Release Note

Release Date : Dec, 2022

Product Ver. : nGen 2023 (v1.1)

Contents

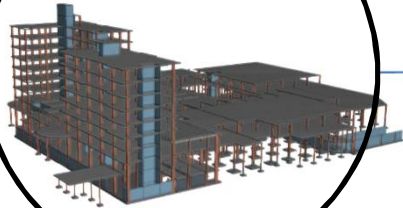↓ Go to FREE TYIAL   ↓ INSTALLER DOWNLOAD

1. New Environment for Drawing Mode

Provide Drawing Mode with 3D model for Generation Drawings
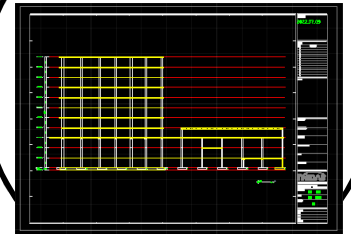
nGen 2022 (v2.1)

Model for Analysis

• Could not confirm the 3D shape for drawing

• Does not support update of drawings according to changes
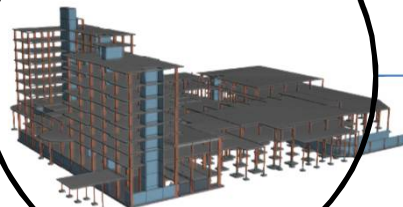 in model and reinforcing bar information

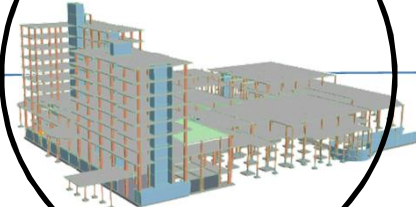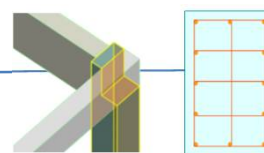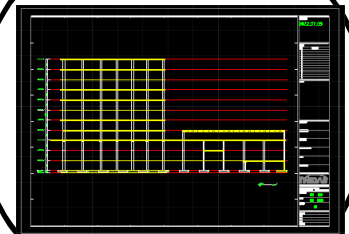 (drawings must be regenerated)

