

# **MKit Plug-in Manual**

For Revit  
Version 1.0

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## 1. Abstract

This document is considered as an instruction for the Plug-in named “MKit” in Revit, there are 4 functions in it, Element Numbering, Remove property value, sheet comparison and sheet creation respectively.

## 2. Prerequisites

This plug-in is available to the Revit version, 2020 or later, make sure the correct installation.

The installation program is available only to *Windows* with x64 architecture. Make sure the x64 desktop Runtime is installed before executing this installation.

This function is available only for xlsx file.

## 3. Installation

Click *Install.exe* for installation, a window will show as below (Figure 3.1); select target Revit version and installation directory for custom installation; User can leave the setting as default by just clicking *Ok* for default installation.

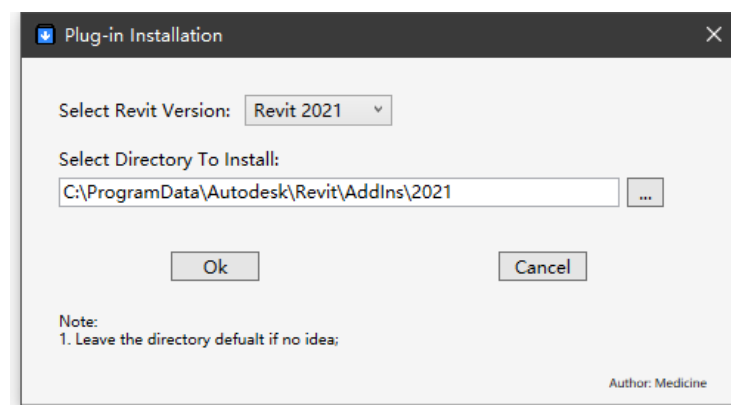


Figure 3.1 Installation window

After installation, user would see the function button on Revit panel in tab MKit as below (Figure 3.2)

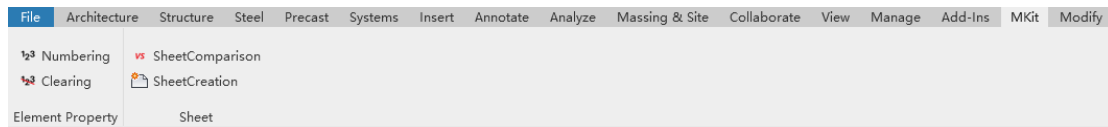


Figure 3.2 Ribbon Panels

## 4. Uninstallation

Click *unInstall.exe* for uninstallation, select which Revit version to implement uninstallation program based on the window (Figure 4.1).

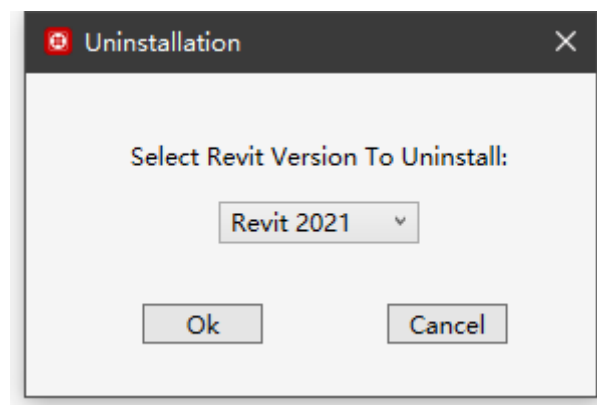


Figure 4.1 Uninstallation window

## 5. Function Introduction

### 5.1. Numbering

Number selected elements in model, the number will be displayed in the selected property value; only property in string format is available. The manipulation flow is as below:

1. Click button to invoke function and select desired elements;
2. After selection, select target property in selection window;
3. Type desired format and select order in the window below (Figure 5.1) to number, only integer is available in the number and spacing block.

