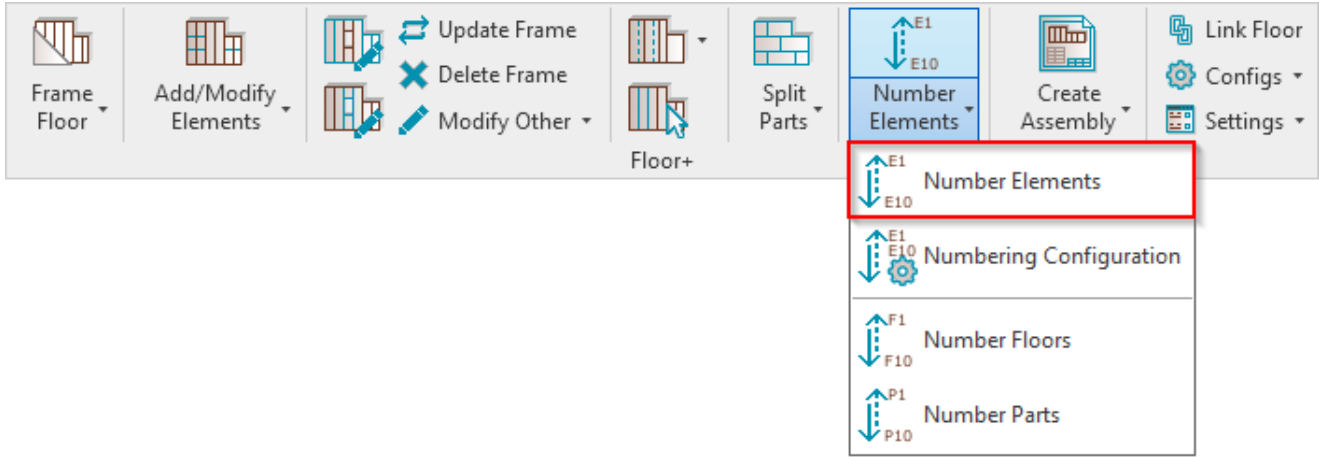


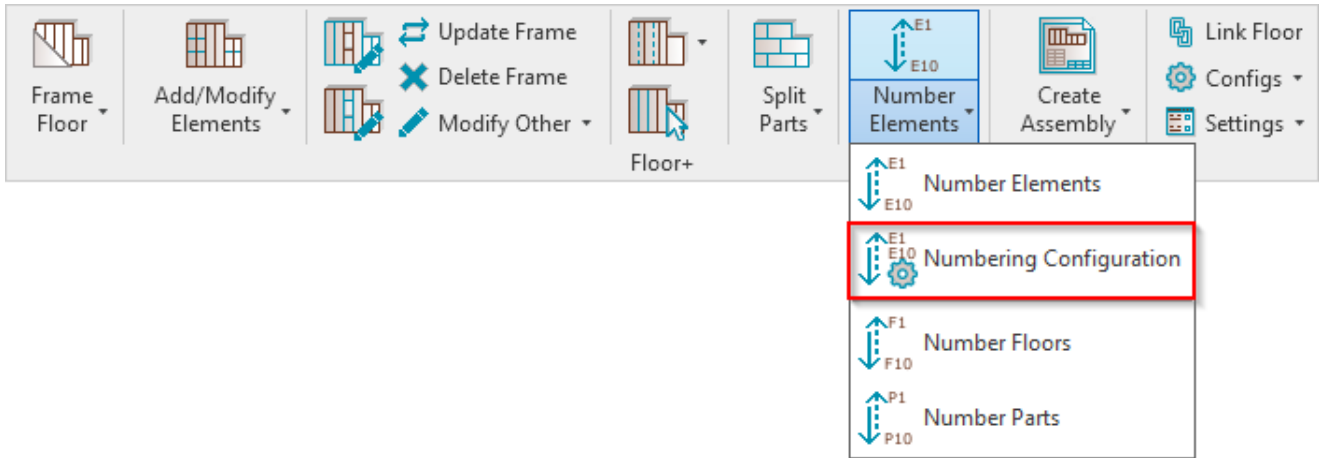
NUMBERING

Modified on: Sun, 6 Dec, 2020 at 5:21 PM

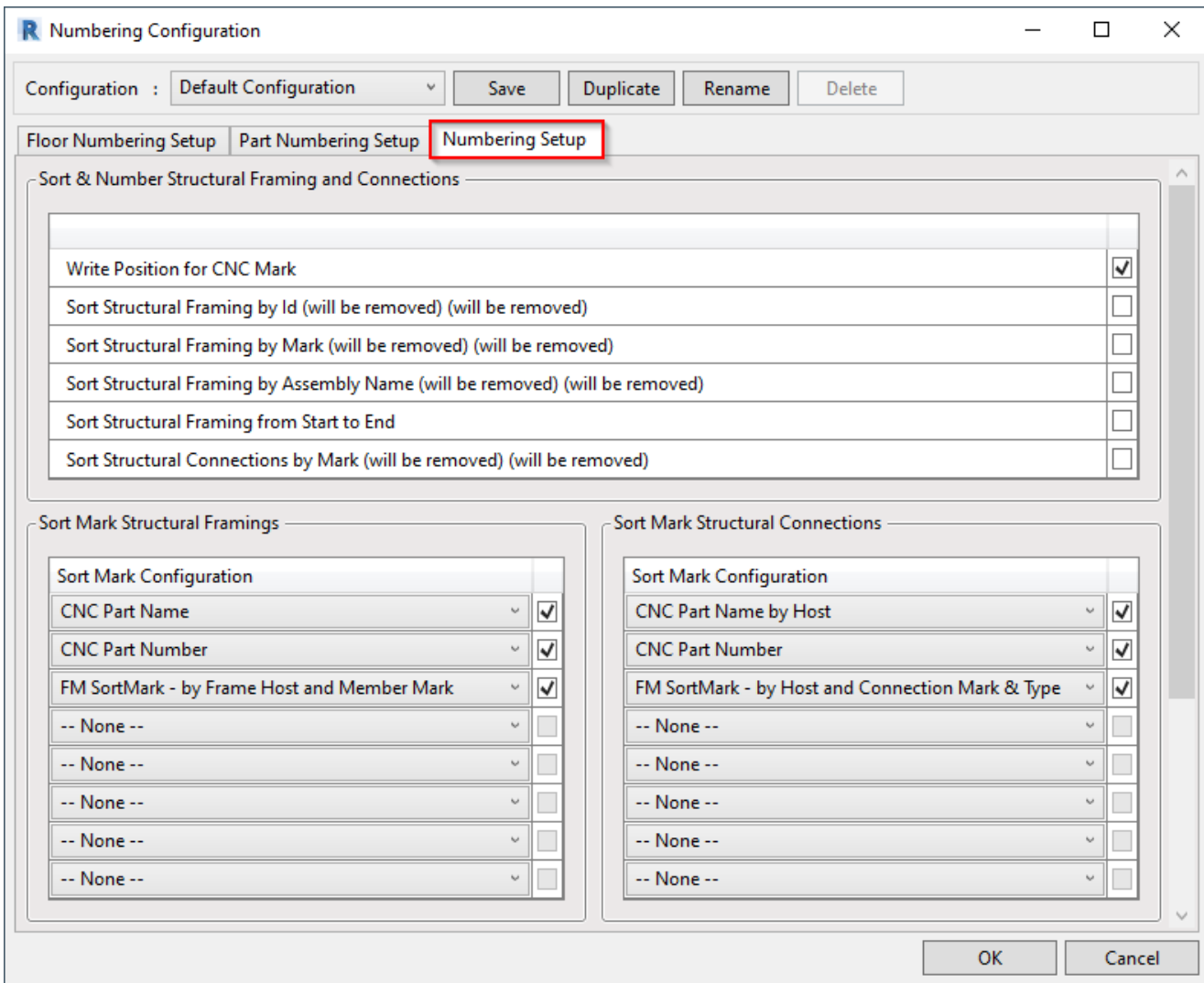
Number Elements



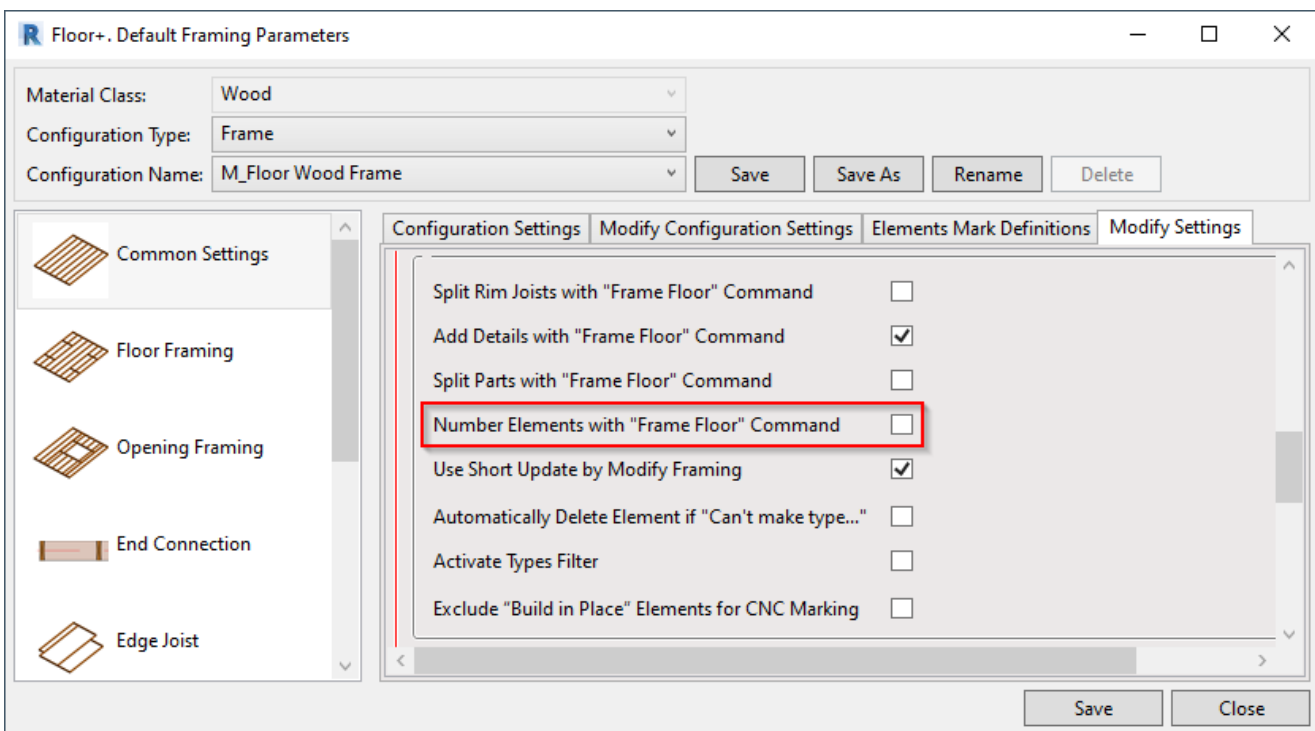
Number Elements – renumbers all framing elements (under Structural Framing category) and details (under Structural Connections category) by predefined **Numbering Configuration**. It have many options for simple and complex numbering when you need to load many numbering rules.