Drawing

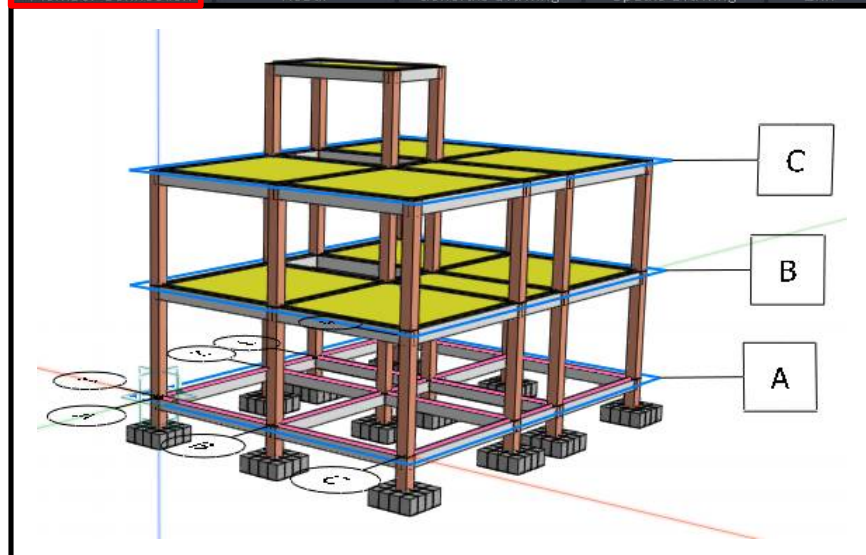**nGen 2023 (v1.1)**

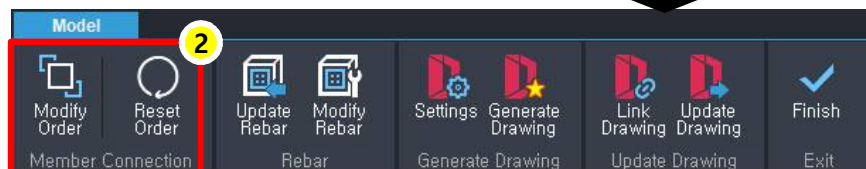*Model for Analysis*

Model for Drawing

Edit Model

Drawing

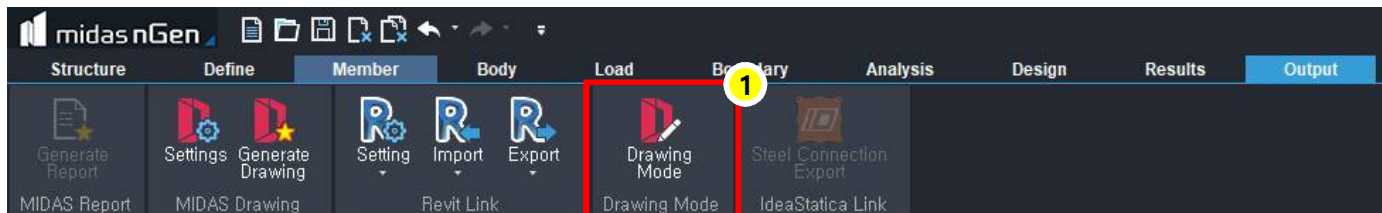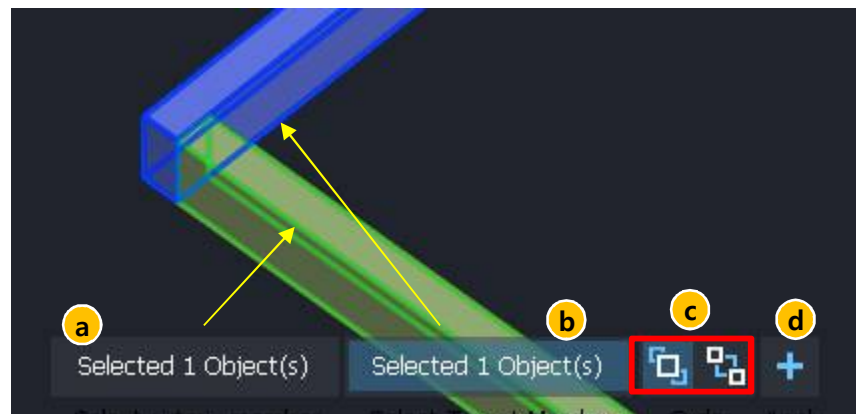Update drawing for model revision

2. The Process of Generating Structural Drawings

Drawing Mode
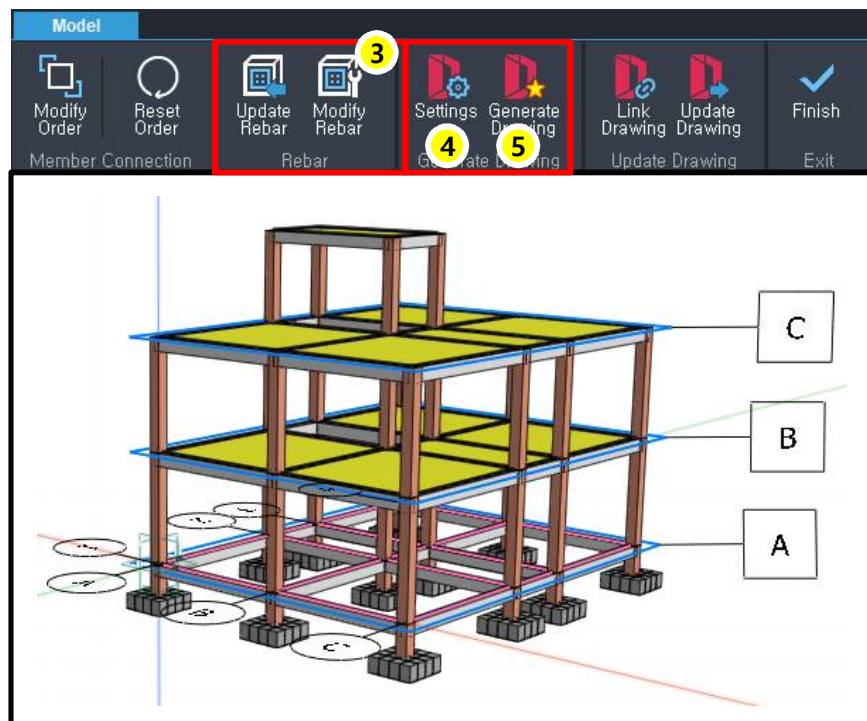

① Click 'Drawing mode' in Output tap. → Drawing mode is activated.

