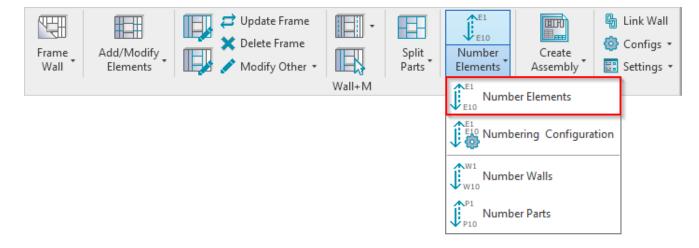
NUMBERING

Modified on: Sat, 7 Sep, 2019 at 6:08 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.

| Frame Wall | Add/Modify Elements | Update Fram | | Split Parts | Number Elements | Create Assembly | ٥ | Link Wall Configs 🝷 Settings 👻 |
|---------------|------------------------|-------------|--------|----------------|--------------------|--------------------|-------|--------------------------------------|
| | | | Wall+M | | LE10 Numb | er Elements | | |
| | | | | | | ering Configura | ation | |
| | | | | | W1 W10 Numb | er Walls | | |
| | | | | | P10 Numb | er Parts | | |

Loads all selected rules from Numbering Setup tab:

| R Numbering Configuration | |
|--|---|
| Configuration: Default Configuration v Save | Duplicate Rename Delete |
| Wall Numbering Setup Part Numbering Setup Numbering Setu | q |
| Sort & Number Structural Framing and Connections | |
| | |
| Write Position for CNC Mark | |
| Sort Structural Framing by ld (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 Configuration FM SortMark - by Frame Host and Member Mark | Sort Mark Configuration FM SortMark - by Host and Connection Mark & Type v |
| None | None V |
| None | None v |
| None ~ | None v |
| Sort Mark Configuration Files' Location Use Predefined SortMark configurations | |
| C:\Users\Renata\AppData\Roaming\Tools 4 Revit\Wall+2020 Co | nfigurations\Numbering Setup Configurations\SortMark |
| | OK Cancel |

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

| | Configuration Settings Modify Configuration Settings Elements Mark Definitions Modify Settings | |
|-----------------|--|---|
| Common Settings | Split Top/Bottom Plates with "Frame Wall" Command | ^ |
| Wall Framing | Add Details with "Frame Wall" Command | |
| | Split Parts with "Frame Wall" Command | |
| Opening Framing | Number Elements with "Frame Wall" Command | |
| | Use Short Update by Modify Framing | |
| L Connection | Automatically Delete Element if "Can't make type" | |
| | Activate Types Filter | |
| End Connection | Check for Wall Sweeps and Reveals | |
| | Exclude "Build in Place" Elements for CNC Marking | ~ |
| \checkmark | | |

Read more about Numbering Configuration >> (https://agacad.freshdesk.com/support/solutions/articles/44001794277-

numbering-%E2%80%93-numbering-configuration)

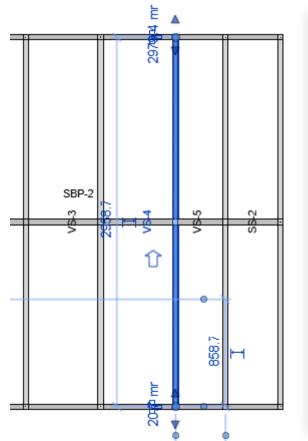
Number Elements - Example 1

| R Numbering Configuration | - | | × |
|---|---|------|-----|
| Configuration: Default Configuration · Save Duplicate Rename Delete | | | |
| Wall 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 Structural Connections | | | |
| Sort Mark Configuration Sort Mark Configuration | | | |
| FM SortMark - by Frame Host & Member Mark and Element ID 🕥 🗸 FM SortMark - by Host and Connection Mark & Type | | ~ | ┛║ |
| None None | | v | |
| None None | | v | |
| None | | ~ | |
| None | | ~ | |
| None None | | ~ | |
| None None | | ~ | |
| None | | v | |
| ОК | | Cano | :el |

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** \rightarrow **Common Settings** \rightarrow **Elements Mark Definitions**). Then every grouped element is sorted by ID.