Loads all selected rules from **Numbering Setup** tab:



Furthermore, you can turn on **Number Elements with "Frame Floor" Command** in **Framing Configuration** → **Common Settings** → **Modify Settings**, and all elements will be numbered with **Frame Floor** command. You will not need to use **Number Elements** additionally.



[Read more about Numbering Configuration >>](https://agacad.freshdesk.com/support/solutions/articles/44001785016-numbering-numbering-configuration) (<https://agacad.freshdesk.com/support/solutions/articles/44001785016-numbering-numbering-configuration>).

Number Elements - Example 1


The screenshot shows the 'Numbering Configuration' dialog box with the following settings:

- Configuration:** Default Configuration
- Buttons:** Save, Duplicate..., Rename..., Delete
- Tabs:** Floor Numbering Setup, Part Numbering Setup, **Numbering Setup**
- Sort & Number Structural Framing and Connections:**
 - Write Position for CNC Mark
 - Sort Structural Framing by Id (will be removed)
 - Sort Structural Framing by Mark (will be removed)
 - Sort Structural Framing by Assembly Name (will be removed)
 - Sort Structural Framing from Start to End
 - Sort Structural Connections by Mar (will be removed)
- Sort Mark Structural Framings:**
 - Sort Mark Configuration: **FM SortMark - by Frame Host & Member Mark and Element ID**
 - None --
 - None --
 - None --
 - None --
 - None --
 - None --
 - None --
- Sort Mark Structural Connections:**
 - Sort Mark Configuration: **FM SortMark - by Host and Connection Mark & Type**
 - None --
 - None --
 - None --
 - None --
 - None --
 - None --
 - None --
- Sort Mark Configuration Files' Location:**
 - Use Predefined SortMark configurations
 - C:\Users\Renata\AppData\Roaming\Tools 4 Revit\Floor+2020 Configurations\Numbering Setup Configurations\SortMark
- Buttons:** OK, Cancel

FM SortMark - by Frame Host & Member Mark and Element ID – a sample rule for numbering farming members. It groups framing elements by frame host and **Framing Member Mark** (comes from **Framing Configuration** → **Common Settings** → **Elements Mark Definitions**). Then every grouped element is sorted by **ID**.

FM SortMark – parameter with the result. You can find it in **Element Properties** → **Identity Data**.

