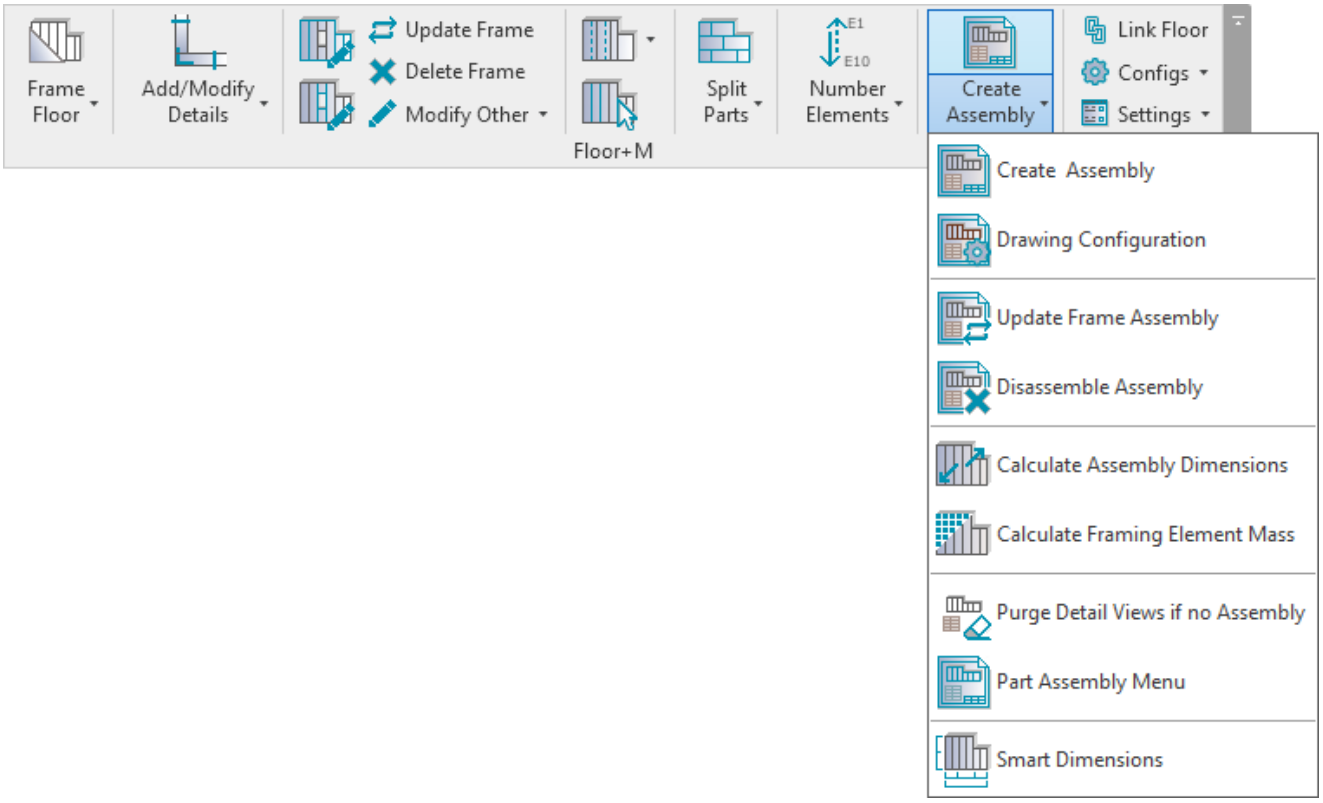
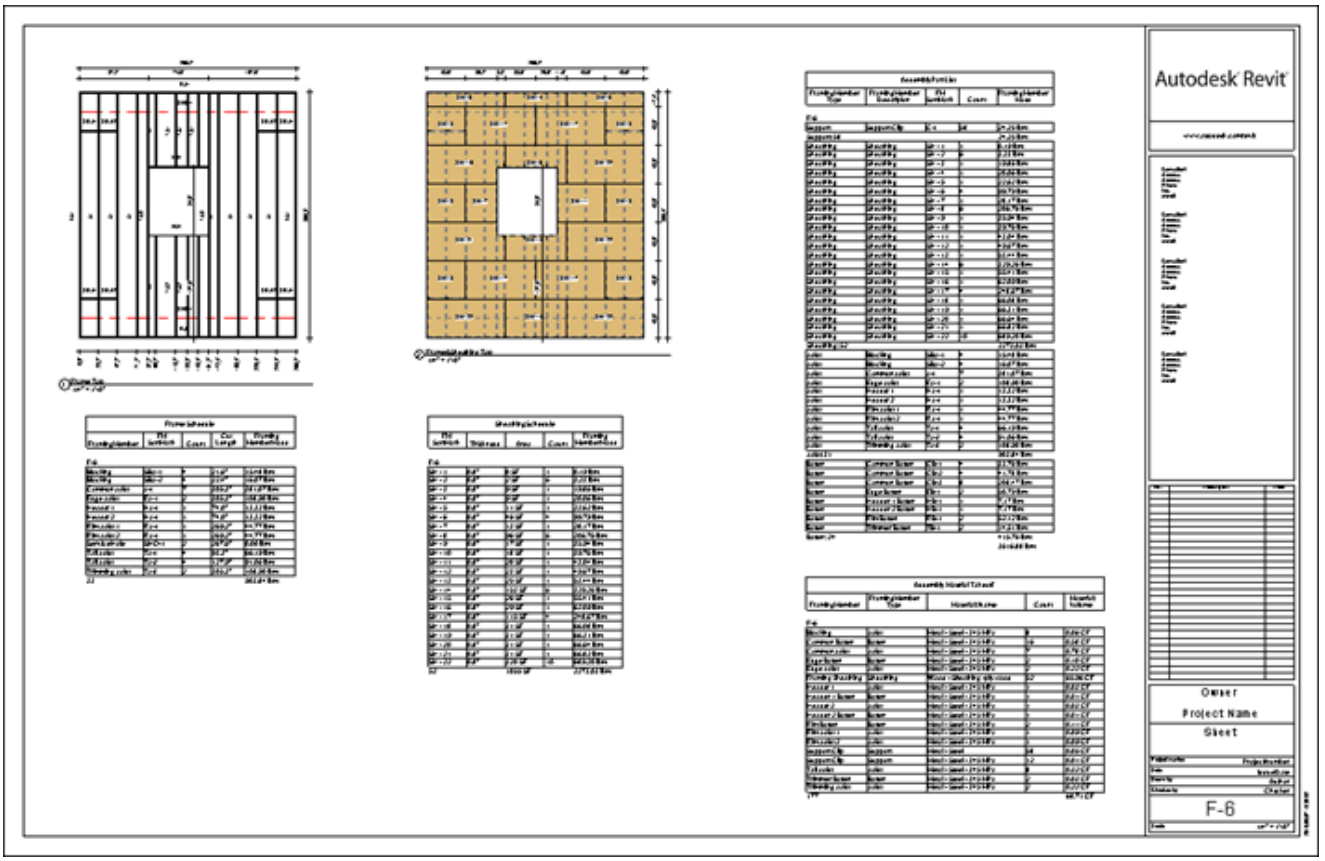
SHOP DRAWINGS – Main Features

Modified on: Fri, 13 Sep, 2019 at 6:32 PM

Finish your modeling with the built-in shop drawing generator and deliver your floor framing estimation in the same hour. Compile your complete shop drawings with dimensioning, part lists, and material take-off automatically.