② Click 'Modify Order'. → Modify the shape of the connections

   * Reset Order : Initialize the edited joint shape in Drawing mode.

a. Select a criteria member

b. Select a target member

c. Select a order type.

d.   Click "+".

# 2. The Process of Generating Structural Drawings

Drawing Mode

③ Click 'Modify Rebar' → Edit a rebar information.

- It does not affect the design result.

- It will be reflected in the drawings for the member lists and rebar arrangement.

- "Update Rebar": After modifying the reinforcing bar information in 'Modify Rebar', the rebar information will be updated again by redesign.

④ Click Settings → Set the level for generation drawings

⑤ Click 'Generate Drawing' → Execute midas Drawing and deliver the information.

3. Main Function for Update Drawing (Without re-generation)

Before
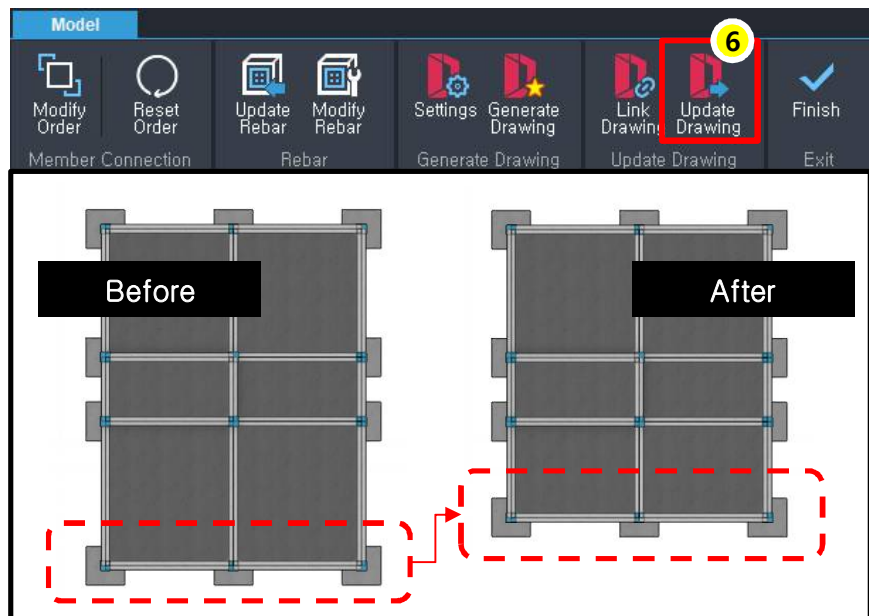
After

⑥ Click 'Update Drawing' → If the model shape or design data (reinforcement information) will be changed in the model, the drawing can be updated.

❖ No need to regenerate previous generated drawing if you use 'update drawing' function.

⑦ After selecting Drawing lists that need to be updated in the tree menu of midas Drawing, right-click the mouse and update drawing.