Properties

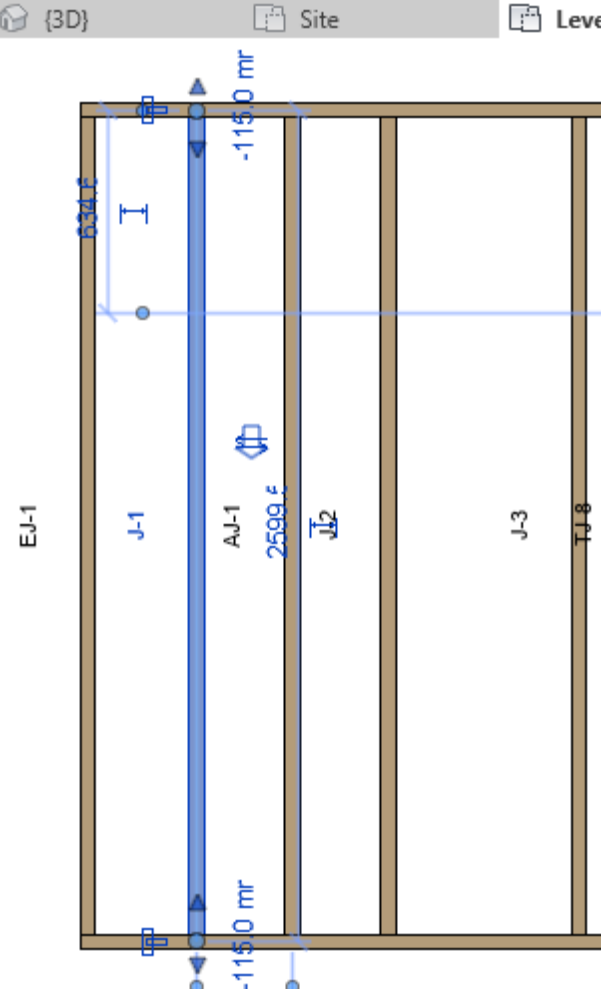


M_WF Joist
LMBR 45x150

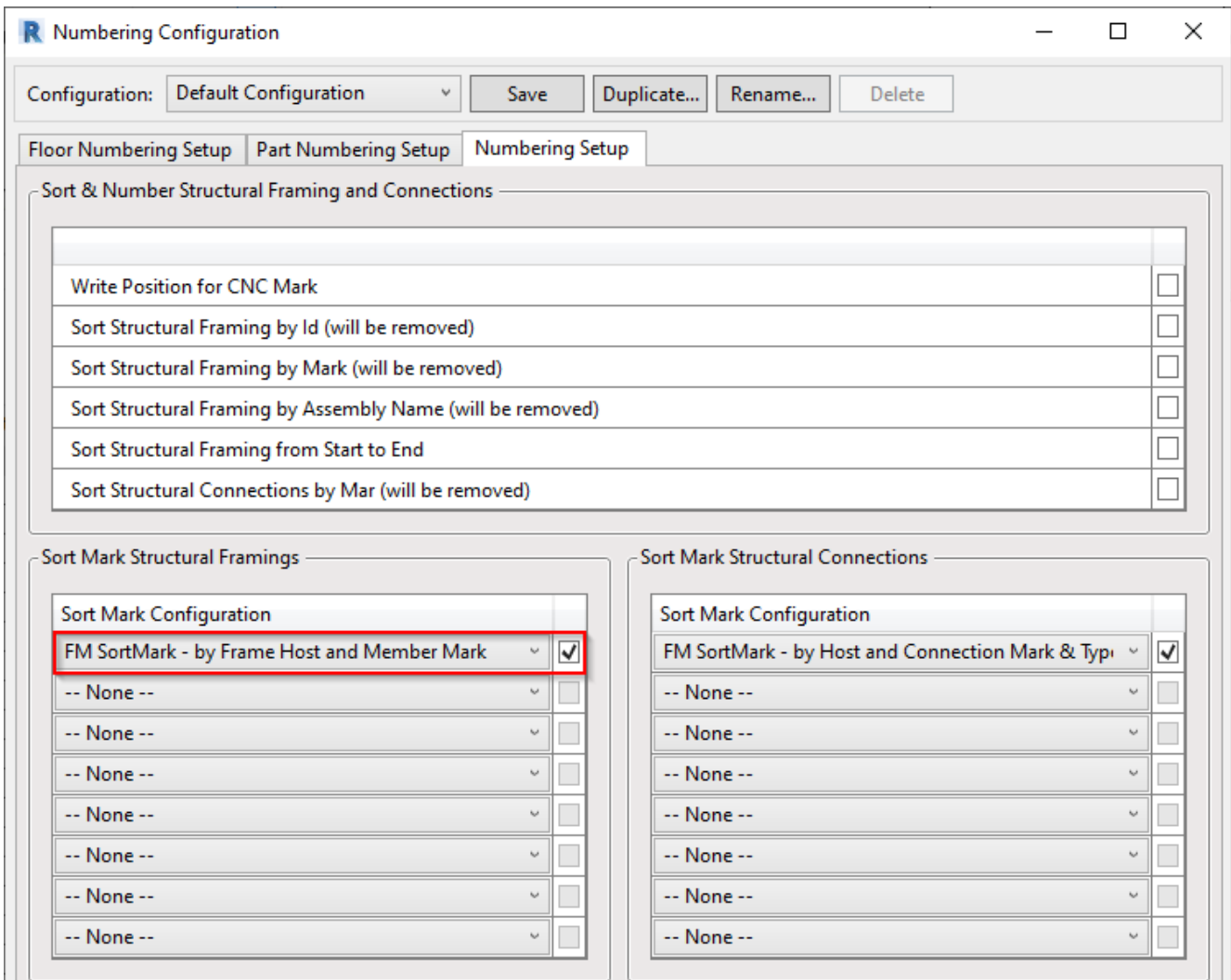
Structural Framing (Other) (1) Edit Type

Identity Data

FM End_Front Angle_Cut An...	90.00°
FM End_Front Bevel_Cut Angle	90.00°
FM HostSortMark	
FM Number of Connectors	0.000000
FM Start_Rear Angle_Cut Angle	90.00°
FM Start_Rear Bevel_Cut Angle	90.00°
Image	
Comments	
Mark	
Framing Member	Common Joist
Framing Member Type	Joist
Framing Member Cut Length	2554.5
Framing	Floor
Framing Member Description	Common Joist
FM SortMark	J-1
Framing Layer	Frame
Framing Member Mark	J
FM HostMemberSortMark	F-1
Framing Member Mass	
Framing Member Volume	0.017 m ³



Number Elements - Example 2



FM SortMark - by Frame Host and Member Mark – a sample rule for numbering framing members. It groups framing elements by frame host and **Framing Member Mark** (comes from **Framing Configuration** → **Common Settings** → **Elements Mark Definitions**). Then every grouped element is sorted by its length.

FM SortMark – parameter with the result. You can find it in **Element Properties** → **Identity Data**.

Properties {3D} Site Level

M_WF Joist
LMBR 45x150

Structural Framing (Other) (1) Edit Type

Identity Data

FM End_Front Angle_Cut An...	90.00°
FM End_Front Bevel_Cut Angle	90.00°
FM HostSortMark	
FM Number of Connectors	0.000000
FM Start_Rear Angle_Cut Angle	90.00°
FM Start_Rear Bevel_Cut Angle	90.00°
Image	
Comments	
Mark	1.6
Framing Member	Common Joist
Framing Member Type	Joist
Framing Member Cut Length	2554.5
Framing	Floor
Framing Member Description	Common Joist
FM SortMark	J-1
Framing Layer	Frame
Framing Member Mark	J
FM HostMemberSortMark	F-1
Framing Member Mass	9.611 kg
Framing Member Volume	0.017 m ³

EJ-1 J-1 AJ-1 J-1 J-1 TJ-6

634.6

Number Elements - Example 3

Numbering Configuration

Configuration: Default Configuration Save Duplicate... Rename... Delete

Floor Numbering Setup Part Numbering Setup **Numbering Setup**

Sort & Number Structural Framing and Connections

Write Position for CNC Mark	<input type="checkbox"/>
Sort Structural Framing by Id (will be removed)	<input type="checkbox"/>
Sort Structural Framing by Mark (will be removed)	<input type="checkbox"/>
Sort Structural Framing by Assembly Name (will be removed)	<input type="checkbox"/>
Sort Structural Framing from Start to End	<input type="checkbox"/>
Sort Structural Connections by Mar (will be removed)	<input type="checkbox"/>

Sort Mark Structural Framings

Sort Mark Configuration		
FM SortMark - by Frame Host and Member Mark	▼	<input checked="" type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>

Sort Mark Structural Connections

Sort Mark Configuration		
FM SortMark - by Host and Connection Mark & Type	▼	<input checked="" type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>
-- None --	▼	<input type="checkbox"/>

FM SortMark - by Host and Connection Mark & Type – a sample rule for numbering details (under structural connections category). It groups details by frame host and **Framing Member Mark** (comes from **Framing Configuration** → **Common Settings** → **Elements Mark Definitions**). Then every grouped detail is sorted by type.