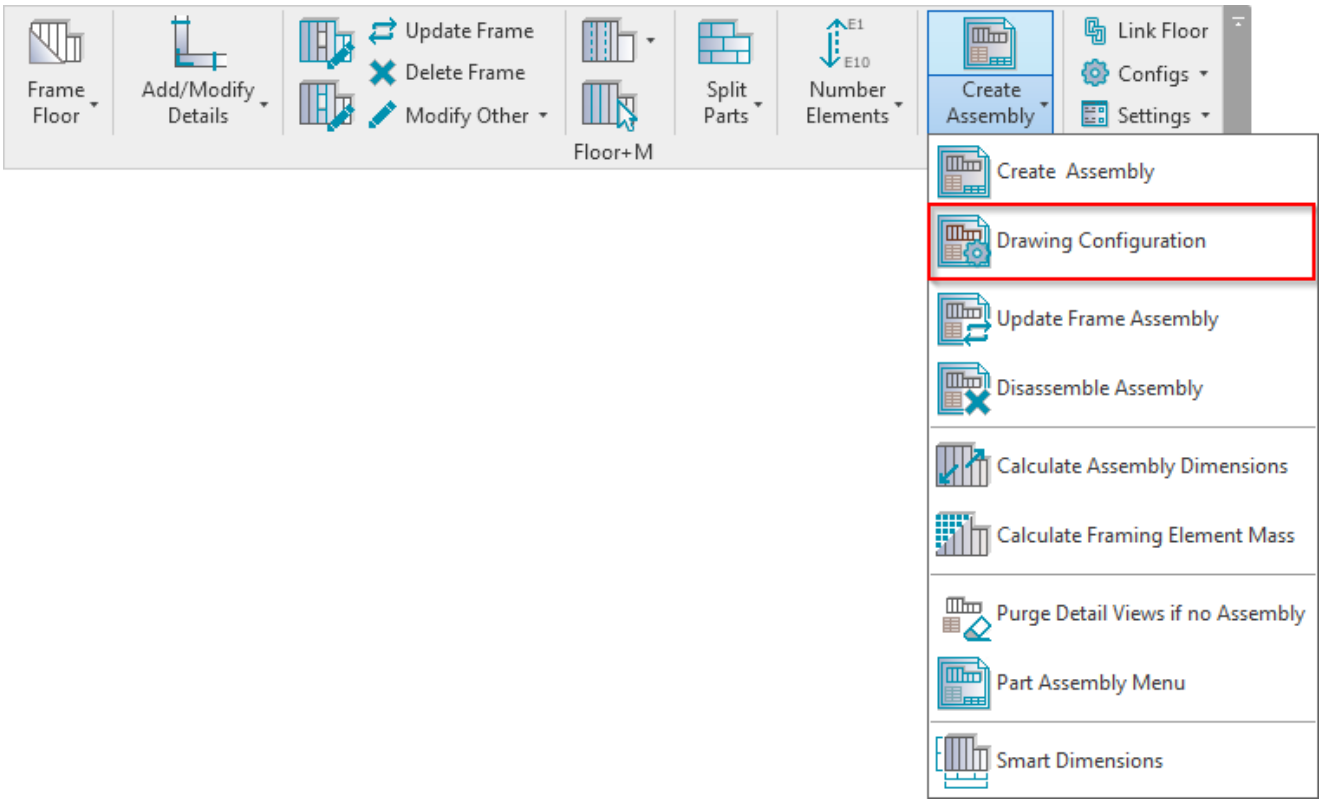
Floor+M will collect all elements from one floor panel and make an assembly with predefined views, add dimensions, add tags, make sheets, and put the views into the sheets.



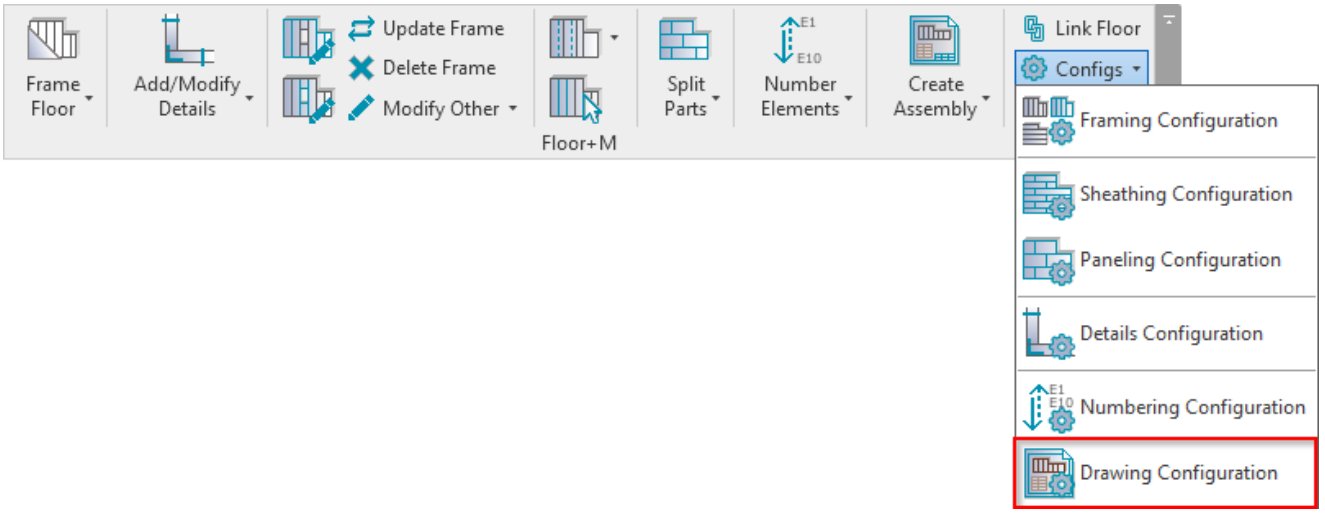
The basic shop drawing workflow consists of the following steps:

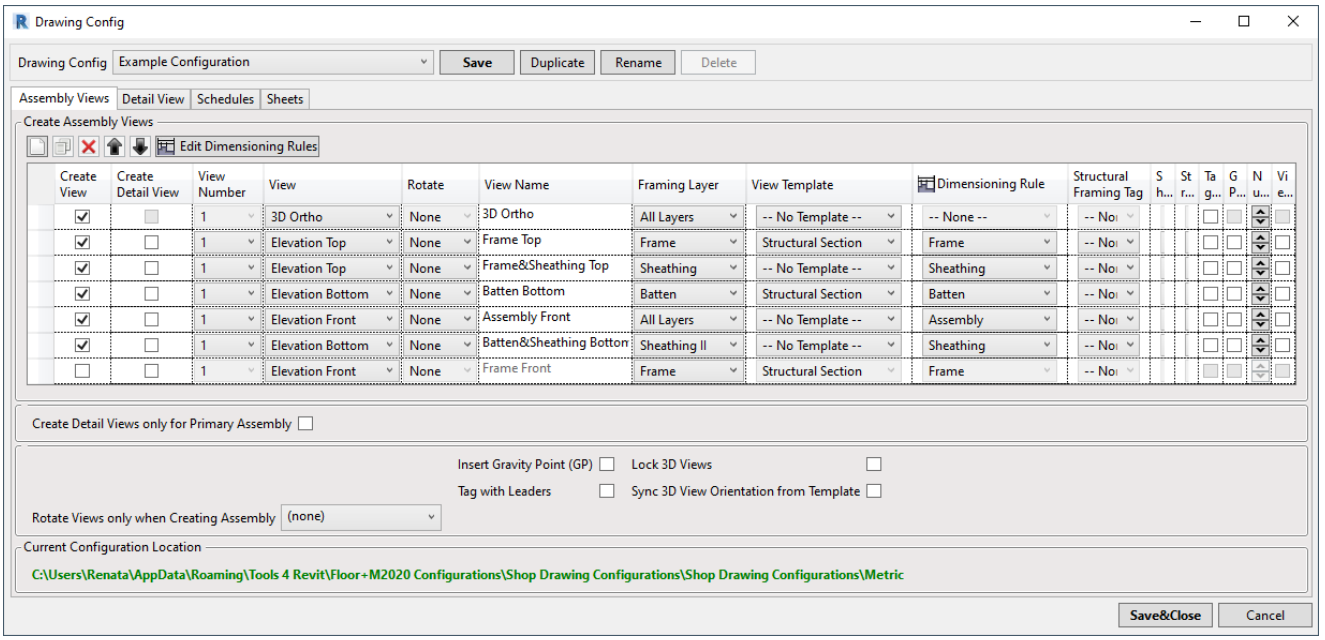
*1. Floor+M → define **Drawing Configuration***
*2. Floor+M → make shop drawings for one floor using **Create Assembly***
3. Floor+M → number the framing members
4. Add shop drawing views into the sheet for one floor and save it as a template for future floors
5. Floor+M → make shop drawings for other floor segments
6. Floor+M → update shop drawings if any changes have been made to the model

Drawing Configuration


Frame Floor
Add/Modify Details
Update Frame
Delete Frame
Modify Other
Floor+M
Split Parts
Number Elements
Create Assembly
Link Floor
Configs
Settings
Create Assembly
Drawing Configuration
Update Frame Assembly
Disassemble Assembly
Calculate Assembly Dimensions
Calculate Framing Element Mass
Purge Detail Views if no Assembly
Part Assembly Menu
Smart Dimensions

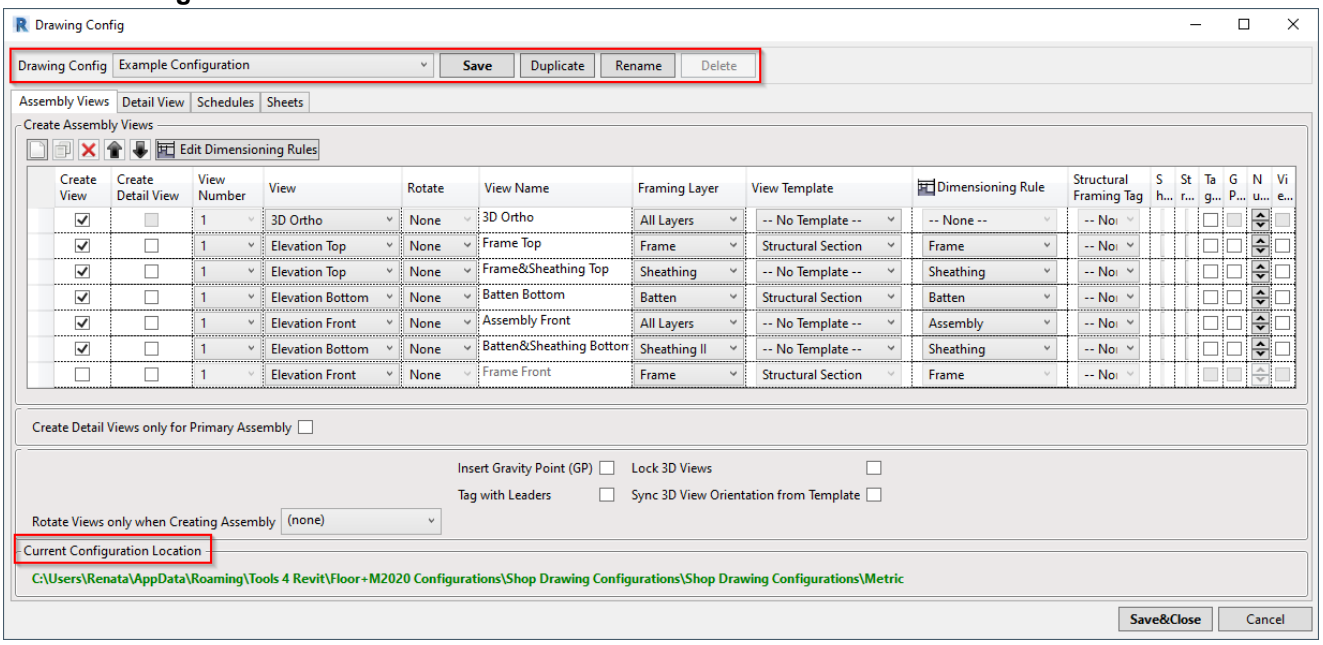
or:


Frame Floor
Add/Modify Details
Update Frame
Delete Frame
Modify Other
Floor+M
Split Parts
Number Elements
Create Assembly
Link Floor
Configs
Framing Configuration
Sheathing Configuration
Paneling Configuration
Details Configuration
Numbering Configuration
Drawing Configuration