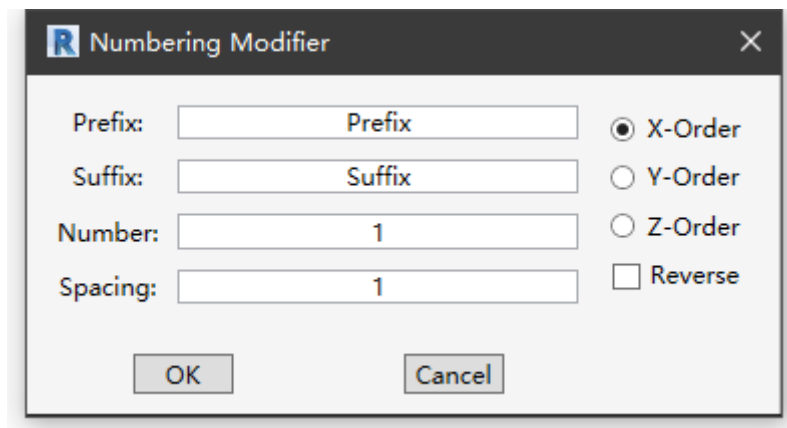


Figure 5.1 Numbering window

The numbering process will number the element based on the coordinate of elements. When finished user can find result in the selected property of element.

## 5.2. Clearing

This is an advanced function for remove value of properties of elements; user can select multiple properties to remove their value.

## 5.3. Sheet Comparison

Compare properties, number, name and revision, of sheets in model with desired drawing list table in xlsx file.

The content in xlsx file shall be in the format as below (Figure 5.2), only 3 columns without table head, the columns represent drawing number, drawing title and revision number respectively. Meanwhile, ensure the sheet in model has these mentioned arguments, if not, the comparison would be failed.

	A	B	C
1	1831/T/OP5/MHK/A01/100	LOCATION PLAN	A
2	1831/T/OP5/MHK/A01/101	GENERAL ROAD LAYOUT PLAN (SHEET 1 OF 2)	A
3	1831/T/OP5/MHK/A01/102	GENERAL ROAD LAYOUT PLAN (SHEET 2 OF 2)	A
4	1831/T/OP5/MHK/A01/103	PLAN OF WORKS AREA	A
5	1831/T/OP5/MHK/A21/001	BLOCK PLAN, EVA LAYOUT PLANGENERAL NOTES	A
6	1831/T/OP5/MHK/A58/020	SCREEN WALL -LAYOUT PLAN, GENERAL NOTES AND TYPICAL DETAIL AT TEMPORARY PRACTICE GREEN	A
7	1831/T/OP5/MHK/A58/101	METAL FENCE DETAILS	A
8	1831/T/OP5/MHK/A58/510	TEMPORARY PRACTICE GREEN - GENERAL ARRANGMENT PLAN	A
9	1831/T/OP5/MHK/A58/511	ADVANCE PREPARATION WORKS TREE SURVEY PLAN	A
10	1831/T/OP5/MHK/A58/512	ADVANCE PREPARATION WORKS TREE TREATMENT PLAN	A
11	1831/T/OP5/MHK/A58/513	ADVANCE PREPARATION WORKS TREE PROTECTION PLAN	A
12	1831/T/OP5/MHK/A58/520	TEMPORARY PRACTICE GREEN - TYPICAL ARTIFICIAL GRASS DETAIL 01	A
13	1831/T/OP5/MHK/A58/521	TEMPORARY PRACTICE GREEN - ARTIFICIAL GRASS DETAIL 01	A
14	1831/T/OP5/MHK/A58/522	TEMPORARY PRACTICE GREEN - ARTIFICIAL GRASS DETAIL 02	A
15	1831/T/OP5/MHK/A58/523	TEMPORARY PRACTICE GREEN - PRECAST CONCRETE KERB PHYSICAL BARRIER DETAIL	A
16	1831/T/OP5/MHK/A58/524	PROTECTION MEASURES FOR EXISTING TREES (SHEET 1 OF 2)	A
17	1831/T/OP5/MHK/A58/525	PROTECTION MEASURES FOR EXISTING TREES (SHEET 2 OF 2)	A
18	1831/T/OP5/MHK/A58/527	TEMPORARY PRACTICE GREEN -GATE DETAIL	A
19	1831/T/OP5/MHK/A58/528	TEMPORARY PRACTICE GREEN -FENCE DETAIL	A
20	1831/T/OP5/MHK/C01/003	GENERAL NOTES FOR CIVIL WORKS	A
21	1831/T/OP5/MHK/C01/010	GENERAL NOTES FOR SITE FORMATION AND SLOPE WORKS	A
22	1831/T/OP5/MHK/C02/101	ROAD SETTING OUT PLAN (SHEET 1 OF 2)	A
23	1831/T/OP5/MHK/C02/102	ROAD SETTING OUT PLAN (SHEET 2 OF 2)	A
24	1831/T/OP5/MHK/C05/001	GENERAL NOTES AND LEGEND FOR CONTOUR PLANS AND GEOLOGICAL SECTIONS	A
25	1831/T/OP5/MHK/C05/100	GROUND INVESTIGATION PLAN (FOR INFORMATION ONLY)	A
26	1831/T/OP5/MHK/C05/110	CONTOUR PLAN FOR EXISTING FILL (FOR INFORMATION ONLY)	A
27	1831/T/OP5/MHK/C05/112	CONTOUR PLAN FOR COMPLETELY / HIGHLY DECOMPOSED ANDESITE (C / HDA) (FOR INFORMATION ONLY)	A
28	1831/T/OP5/MHK/C05/113	CONTOUR PLAN FOR CORESTONE (FOR INFORMATION ONLY)	A
29	1831/T/OP5/MHK/C05/115	INFERRED ROCKHEAD CONTOUR PLAN (FOR INFORMATION ONLY)	A
30	1831/T/OP5/MHK/C05/117	GROUND WATER LEVEL CONTOUR PLAN (FOR INFORMATION ONLY)	A
31	1831/T/OP5/MHK/C05/200	GEOLOGICAL PROFILE (SHEET 1) (FOR INFORMATION ONLY)	A

