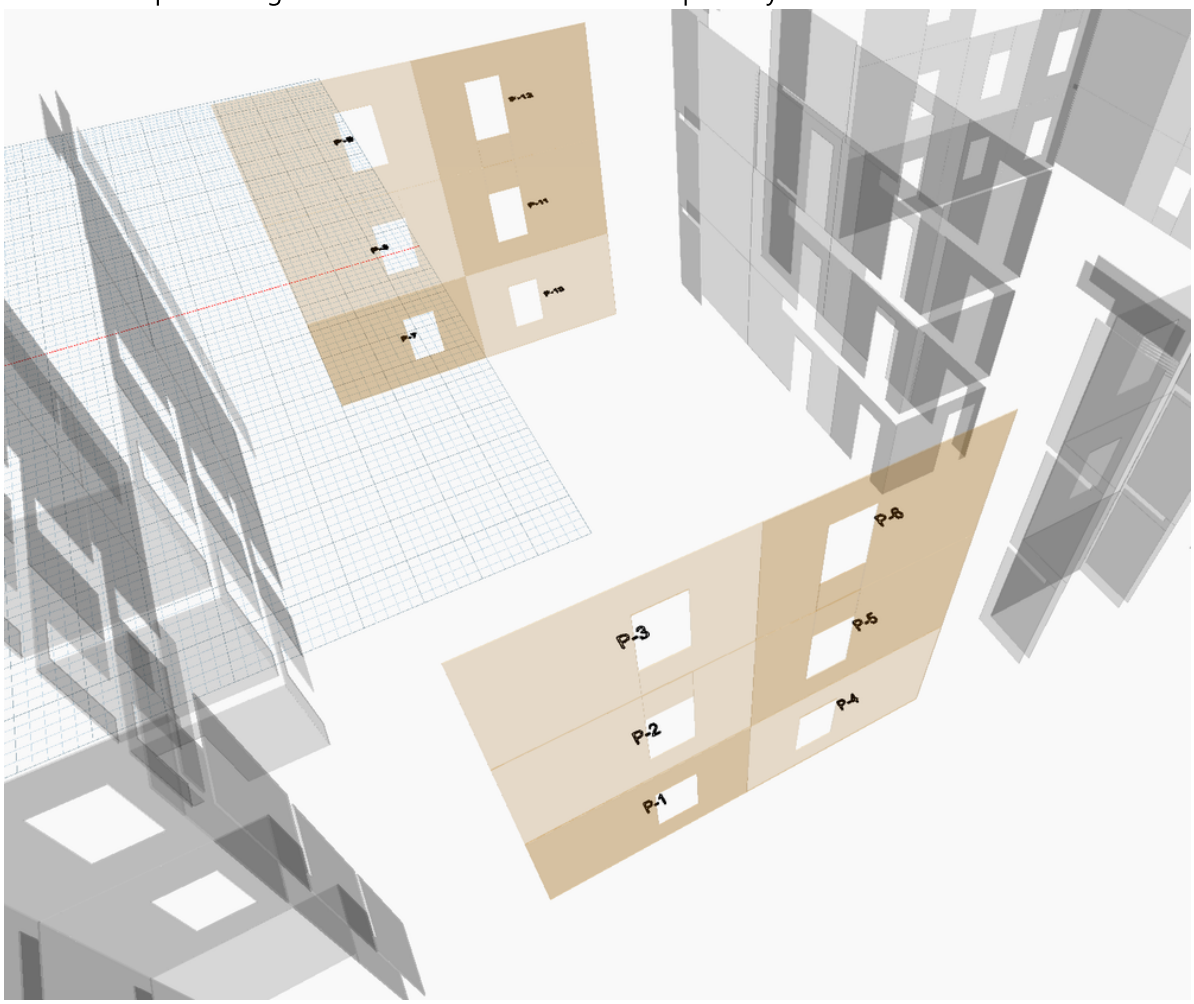
The preview will update by highlighting the panel selection in orange with labels for all subgroups within the panel group.
Orbit the 3D preview again to determine which panel subgroup you would like to edit.