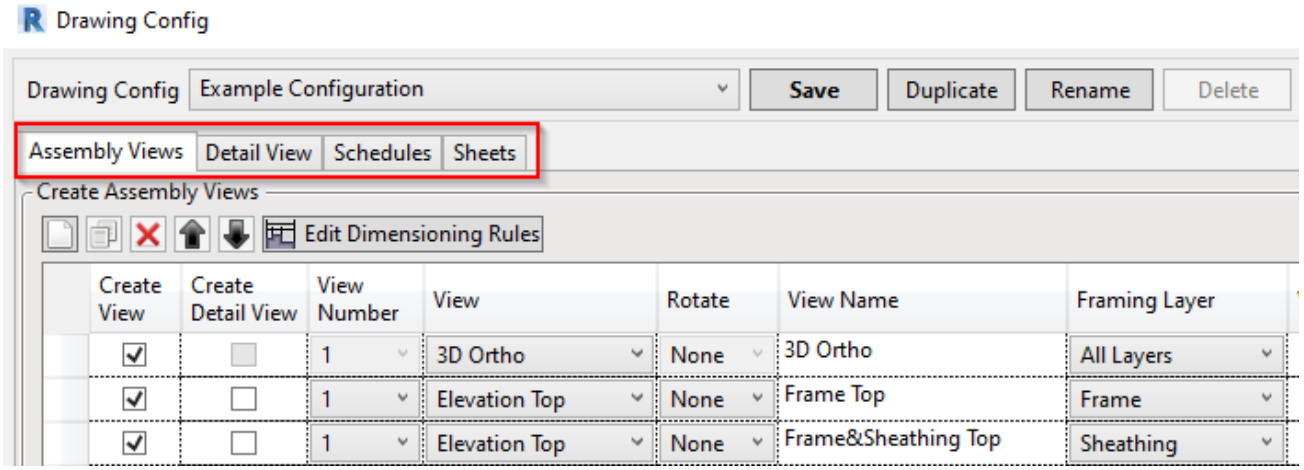

Drawing Config
Drawing Config
Example Configuration
Save
Duplicate
Rename
Delete
Assembly Views
Detail View
Schedules
Sheets
Create Assembly Views
Edit Dimensioning Rules
Create View
Create Detail View
View Number
View
Rotate
View Name
Framing Layer
View Template
Dimensioning Rule
Structural Framing Tag
3D Ortho
Elevation Top
Elevation Bottom
Elevation Front
Frame Top
Frame&Sheathing Top
Batten Bottom
Assembly Front
Batten&Sheathing Bottom
Frame Front
Create Detail Views only for Primary Assembly
Insert Gravity Point (GP)
Lock 3D Views
Tag with Leaders
Sync 3D View Orientation from Template
Rotate Views only when Creating Assembly
(none)
Current Configuration Location
C:\Users\Renata\AppData\Roaming\Tools 4 Revit\Floor+M2020 Configurations\Shop Drawing Configurations\Shop Drawing Configurations\Metric
Save&Close
Cancel

Drawing Configuration – predefine the settings for creating shop drawings. It is very versatile with thousands of different possibilities.

Configurations can be saved, duplicated, renamed, and deleted. You can check the location of configurations under **Current Configuration Location**:

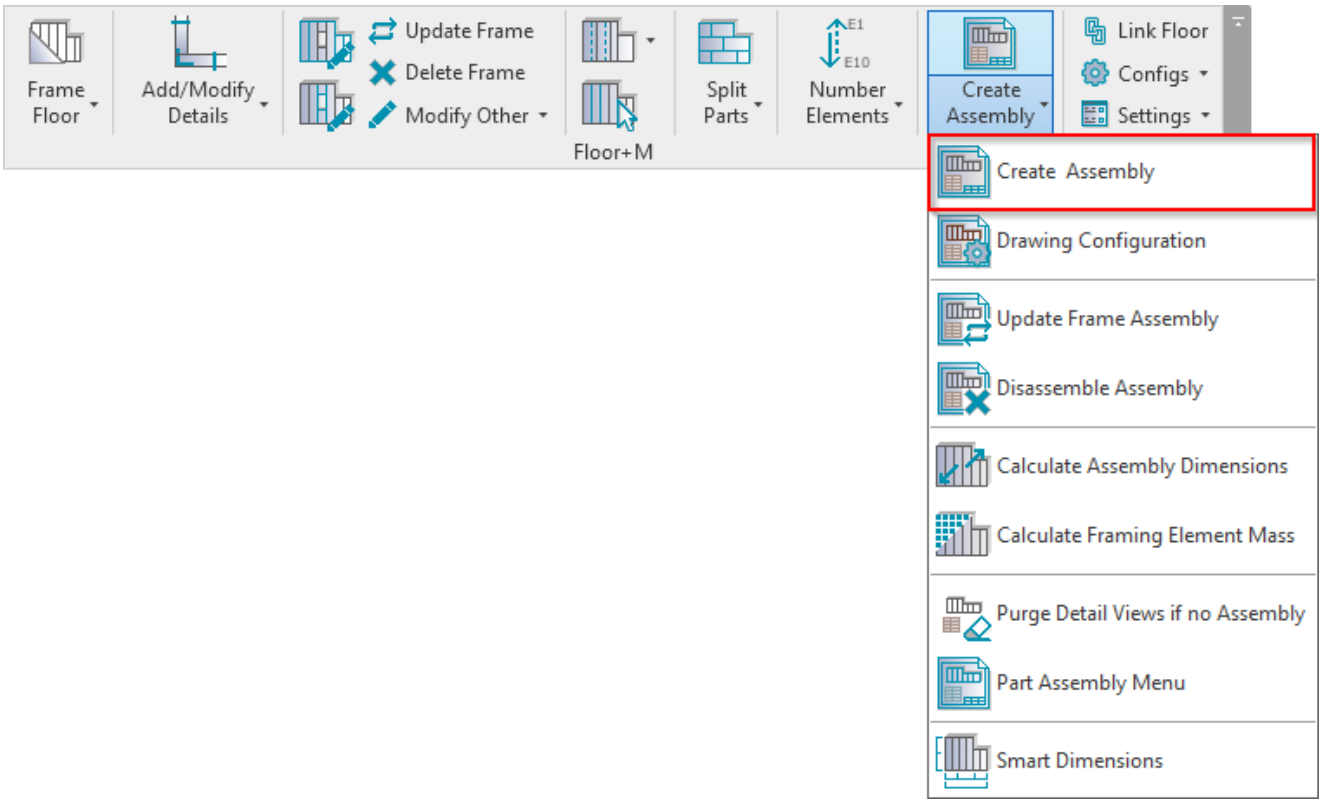


The 4 tabs (**Assembly Views**, **Detail View**, **Schedules** and **Sheets**) are for setting up assembly views, detail views, schedules, and sheets, respectively:



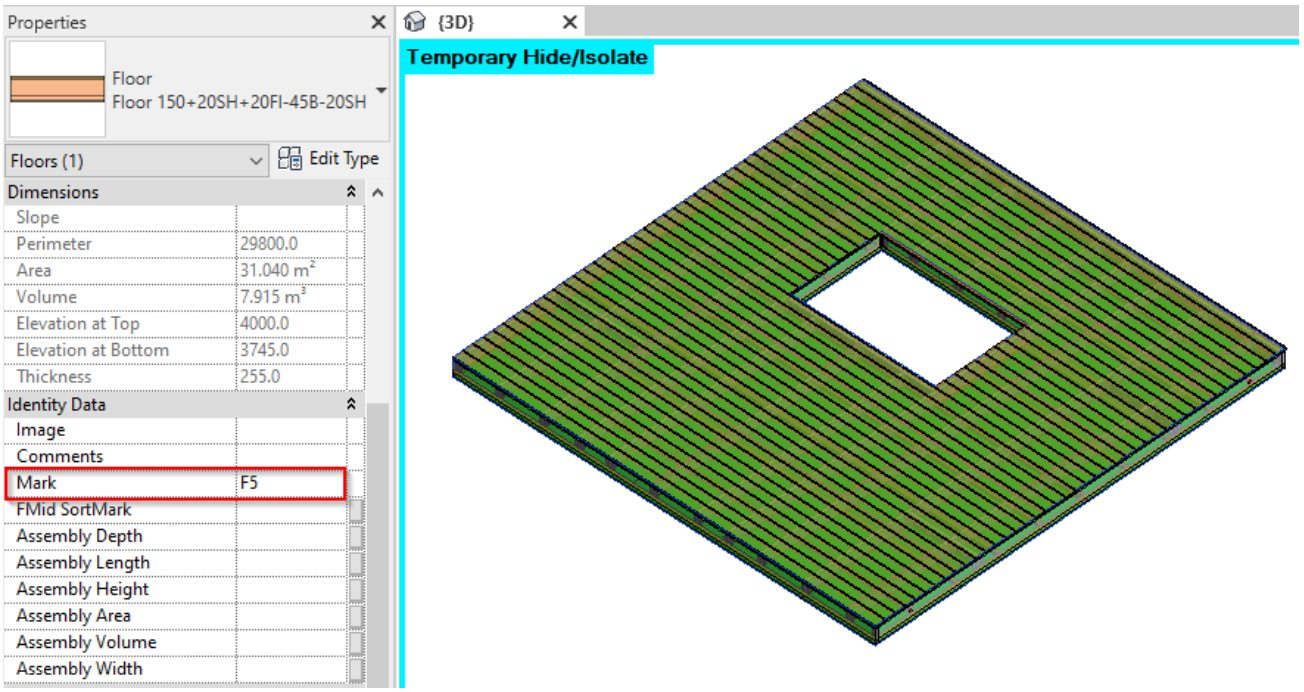
Read more about Assembly Views >> (https://agacad.freshdesk.com/support/solutions/articles/44001797860-shop-drawings-%E2%80%93-drawing-configuration-%E2%80%93-assembly-views)
Read more about Schedules >> (https://agacad.freshdesk.com/support/solutions/articles/44001797864-shop-drawings-%E2%80%93-drawing-configuration-%E2%80%93-schedules)
Read more about Sheets>> (https://agacad.freshdesk.com/support/solutions/articles/44001797867-shop-drawings-%E2%80%93-drawing-configuration-%E2%80%93-sheets)

Create Assembly



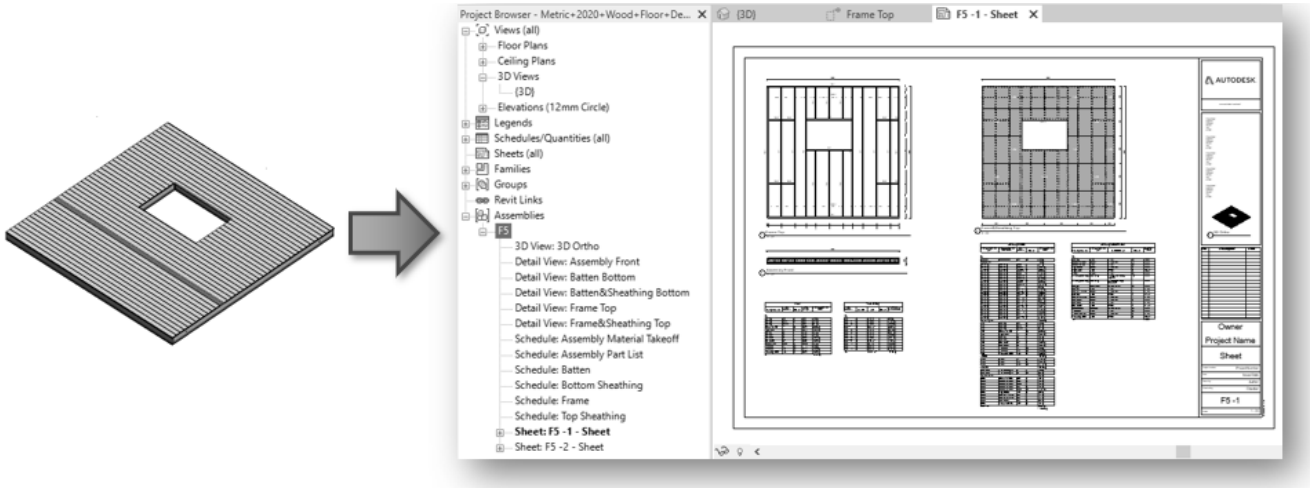
Create Assembly – makes shop drawings for selected floors. Select any frame from the floor, and after clicking **Create Assembly**, the software will create shop drawings according to the predefined configuration.