FM SortMark – parameter with the result. You can find it in **Element Properties** → **Identity Data**.

The screenshot shows a software interface with a 3D model of a structural member on the right and a 'Properties' panel on the left. The 3D model shows a brown structural member with a blue hanger attached to its bottom edge. The 'Properties' panel is titled 'MH_Support Face_Bottom Edge_Hanger 45x120'. It includes a section for 'Structural Connections (1)' with an 'Edit Type' button. Below that is the 'Identity Data' section, which contains a table of properties:

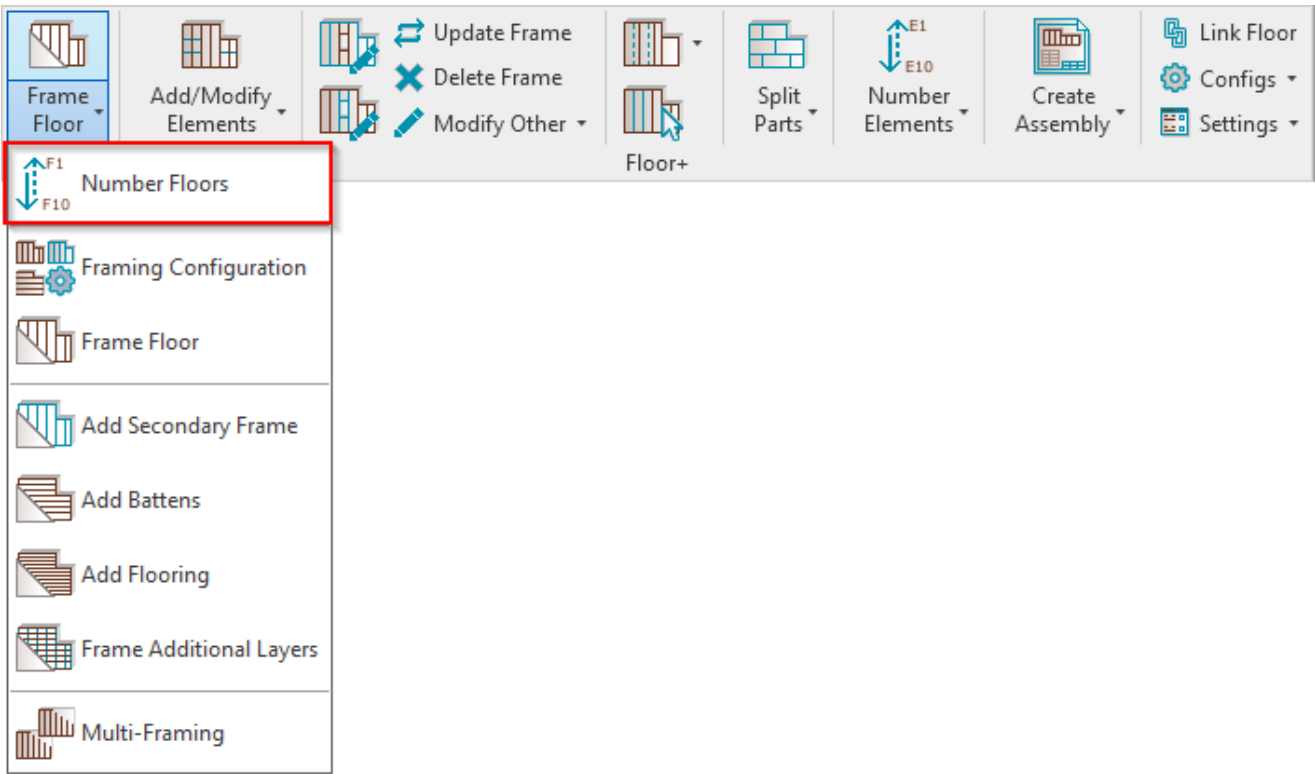
Identity Data	
Framing Member Cut Length	121.0
Framing Layer	Frame
Framing	Floor
FM Type	Standard
Image	
Comments	
Mark	
FM SortMark	F-9-C-1
Framing Member Mark	C
FM HostMemberSortMark	F-9
Framing Member Mass	
Framing Member Volume	0.000 m ³
CNC Part Number	
CNC Part Name	
Facing flipped	<input checked="" type="checkbox"/>
Hand flipped	<input checked="" type="checkbox"/>
CNC Part Position	