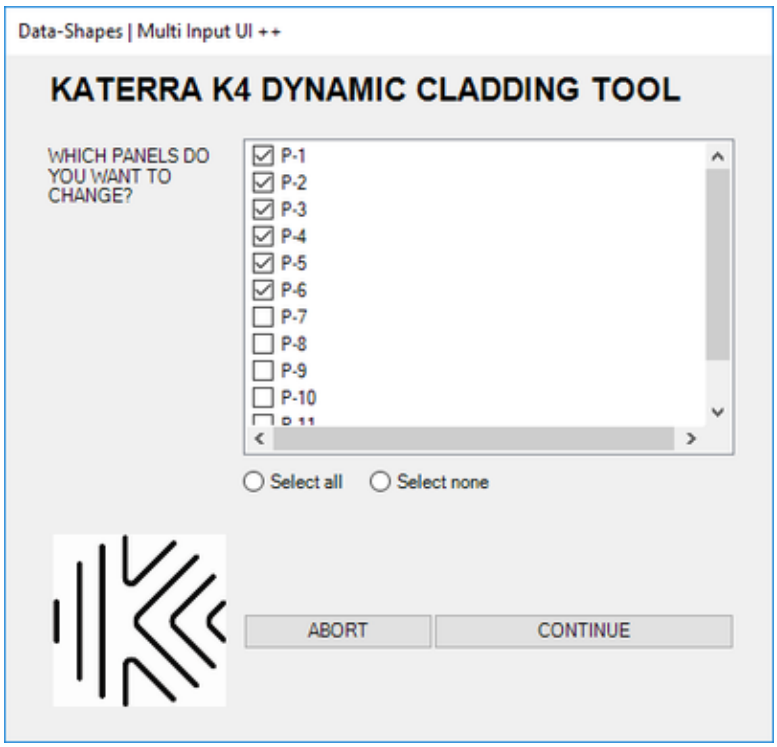
- Toggle "Panel Subgroup Selection" box **(3)** to True and then press the "Run" button and a popup window will appear with a drop-down for selecting which panel subgroup you'd like to edit.
  Make your selection and hit "continue".



The preview will update by highlighting all of the panels within the selected subgroup and then numbering them in a series.
Orbit the 3D preview again to determine which individual panels you would like to edit.

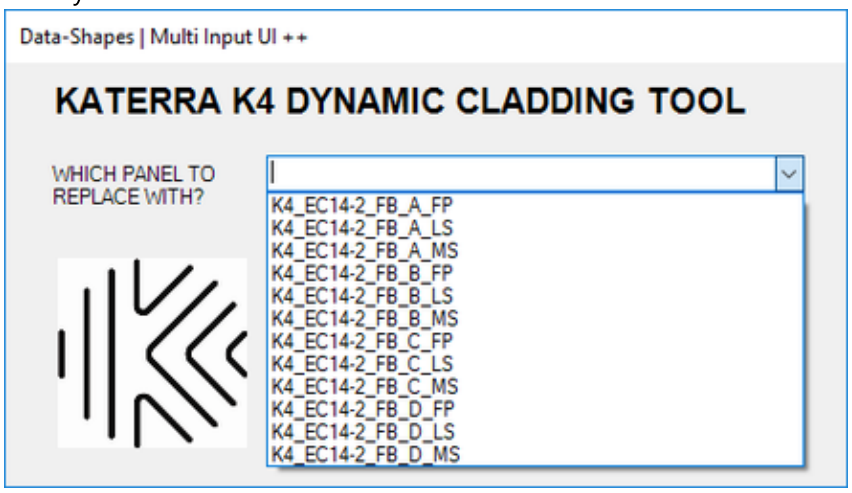


- Toggle "Individual Panel Selection" box **(4)** to True and then press the "Run" button and a popup window will appear with a list for selecting which panel subgroup you'd like to edit.
  Here you can select as many panels from the list as you would like to change. Make your selection and hit "continue".