*Mandatory condition: selected floor needs to have a **Mark** value assigned:*

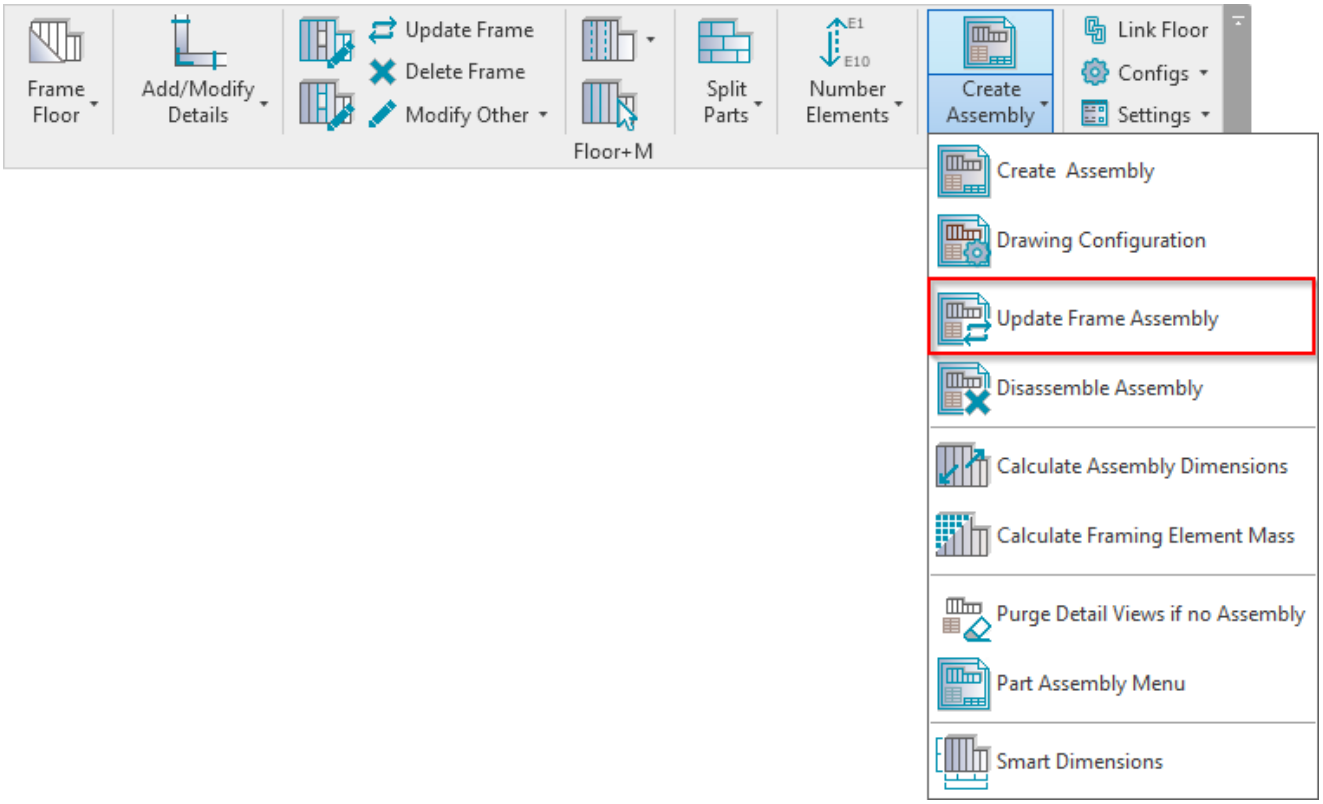


*This value will be used as the assembly name. You can find shop drawings in **Project Browser** under **Assemblies**.*

An assembly combines all parts into a single entity, which is scheduled and isolated to create shop drawing views with tags and dimensions.