Number Floors

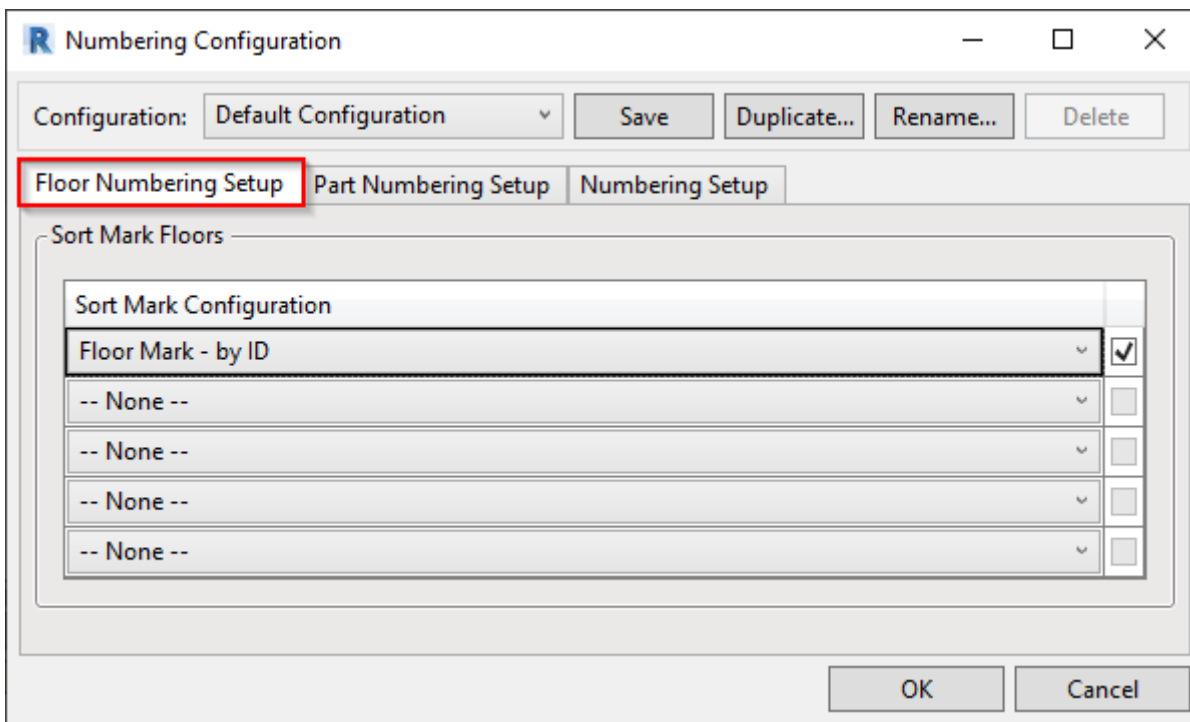
The screenshot shows a software toolbar with various icons for frame and element management. A dropdown menu is open under the 'Number Elements' icon, showing the following options:

- Number Elements
- Numbering Configuration
- Number Floors** (highlighted with a red box)
- Number Parts

or:



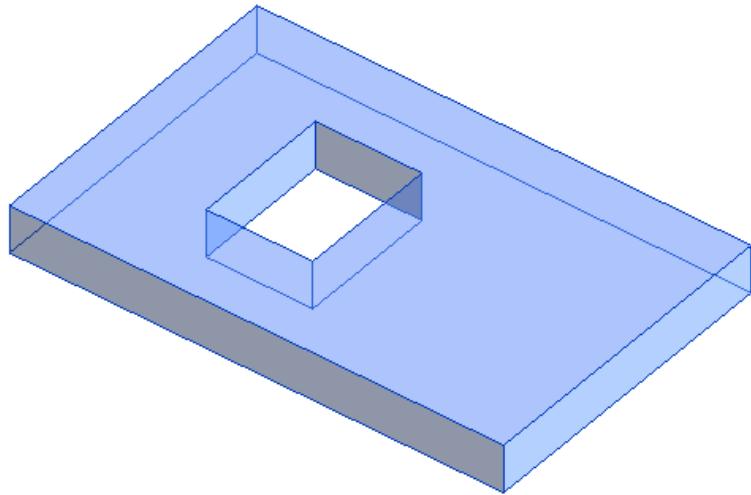
Number Floors – rennumbers all floors by predefined configuration in **Numbering Configuration** → **Floor Numbering Setup**. Floor numbering configurations come from **Sort Mark** (<http://www.aga-cad.com/products/tools4revit/sort-mark>).



Example: All floors are numbered by unique number, which has F as a prefix. Result is written to the Mark instance parameter.

[Sort Mark E-Help >>](#)