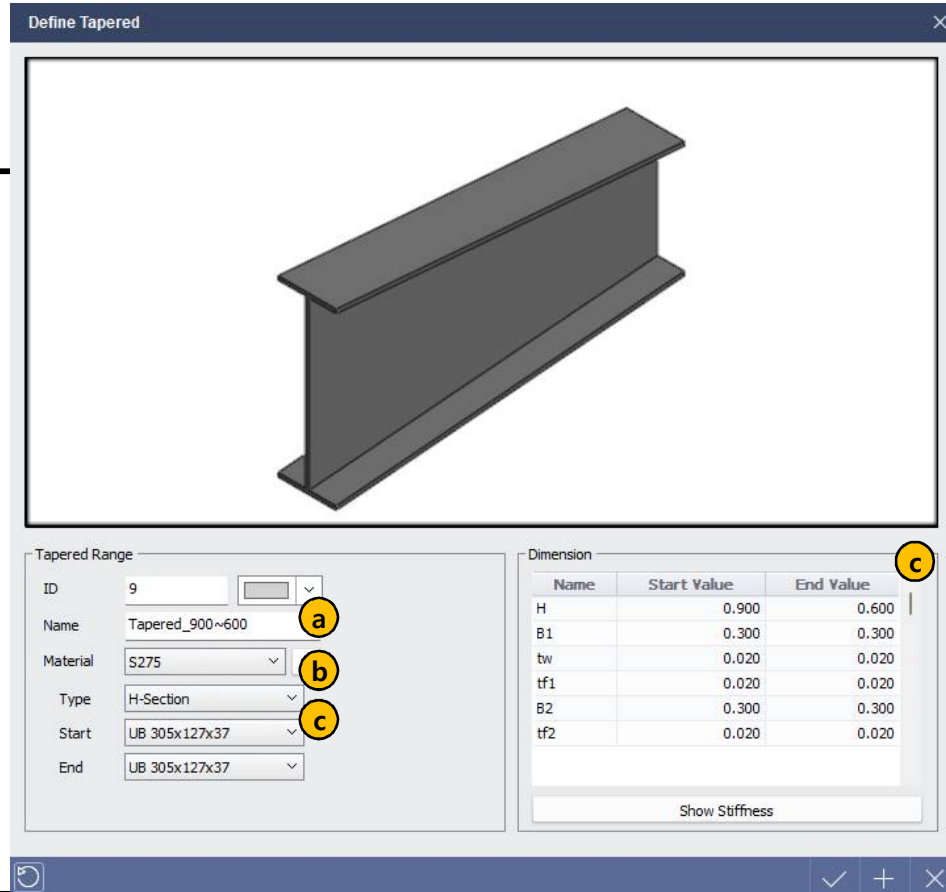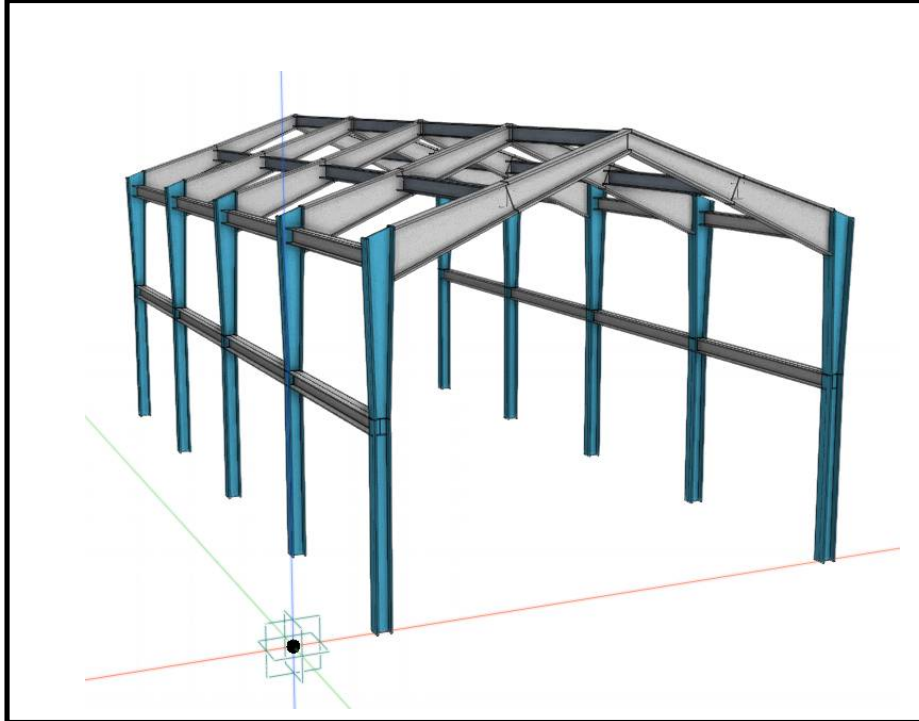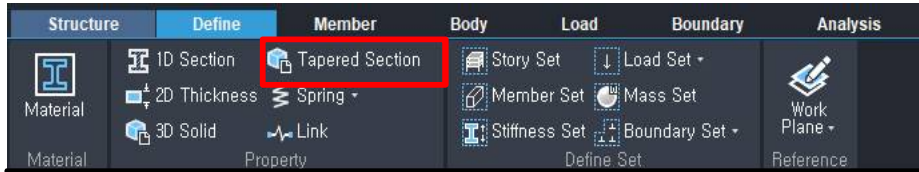❖ Link Drawing : Only mdwg files that match the model running in nGen can be opened.