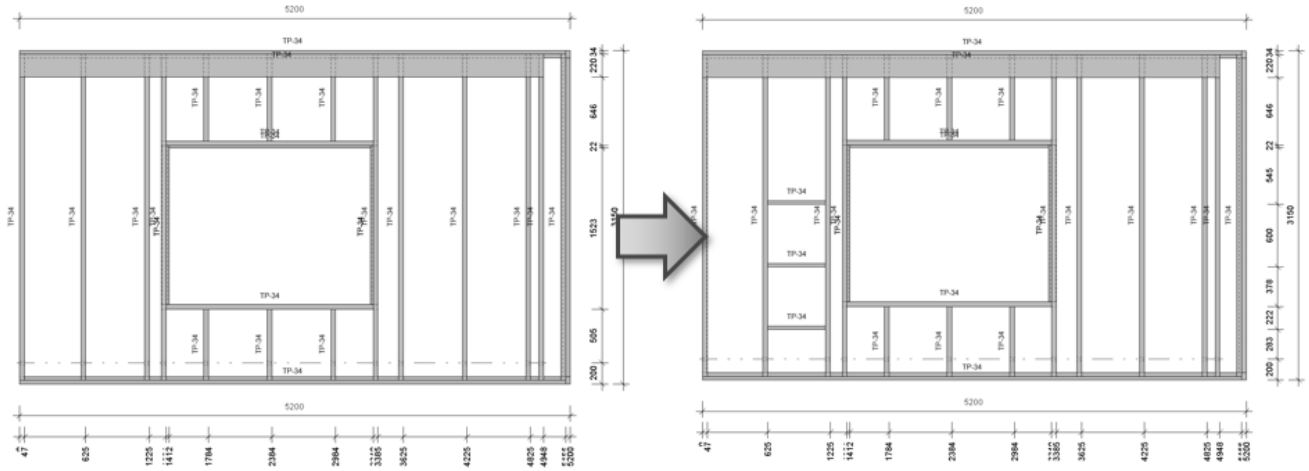


Update Frame Assembly

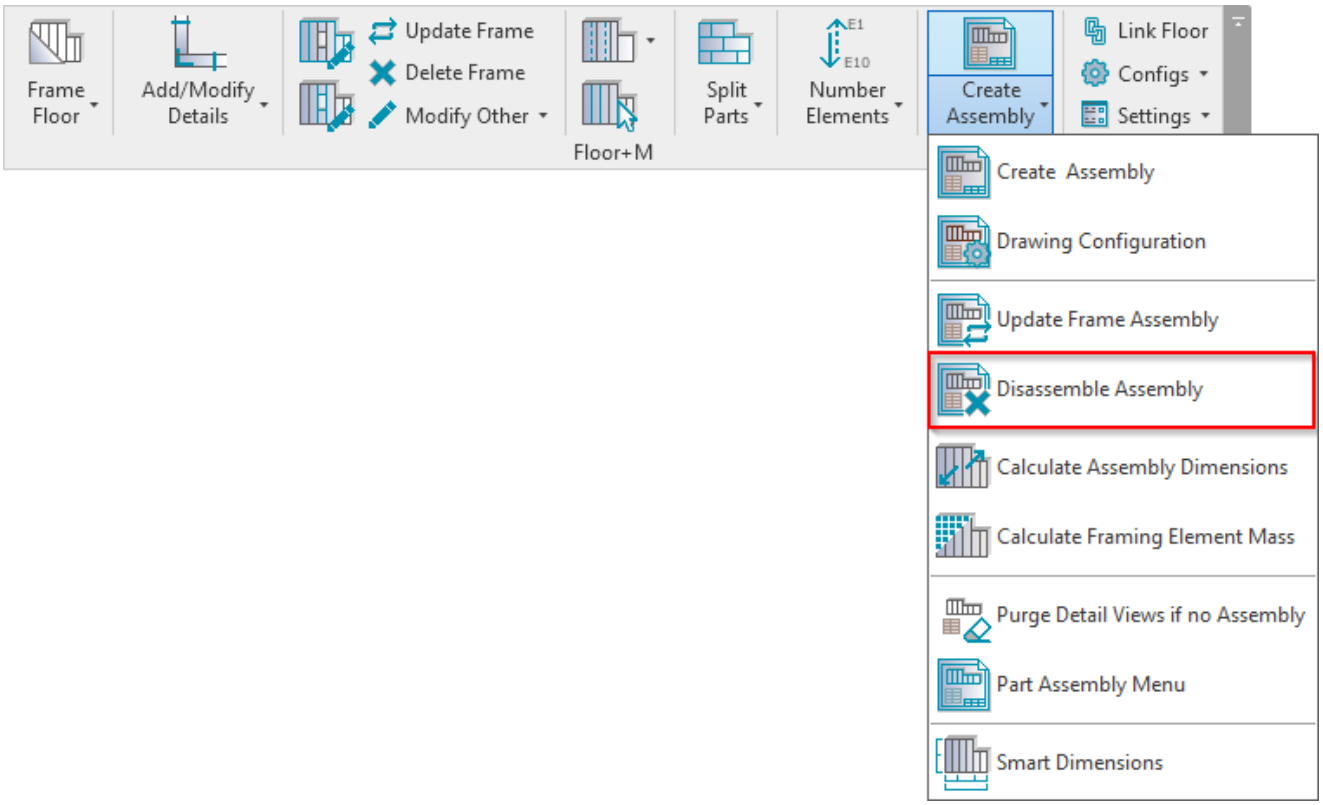


Update Frame Assembly – updates the selected assembly if any changes were made to the framing or to the **Drawing Configuration**.

Example: additional bridging was added to the floor. Result after updating:



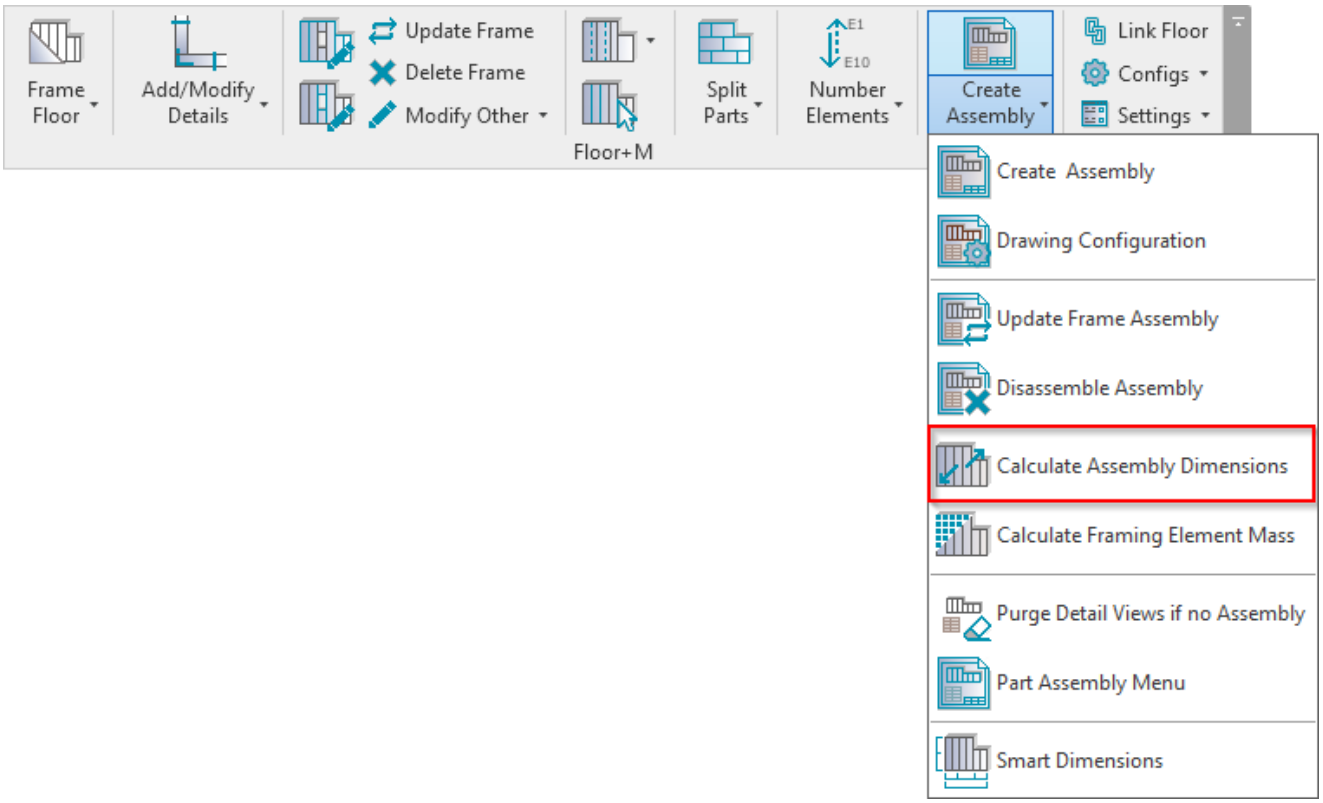
Disassemble Assembly



Disassemble Assembly – removes the assembly relationship between elements in the selected assembly and all associated views.

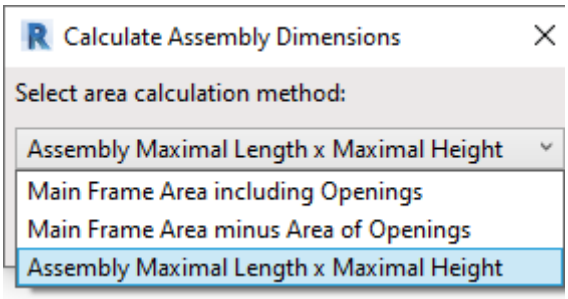
Recommended workflow: Instead of **Revit** → **Disassemble**, we recommend using **Floor+M** → **Create Assembly** → **Disassemble Assembly** as it doesn't show unnecessary pop-ups and deletes the gravity point.