Figure 5.2 Correct format

If there is difference between sheets and xlsx file, a xlsx file will be created with name “*Comparison\_Result*”, click prompt link to find it (Figure 5.3);

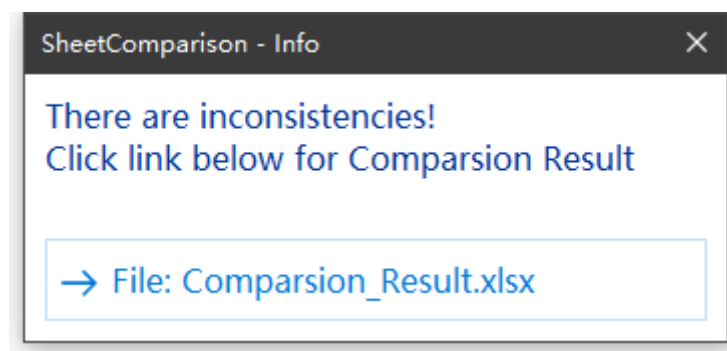


Figure 5.3 Window for comparison result

No file will be created if the comparison finished with no difference.

## 5.4. Sheet Creation

Batch creation of sheet by input drawing list table in xlsx file; the table shall be with 2 columns, Drawing Number and Drawing Title, without table head as below (Figure 5.4). The manipulation flow is as below:

	A	B
1	1831/T/OP5/MHK/A01/100	LOCATION PLAN
2	1831/T/OP5/MHK/A01/101	GENERAL ROAD LAYOUT PLAN (SHEET 1 OF 2)
3	1831/T/OP5/MHK/A01/102	GENERAL ROAD LAYOUT PLAN (SHEET 2 OF 2)
4	1831/T/OP5/MHK/A01/103	PLAN OF WORKS AREA
5	1831/T/OP5/MHK/A21/001	BLOCK PLAN, EVA LAYOUT PLANGENERAL NOTES
6	1831/T/OP5/MHK/A58/020	SCREEN WALL -LAYOUT PLAN, GENERAL NOTES AND TYPICAL DETAIL AT TEMPORARY PRACTICE GREEN
7	1831/T/OP5/MHK/A58/101	METAL FENCE DETAILS
8	1831/T/OP5/MHK/A58/510	TEMPORARY PRACTICE GREEN - GENERAL ARRANGMENT PLAN
9	1831/T/OP5/MHK/A58/511	ADVANCE PREPARATION WORKS TREE SURVEY PLAN
10	1831/T/OP5/MHK/A58/512	ADVANCE PREPARATION WORKS TREE TREATMENT PLAN
11	1831/T/OP5/MHK/A58/513	ADVANCE PREPARATION WORKS TREE PROTECTION PLAN
12	1831/T/OP5/MHK/A58/520	TEMPORARY PRACTICE GREEN - TYPICAL ARTIFICIAL GRASS DETAIL 01
13	1831/T/OP5/MHK/A58/521	TEMPORARY PRACTICE GREEN - ARTIFICIAL GRASS DETAIL 01
14	1831/T/OP5/MHK/A58/522	TEMPORARY PRACTICE GREEN - ARTIFICIAL GRASS DETAIL 02
15	1831/T/OP5/MHK/A58/523	TEMPORARY PRACTICE GREEN - PRECAST CONCRETE KERB PHYSICAL BARRIER DETAIL
16	1831/T/OP5/MHK/A58/524	PROTECTION MEASURES FOR EXISTING TREES (SHEET 1 OF 2)
17	1831/T/OP5/MHK/A58/525	PROTECTION MEASURES FOR EXISTING TREES (SHEET 2 OF 2)
18	1831/T/OP5/MHK/A58/527	TEMPORARY PRACTICE GREEN -GATE DETAIL
19	1831/T/OP5/MHK/A58/528	TEMPORARY PRACTICE GREEN -FENCE DETAIL
20	1831/T/OP5/MHK/C01/003	GENERAL NOTES FOR CIVIL WORKS
21	1831/T/OP5/MHK/C01/010	GENERAL NOTES FOR SITE FORMATION AND SLOPE WORKS
22	1831/T/OP5/MHK/C02/101	ROAD SETTING OUT PLAN (SHEET 1 OF 2)
23	1831/T/OP5/MHK/C02/102	ROAD SETTING OUT PLAN (SHEET 2 OF 2)
24	1831/T/OP5/MHK/C05/001	GENERAL NOTES AND LEGEND FOR CONTOUR PLANS AND GEOLOGICAL SECTIONS
25	1831/T/OP5/MHK/C05/100	GROUND INVESTIGATION PLAN (FOR INFORMATION ONLY)
26	1831/T/OP5/MHK/C05/110	CONTOUR PLAN FOR EXISTING FILL (FOR INFORMATION ONLY)
27	1831/T/OP5/MHK/C05/112	CONTOUR PLAN FOR COMPLETELY / HIGHLY DECOMPOSED ANDESITE (C / HDA) (FOR INFORMATION ONLY)
28	1831/T/OP5/MHK/C05/113	CONTOUR PLAN FOR CORESTONE (FOR INFORMATION ONLY)
29	1831/T/OP5/MHK/C05/115	INFERRED ROCKHEAD CONTOUR PLAN (FOR INFORMATION ONLY)
30	1831/T/OP5/MHK/C05/117	GROUND WATER LEVEL CONTOUR PLAN (FOR INFORMATION ONLY)
31	1831/T/OP5/MHK/C05/200	GEOLOGICAL PROFILE (SHEET 1) (FOR INFORMATION ONLY)

Figure 5.4 Drawing list table for sheet creation

1. Click button to invoke function and select desired title block in window shown, if no title block is needed, click cancel button and a window displayed of prompt that asks whether to continue process (Figure 5.5);

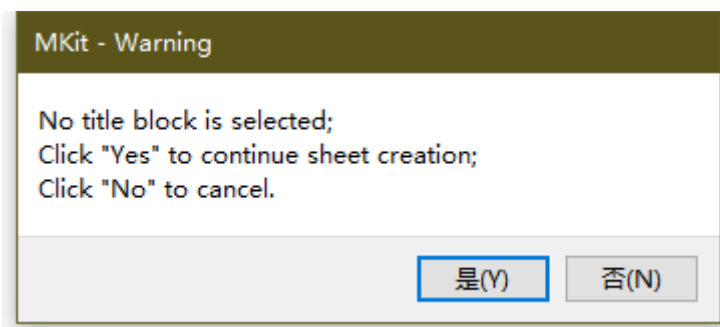


Figure 5.5 Prompt window

2. If a title block is selected or order to continue is given, navigate to the target file for sheet creation.

When finished, check created sheets in project browser window.

## 6. More Information

This document is updated regularly according to the progress of development of MKit Plug-in.