❖ Older versions of mdwg files cannot be opened.

❖ By installing another midas Drawing file, which is provided separately global technical support center website.

pre-modified drawing

Updated drawing
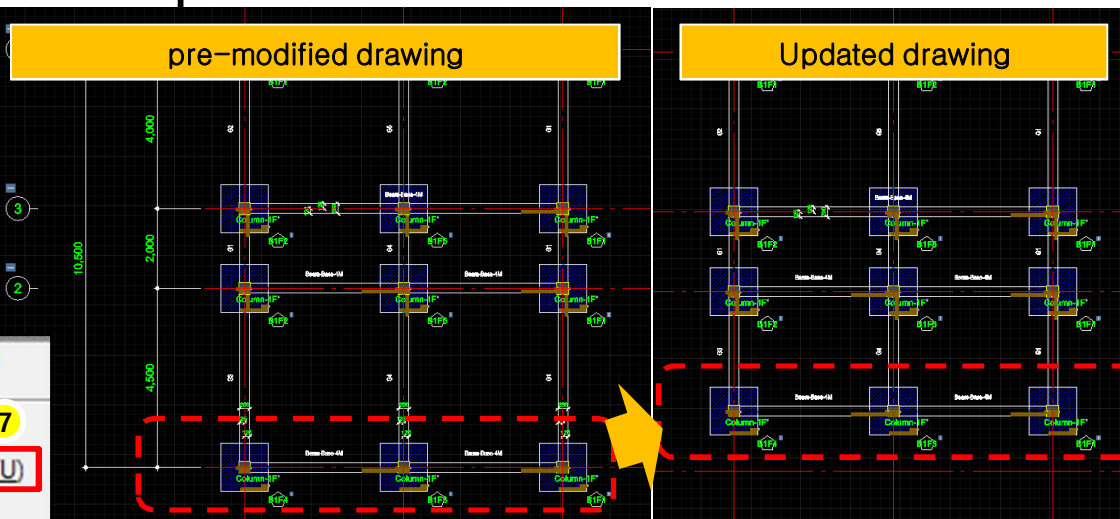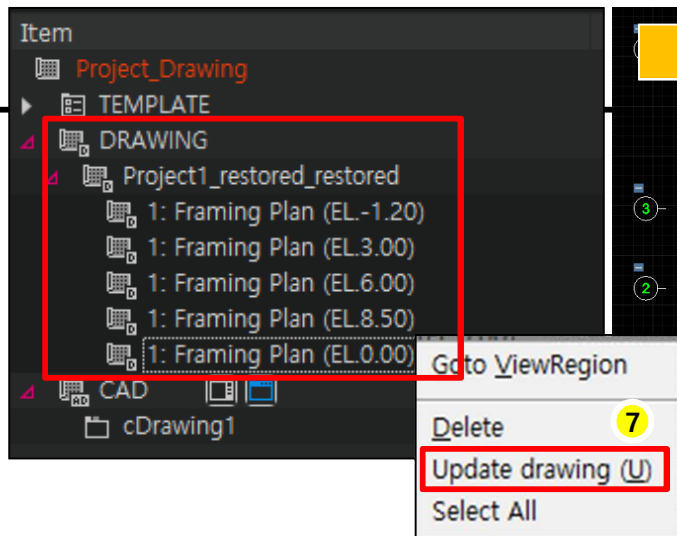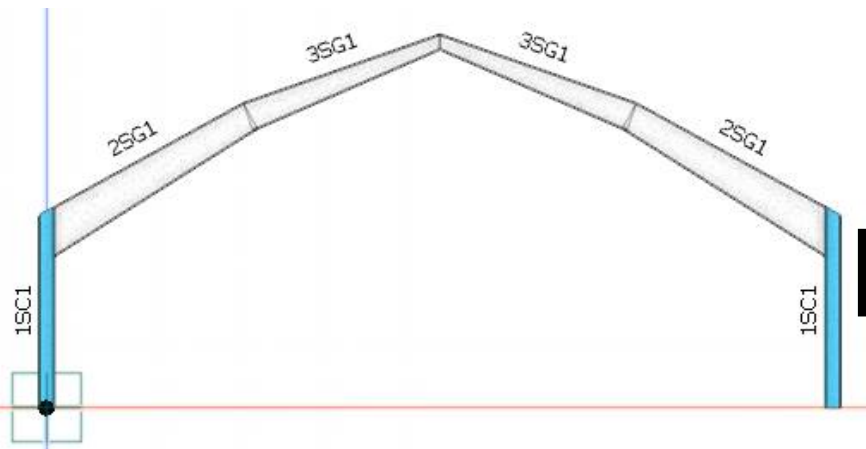
4. Tapered Section
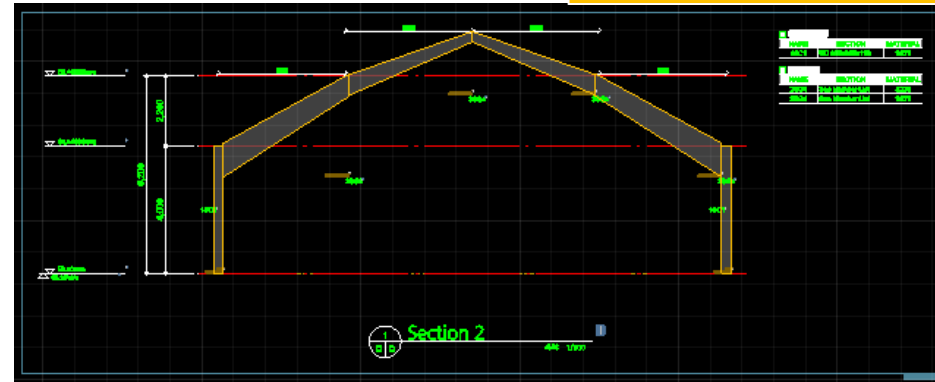
Define the Tapered Section