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





NUMBERING : AGACAD

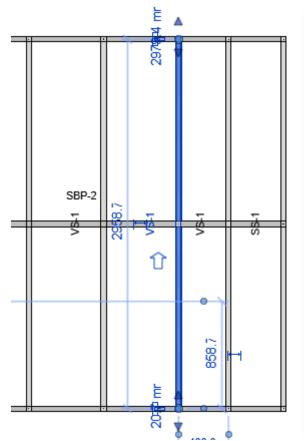
| Properties | × |
|--------------------------------|---------------|
| M_MF C+C_CH Stud C08941-10 | d 🗸 |
| Structural Framing (Other) (1) | 🗸 🔐 Edit Type |
| Mark | ^ |
| Framing Member | Stud |
| Framing Member Type | Stud |
| Framing Member Cut Length | 2998.0 |
| Framing | Wall |
| Framing Member Description | Stud |
| FM SortMark | VS-4 |
| Framing Layer | Frame |
| Framing Member Mark | VS |
| FM HostMemberSortMark | W-11 |
| Framing Member Mass | |
| Framing Member Volume | 0.002 m³ |
| Link to Connected Wall | |
| Build in Place | |
| CNC Part Number | v |
| Properties help | Apply |

Number Elements - Example 2

| | - | | | | | | | |
|--|--|-----------|----------|---------|---|-------------------|---------|---|
| nfiguration: | Default Configuration v S | Save | D | uplicat | Rename Delete | | | |
| ll Numberin | g Setup Part Numbering Setup Num | bering S | Setup | p | | | | |
| ort & Numbe | er Structural Framing and Connections — | | | | | | | |
| | | | | | | | | |
| Write Posit | tion for CNC Mark | | | | | | | |
| Sort Struct | ural Framing by Id (will be removed) | | | | | | | 同 |
| Sort Struct | ural Framing by Mark (will be removed) | | | | | | | |
| Sort Struct | ural Framing by Assembly Name (will be | remove | d) | | | | | |
| Sort Struct | ural Framing from Start to End | | | | | | | |
| | - | | | | | | | |
| | ural Connections by Mar (will be remove uctural Framings | :d) | | | t Mark Structural Connections — | | | |
| ort Mark Stru Sort Mark C | ural Connections by Mar (will be remove uctural Framings Configuration | :d) | | | t Mark Structural Connections Sort Mark Configuration | | | |
| ort Mark Stru Sort Mark C | ural Connections by Mar (will be remove uctural Framings | | √ | | | ction Mark & Type | ~ | |
| ort Mark Stru Sort Mark C | ural Connections by Mar (will be remove uctural Framings Configuration | | V | | Sort Mark Configuration | ction Mark & Type | > > | |
| ort Mark Stru Sort Mark C FM SortMa | ural Connections by Mar (will be remove uctural Framings Configuration | ~ | | | Sort Mark Configuration FM SortMark - by Host and Connec | ction Mark & Type | | |
| ort Mark Stru Sort Mark C FM SortMa None | ural Connections by Mar (will be remove uctural Framings Configuration | ~ | | | Sort Mark Configuration FM SortMark - by Host and Connec None | ction Mark & Type | Ŷ | |
| ort Mark Stru Sort Mark C FM SortMa None None | ural Connections by Mar (will be remove uctural Framings Configuration | · · · · · | ✓ | | Sort Mark Configuration FM SortMark - by Host and Connec None None | ction Mark & Type | 2 2 | |
| Sort Mark Stru Sort Mark C FM SortMa None None None | ural Connections by Mar (will be remove uctural Framings Configuration | | | | Sort Mark Configuration FM SortMark - by Host and Connec None None None | ction Mark & Type | > > > | |
| Sort Mark Stru Sort Mark C FM SortMa None None None None | ural Connections by Mar (will be remove uctural Framings Configuration | | | | Sort Mark Configuration FM SortMark - by Host and Connec None None None | ction Mark & Type | > > > > | |
| Sort Mark Stru Sort Mark C FM SortMa None None None None | ural Connections by Mar (will be remove uctural Framings Configuration | | | | Sort Mark Configuration FM SortMark - by Host and Connec None None None None | ction Mark & Type | > > > > | |

FM SortMark - by Frame Host and Member Mark – a sample rule for numbering farming members. It groups framing elements by frame host and **Framing Member Mark** (comes from **Framing Configuration** \rightarrow **Common Settings** \rightarrow **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** \rightarrow **Identity Data**.