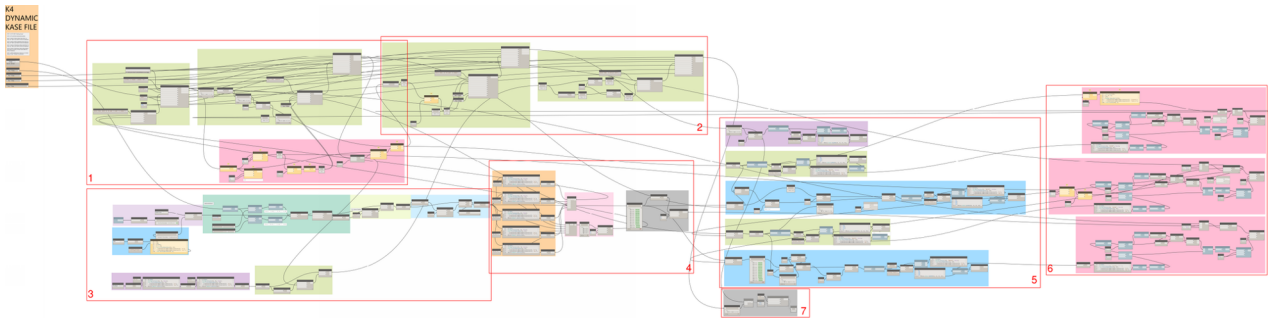
The preview will update by highlighting all of the panels you selected and colors them a solid orange.

- Toggle "Individual Panel Replacement Selection" box **(5)** to True and then press the "Run" button and a popup window will appear with a drop-down for selecting your replacement panel.
  Make your selection and hit "continue".

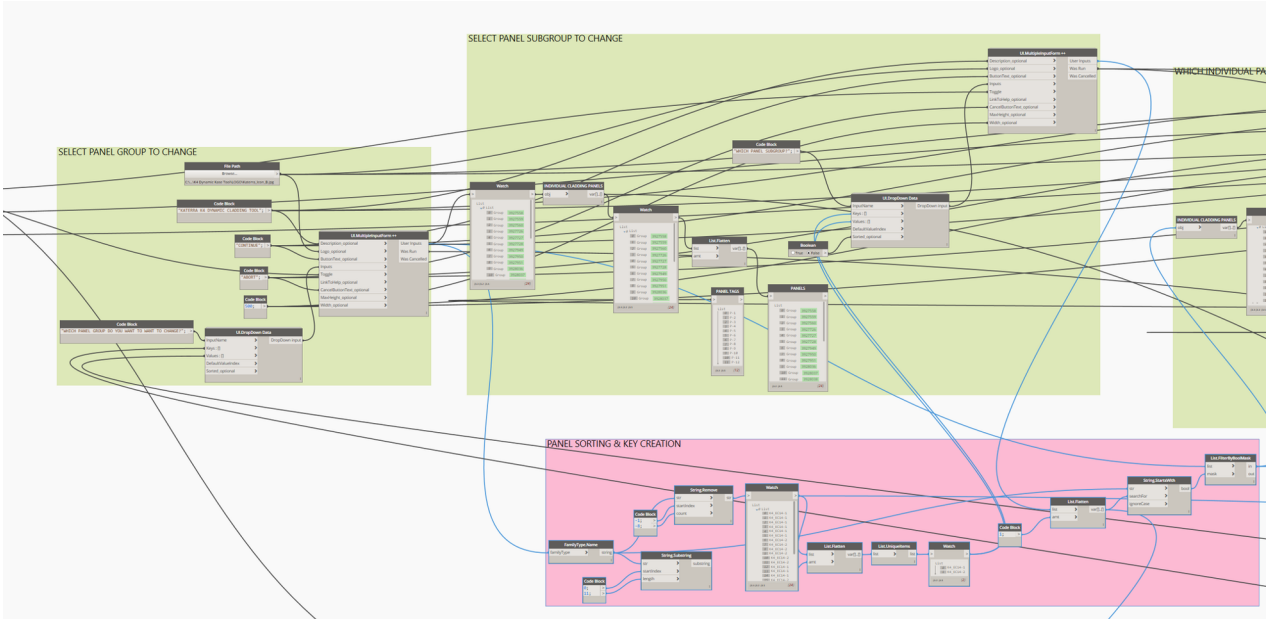


  This will swap out the current cladding panels with your selection in the Revit model itself. **THIS MAY TAKE A LOT OF TIME, DEPENDING ON HOW MANY PANELS YOU'RE EDITING.**
- To make changes to other panel groups, toggle all previously toggled boxes to False, and press the "Run" button to reset the script.