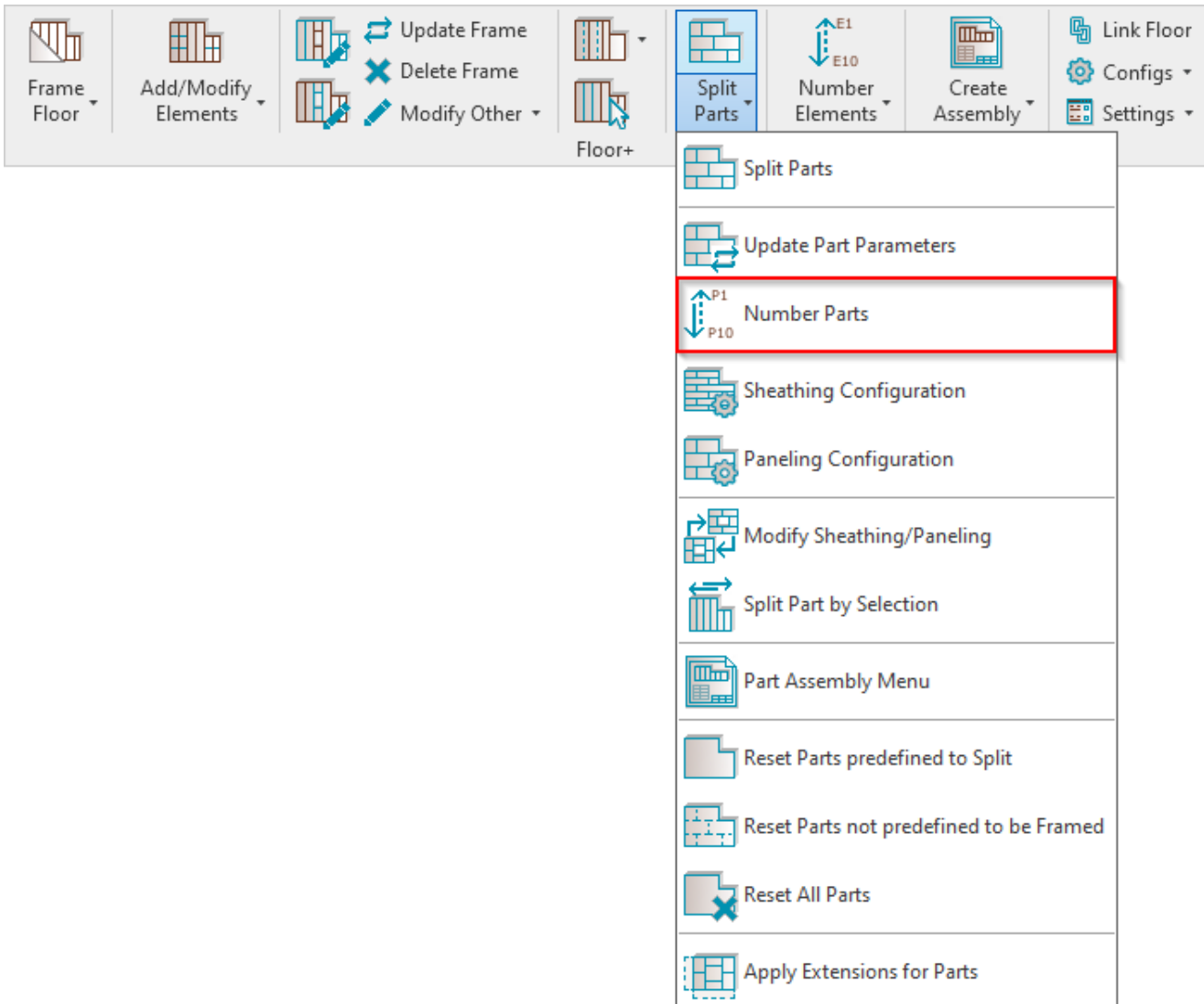
Properties	
Floor Floor 200+18SH+35FI-45B-18SH	
Floors (1) Edit Type	
Perimeter	13952.4
Area	6.175 m ²
Volume	1.951 m ³
Elevation at Top	4000.0
Elevation at Bottom	3684.0
Thickness	316.0
Identity Data	
Image	
Comments	
Mark	F-9
FMid SortMark	
Assembly Area	
Assembly Volume	
Assembly Width	
Assembly Depth	
Assembly Length	
Assembly Height	



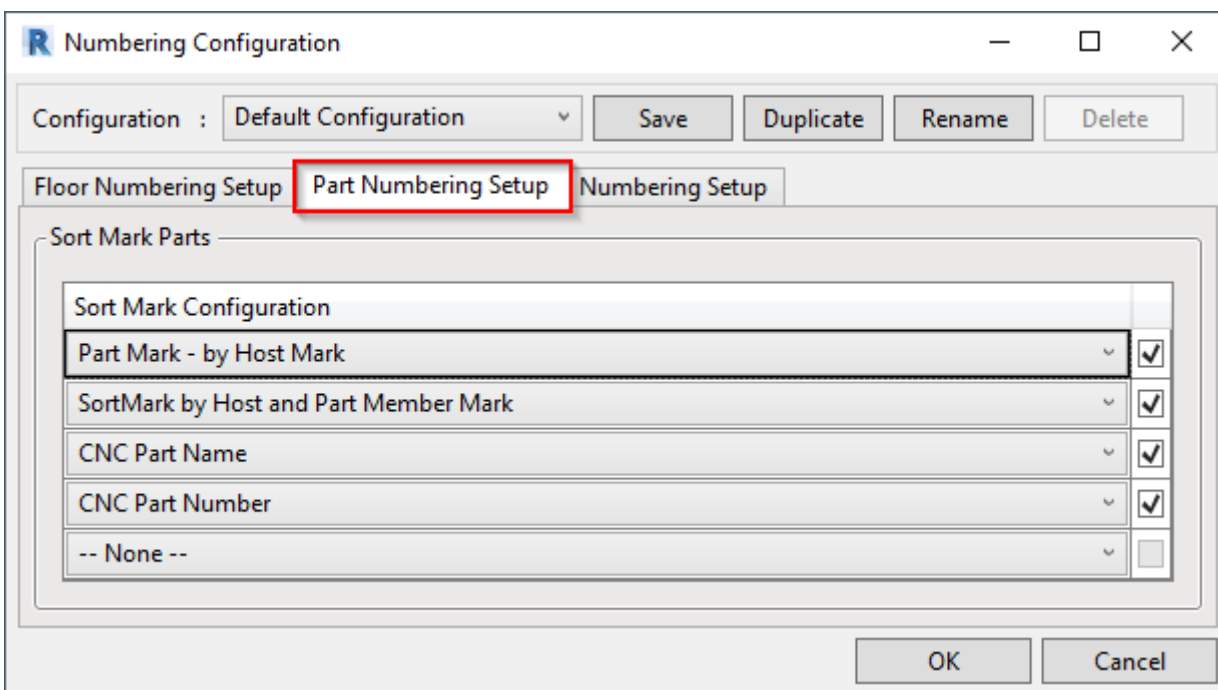
Number Parts

The screenshot shows the software's ribbon menu with the following options: Frame Floor, Add/Modify Elements, Update Frame, Delete Frame, Modify Other, Floor+, Split Parts, Number Elements, Create Assembly, Link Floor, Configs, and Settings. The 'Number Elements' dropdown menu is open, showing the following options: Number Elements, Numbering Configuration, Number Floors, and Number Parts. The 'Number Parts' option is highlighted with a red box.