a. Input the name for tapered section

b. Select the material

c. Input the value for tapered section (Type : Support Only H-section, and other section shapes will be added later.)

4. Tapered Section

Generate Drawing for Tapered Section

Elevation Drawing

Member Lists

If there is a tapered beam, select Style02.

5. nGen-Revit Interface

Revit Model

nGen Model
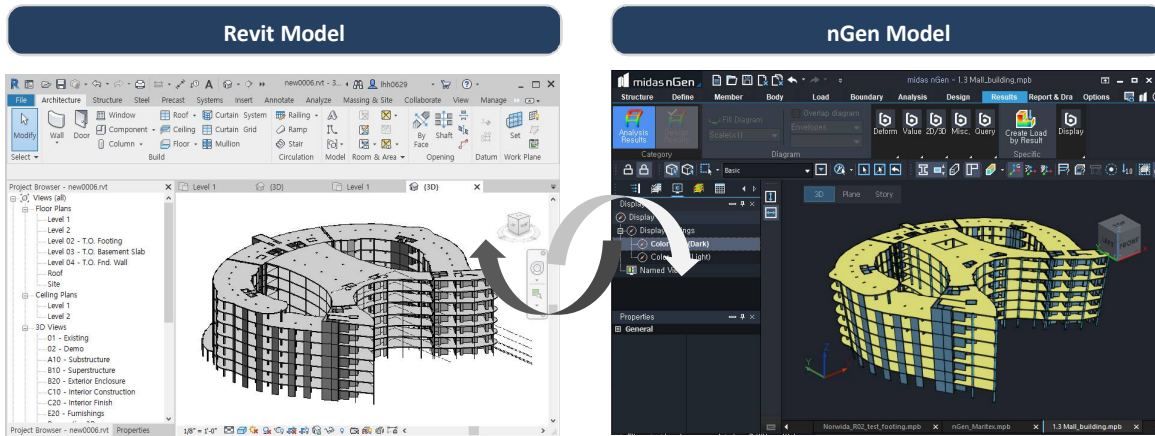
In the case of Revit 2023, you can export to nGen after setting structural elements through the Analytical Automation function.
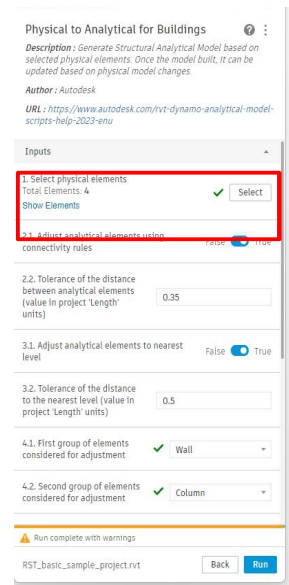
The following table shows the Revit components that are sent to midas nGen.