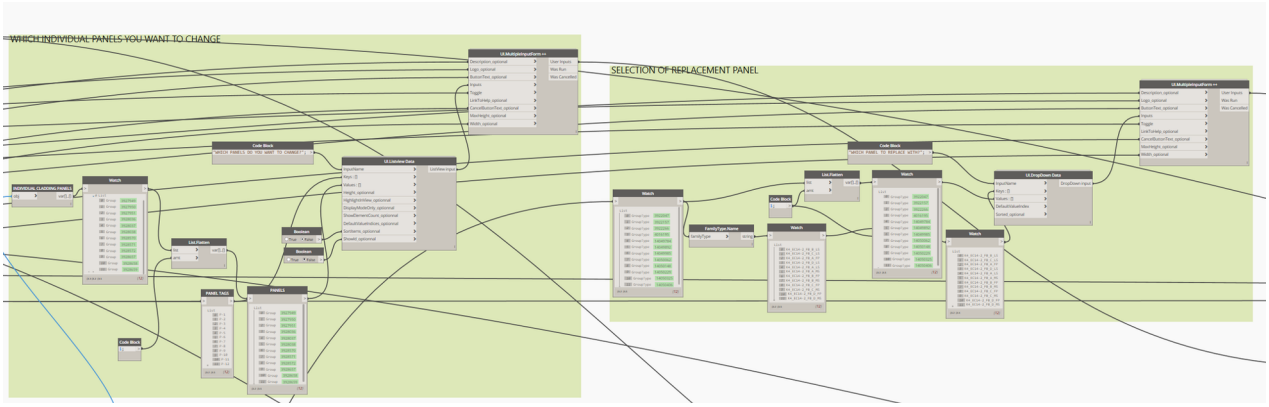
WHATS INSIDE THE SCRIPT ?



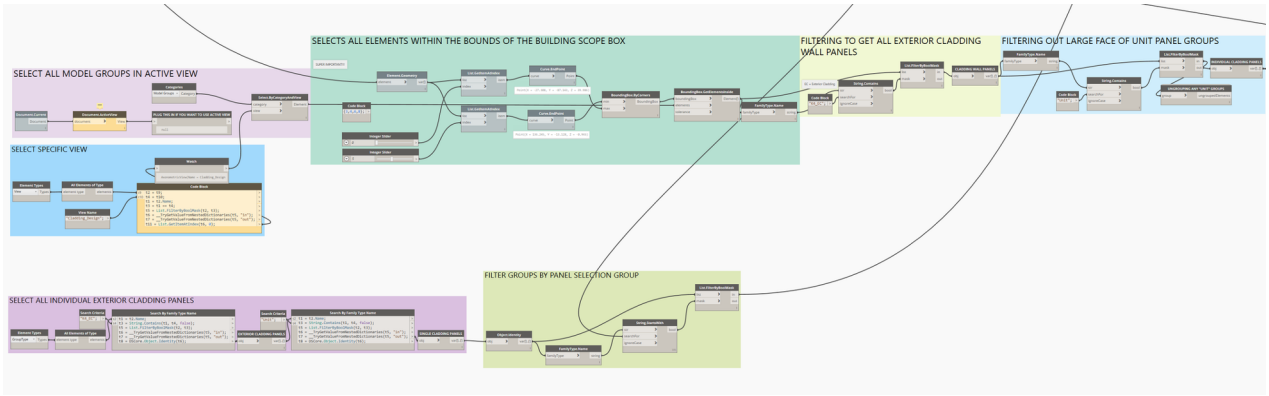
(1)