OR:

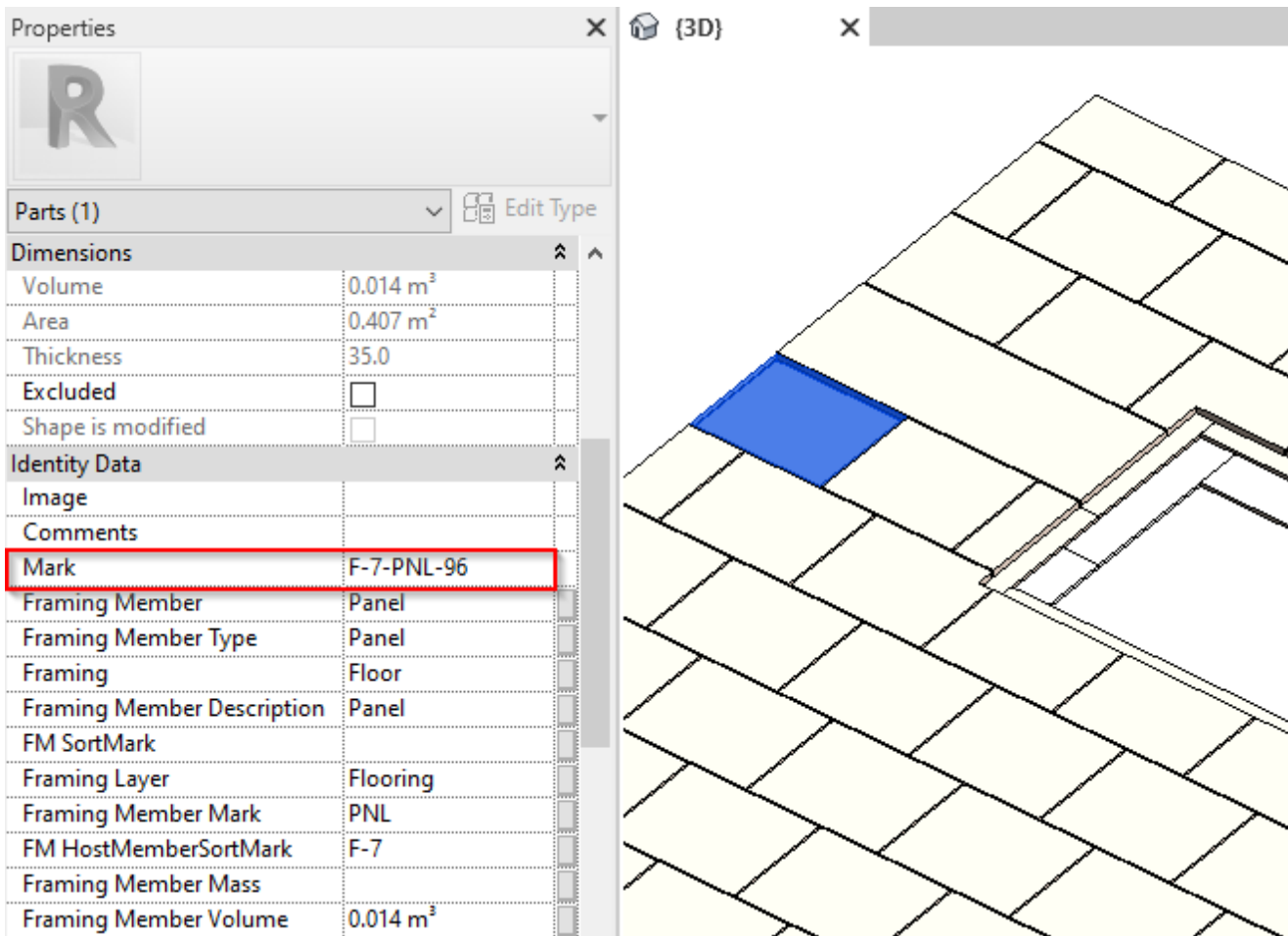


Number Parts – rennumbers all sheathing/paneling (Parts) by predefined configuration in **Numbering Configuration** → **Part Numbering Setup**. Part numbering configurations come from **Sort Mark** (<http://www.agacad.com/products/tools4revit/sort-mark>).



Example: All sheathing/paneling elements (Parts) are grouped by **Framing Member Mark** (comes from **Framing Configuration** → **Common Settings** → **Elements Mark Definitions**), uniquely numbered, and have **FM HostMemberSortMark** value as a prefix. Result is written to the **Mark** instance parameter.

[Sort Mark E-Help >>](#)



The screenshot displays a 3D model of a floor paneling system on the right and a Properties window on the left. The Properties window is titled 'Properties' and shows a large 'R' icon. Below the icon, there is a 'Parts (1)' section with an 'Edit Type' button. The 'Dimensions' section includes the following data:

Property	Value
Volume	0.014 m ³
Area	0.407 m ²
Thickness	35.0
Excluded	<input type="checkbox"/>
Shape is modified	<input type="checkbox"/>

The 'Identity Data' section includes the following data:

Property	Value
Image	
Comments	
Mark	F-7-PNL-96
Framing Member	Panel
Framing Member Type	Panel
Framing	Floor
Framing Member Description	Panel
FM SortMark	
Framing Layer	Flooring
Framing Member Mark	PNL
FM HostMemberSortMark	F-7
Framing Member Mass	
Framing Member Volume	0.014 m ³

The 'Mark' field is highlighted with a red box. The 3D model on the right shows a grid of yellow panels on a floor, with one panel highlighted in blue.