NUMBERING : AGACAD

| Properties | × |
|--------------------------------|---------------|
| M_MF C+C_CH Stud C08941-10 | d 🗸 |
| Structural Framing (Other) (1) | 🗸 🕞 Edit Type |
| Mark | ^ |
| Framing Member | Stud |
| Framing Member Type | Stud |
| Framing Member Cut Length | 2998.0 |
| Framing | Wall |
| Framing Member Description | Stud |
| FM SortMark | VS-1 |
| Framing Layer | Frame |
| Framing Member Mark | VS |
| FM HostMemberSortMark | W-11 |
| Framing Member Mass | |
| Framing Member Volume | 0.002 m³ |
| Link to Connected Wall | |
| Build in Place | |
| CNC Part Number | · · · |
| Properties help | Apply |

Number Elements - Example 3

| Numbering Configuration | | | | ~ | _ | | × |
|---|----------|------|-----------|--|-----------------------|---|----------|
| onfiguration: Default Configuration v S | ave | Du | uplicate. | . Rename Delete |] | | |
| all Numbering Setup Part Numbering Setup Numb | bering S | etup | | | | | |
| 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 | remove | d) | | | | | |
| Sort Structural Framing from Start to End | | | | | | | |
| Sort Structural Connections by Mar (will be removed | d) | | | | | | |
| Sort Mark Structural Framings Sort Mark Configuration FM SortMark - by Frame Host and Member Mark | ~ 1 | 7 | So | Mark Structural Connections rt Mark Configuration M SortMark - by Host and Cor | nection Mark & Type | ~ | v |
| None | ~ | | | None | incetion mark of type | v | |
| None | ~ | | | None | | Ŷ | |
| None | ~ | | | None | | v | |
| None | ~ | | | None | | Ŷ | |
| None | ~ | | | None | | Ŷ | |
| None | ~ | | | None | | Ŷ | |
| None | ~ | | | None | | Ŷ | |
| | | | JL | | | | |

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** \rightarrow **Common Settings** \rightarrow **Elements Mark Definitions**). Then every grouped detail is sorted by type.