SELECT PANEL SUBGROUP TO CHANGE
SELECT PANEL GROUP TO CHANGE
PANEL SORTING & KEY CREATION

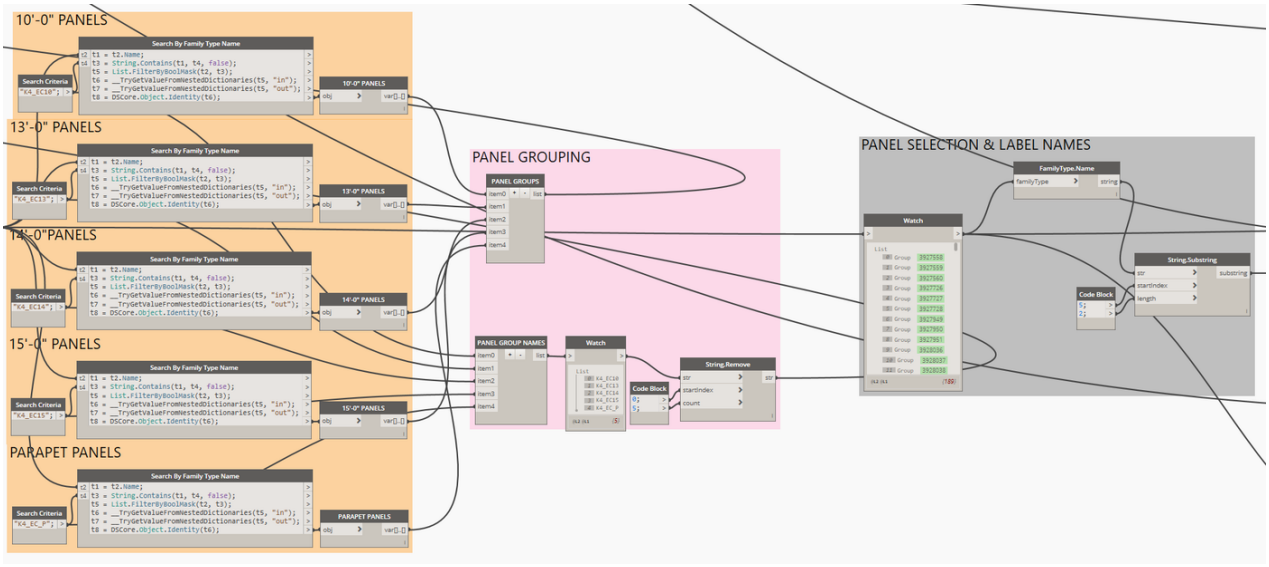
(2)


WHICH INDIVIDUAL PANELS YOU WANT TO CHANGE
SELECTION OF REPLACEMENT PANEL

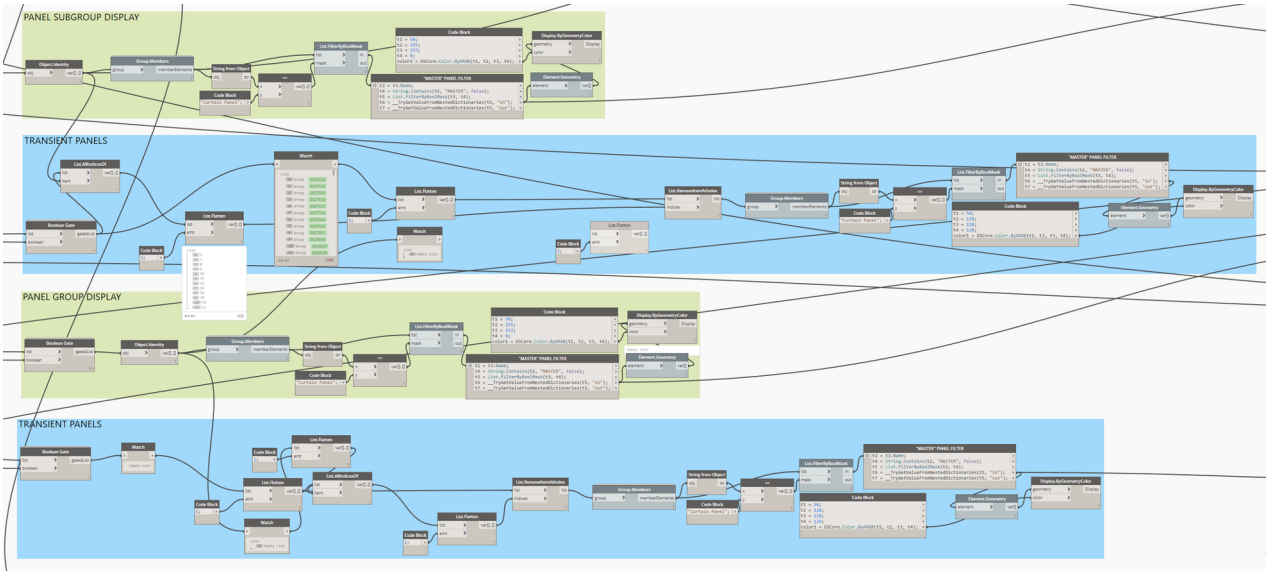
(3)