| Components		Interface			Check
Properties	**Grid**	Revit	↔	nGen	Inclined and curved grids are not supported.
	Material	Revit	↔	nGen	
	Section	Revit	↔	nGen	
Member	**Beam**	Revit	↔	nGen	
	Column	Revit	↔	nGen	
	Wall	Revit	↔	nGen	
	Slab Horizontal Slab	Revit	↔	nGen	
	Slope Slab	Revit	→	nGen	
	Drop Panel	Revit	→	nGen	
	Foundation Mat footing	Revit	↔	nGen	
	Isolation footing	Revit	→	nGen	Import as mat footing member in midas nGen.
	Strip footing	Revit	→	nGen	Import as mat footing member in midas nGen.
	Brace	Revit	↔	nGen	
	Truss (Family)	Revit	→	nGen	Import as brace member in midas nGen.
	Opening	Revit	↔	nGen	
	Offset Information	Revit	↔	nGen	
Load			-		Not support
Boundary condition			-		Not support
Rebar Data			-		(nGen 2021 (v2.1))

* **Rebar Data is supported to export only nGen to Revit.**

6. Revision Mark & Note
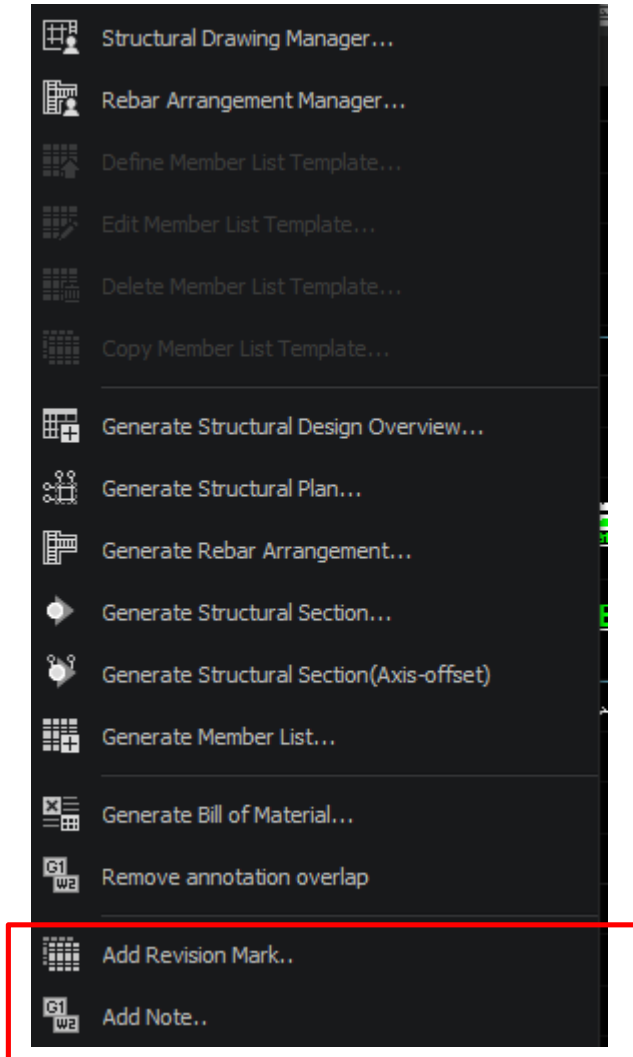
Simple revision information and notes can be added in Drawing mode.

if the drawing is updated, this information will be maintained.

7. Steel Section DB

Add Box & Pipe Section as per UNI code