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

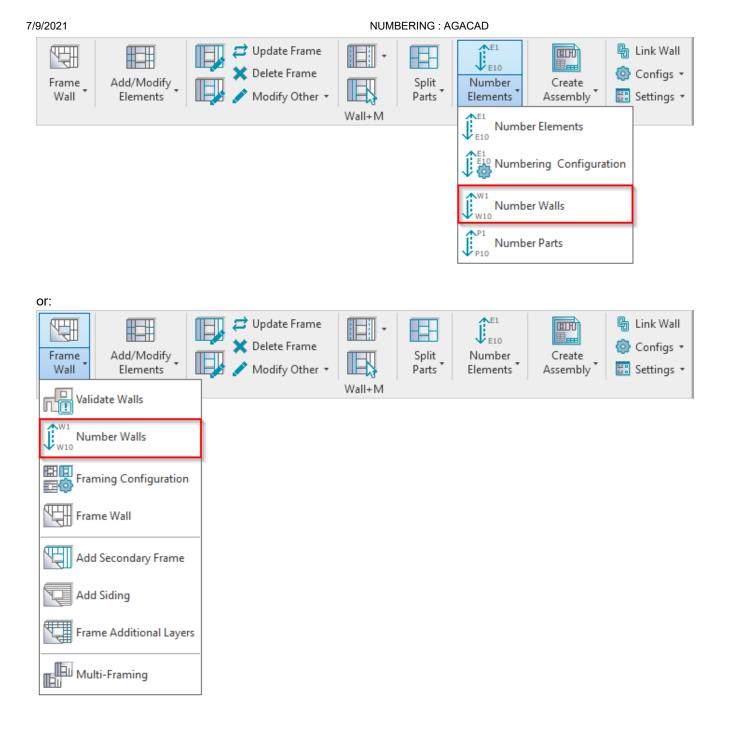
| 7/9/2021 | NUM | IBERING : AGACAD | | |
|----------|-----------|--------------------------------------|---------|-----------|
| | | Properties M_SC_Angle Cont 100 | nector | × |
| | l | Structural Connections (1) | | Edit Type |
| | | Framing | Wall | |
| | $\cdot c$ | FM HostMemberSortMark | | |
| | | FM Skew Direction | Right | |
| | | FM Skew Angle | 90.00° | |
| | | Image | | |
| | | Comments | | |
| | | Mark | | |
| | | FM SortMark | AC-1 | |
| | | Framing Member Mass | | |
| × | 14 | Framing Member Volume | 0.000 n | n³ |
| | | CNC Part Number | | |
| | | CNC Part Name | | |
| | | CNC Part Position | | |
| | | Facing flipped | ~ | |
| | | Hand flipped | ~ | ▼ |
| | $\cdot G$ | Properties help | | Apply |
| | | | | |
| | V | | | |

Write Position for CNC Mark

| R Numbering Configuration - | × |
|--|------|
| Configuration: Default Configuration v Save Duplicate Rename Def | lete |
| Wall 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) | |
| | |

Write Position for CNC Mark – writes CNC position information to framing elements (under Structural Framing Category) and writes result to CNC Part Position instance parameter (<u>http://www.aga-cad.com/products/tools4revit/sort-mark</u>).

Number Walls

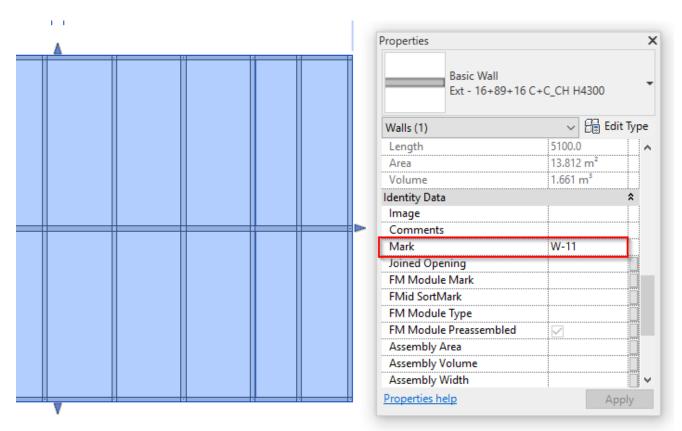


Number Walls – renumbers all walls by predefined configuration in Numbering Configuration \rightarrow Wall Numbering Setup. Wall numbering configurations come from <u>Sort Mark (http://www.aga-cad.com/products/tools4revit/sort-mark)</u>.