SELECT ALL MODEL GROUPS IN ACTIVE VIEW
SELECTS ALL ELEMENTS WITHIN THE BOUNDS OF THE BUILDING SCOPE BOX
FILTERING TO GET ALL EXTERIOR CLADDING WALL PANELS
FILTERING OUT LARGE FACE OF UNIT PANEL GROUPS
SELECT SPECIFIC VIEW
SELECT ALL INDIVIDUAL EXTERIOR CLADDING PANELS
FILTER GROUPS BY PANEL SELECTION GROUP

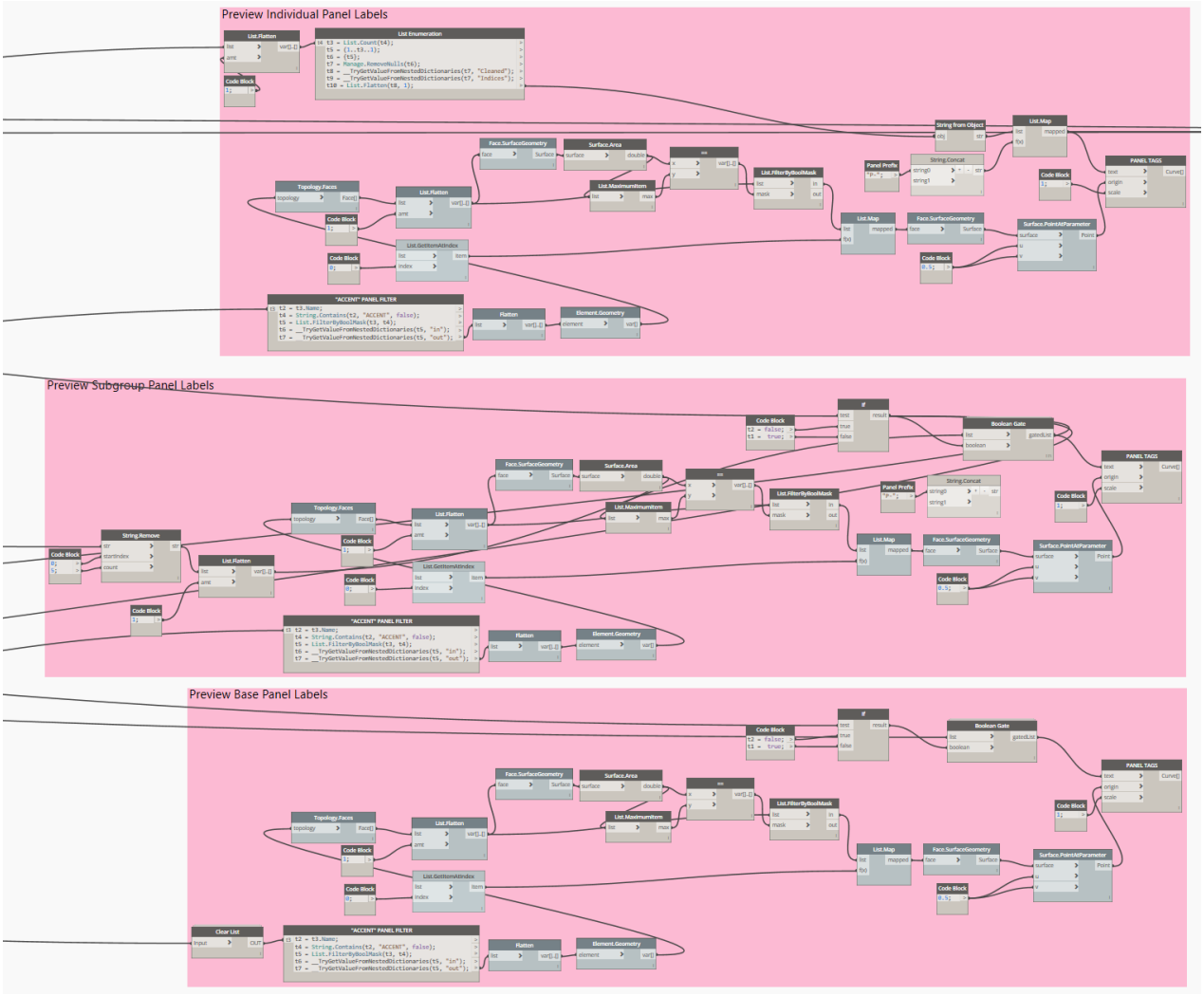
(4)


10'-0" PANELS
13'-0" PANELS
14'-0"PANELS
15'-0" PANELS
PARAPET PANELS
PANEL GROUPING
PANEL SELECTION & LABEL NAMES

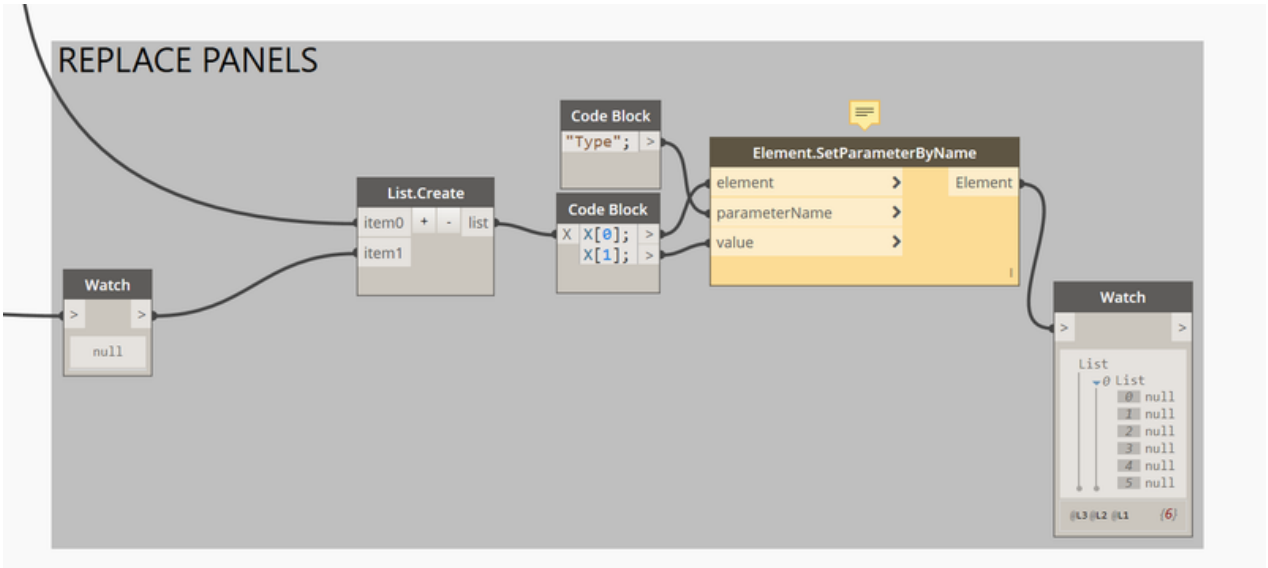
(5)


PANEL SUBGROUP DISPLAY
TRANSIENT PANELS
PANEL GROUP DISPLAY
TRANSIENT PANELS

(6)



(7)



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No labels