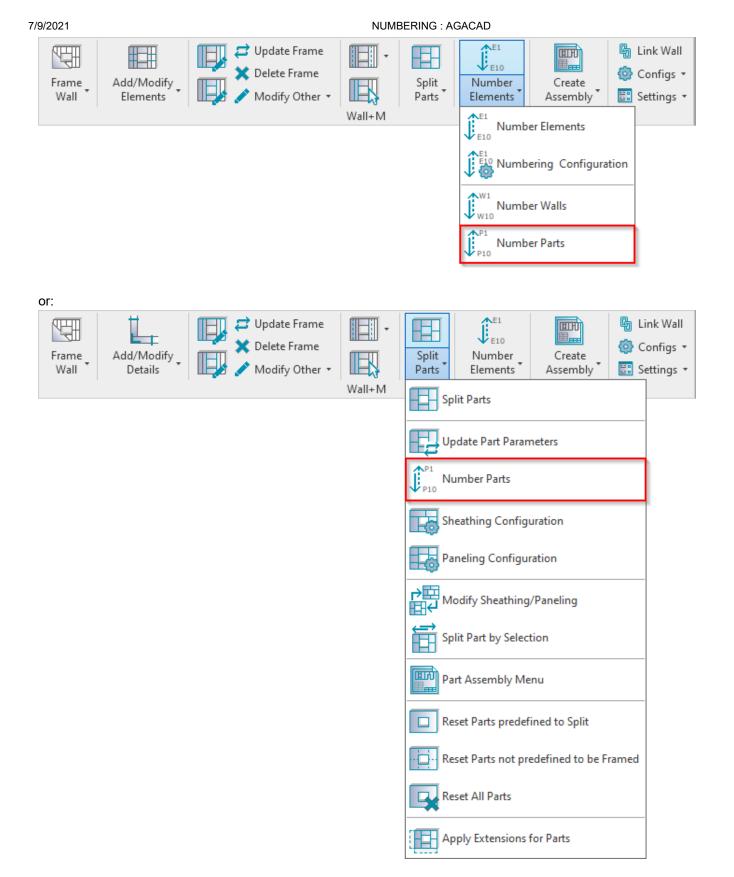
| R Numbering Configuration | _ | | × |
|---|--------|-------|-----|
| Configuration: Default Configuration | Rename | Delet | e |
| Wall Numbering Setup Part Numbering Setup Numbering Setup | | | |
| Sort Mark Walls | | | |
| Sort Mark Configuration | | | |
| Wall Mark - by ID | | ~ | ✓ |
| None | | v | |
| None | | Ŷ | |
| None | | Ŷ | |
| None | | Ŷ | |
| | | | |
| | ОК | Can | cel |

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

Sort Mark E-Help >>



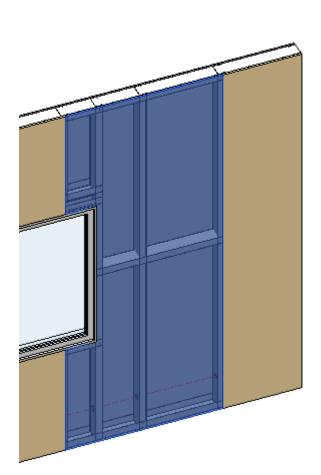
Number Parts



Number Parts – renumbers all sheathing/paneling (Parts) by predefined configuration in Numbering Configuration \rightarrow Part Numbering Setup. Part numbering configurations come from <u>Sort Mark (http://www.aga-cad.com/products/tools4revit/sort-mark)</u>.

| R Numbering Configuration - | | × |
|--|------|------|
| Configuration: Default Configuration v Save Duplicate Rename | Dele | ete |
| Wall Numbering Setup Part Numbering Setup Numbering Setup | | |
| Sort Mark Parts Sort Mark Configuration | | |
| Part Mark - by Mark and ID | v | • |
| SortMark by Host and Part Mark | Ŷ | < |
| None | Ŷ | |
| None | Ŷ | |
| None | Ŷ | |
| | | |
| ОК | Car | ncel |

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



| Properties | × |
|----------------------------|-------------------|
| Parts (1) | ✓ 🔂 Edit Type |
| Identity Data | * ^ |
| Assembly Name | W-4 |
| Image | ****** |
| Comments | |
| Mark | W-4-SHO-9 |
| Framing Member | Framing Sheathing |
| Framing Member Type | Sheathing |
| Framing | Wall |
| Framing Member Description | Sheathing |
| FM SortMark | SHO-6 |
| Framing Layer | Sheathing |
| Framing Member Mark | SHO |
| FM HostMemberSortMark | W-4 |
| Framing Member Mass | 42.410 kg |
| Framing Member Volume | 0.304 m³ |
| Link to Connected Wall | |
| Build in Place | |
| Show Shape Handles | |
| Properties help | Apply |