Calculate Assembly Dimensions

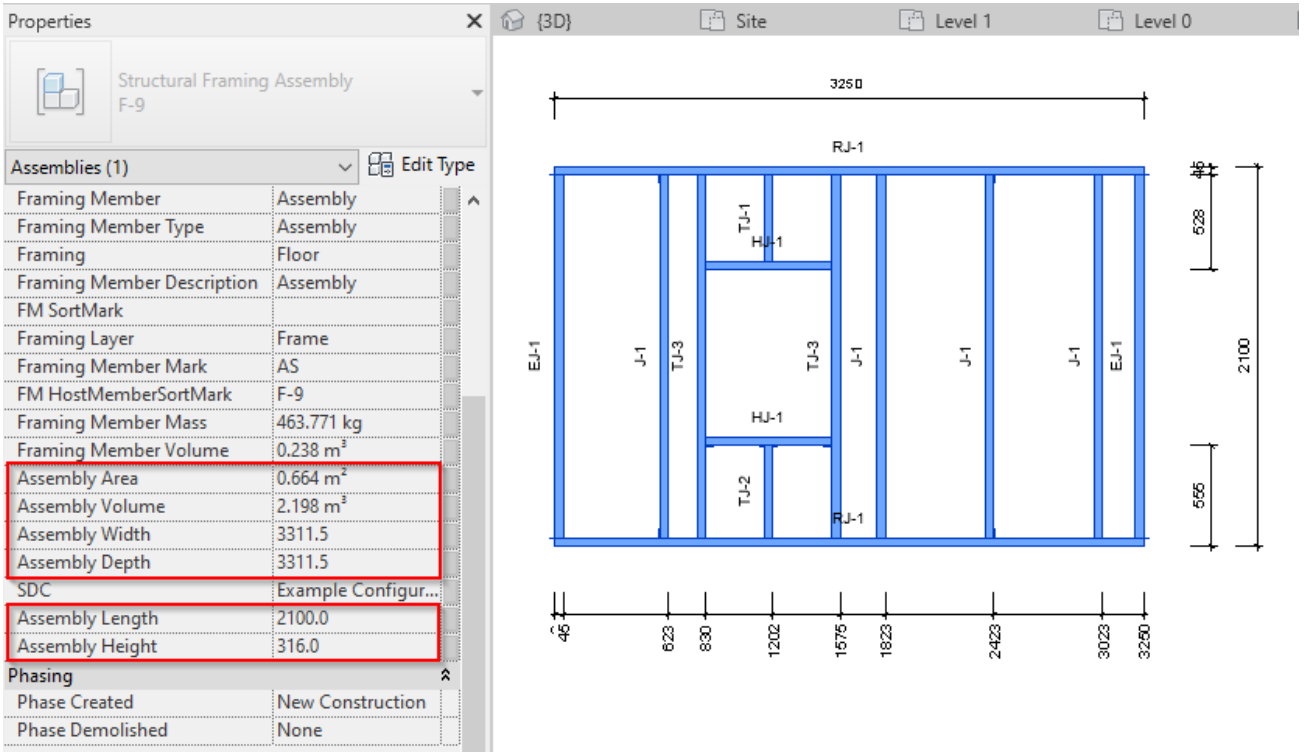


Calculate Assembly Dimensions – calculates assembly dimensions (area, volume, width, depth, length, height) by predefined rules and writes the results in assembly instance parameters (**Assembly Area**, **Assembly Volume**, **Assembly Width**, **Assembly Depth**, **Assembly Length**, **Assembly Height**) for later use in schedules.

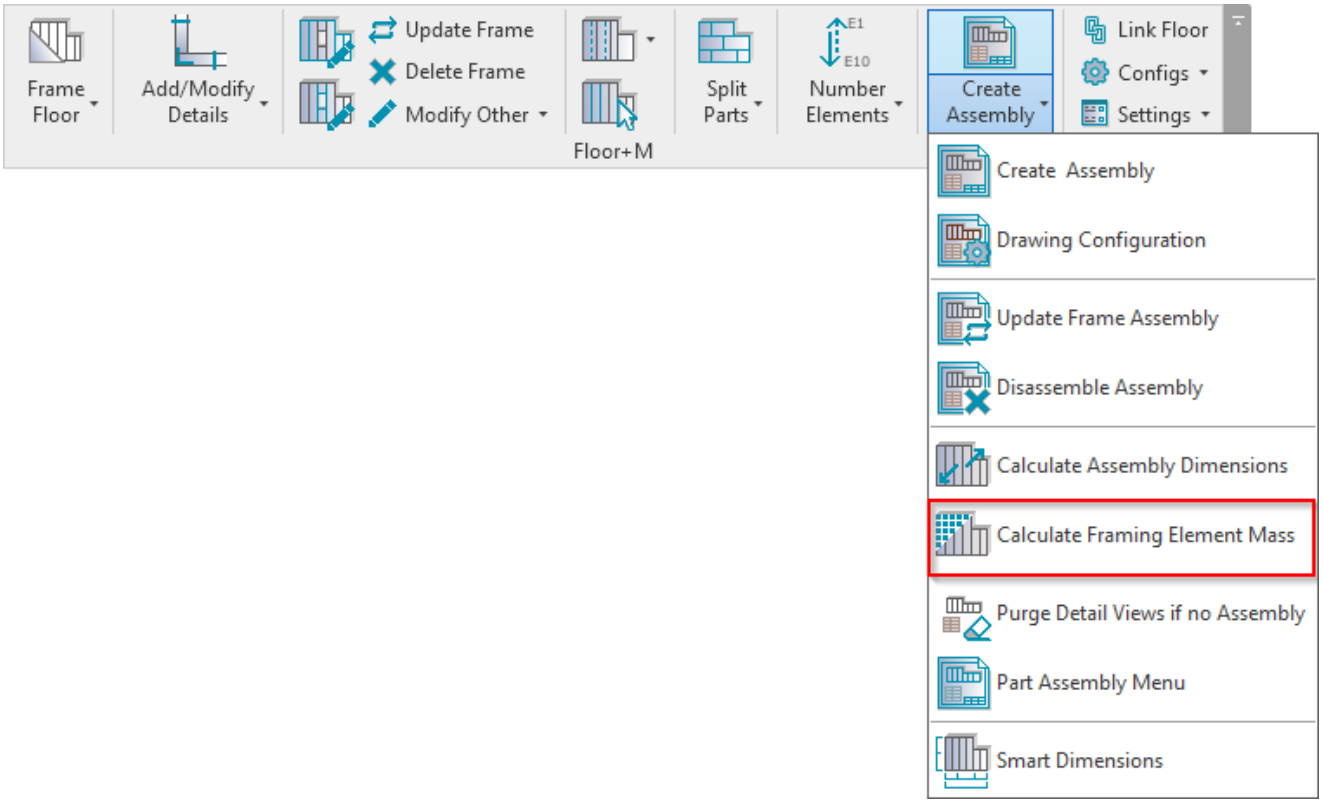
Select area calculation method:



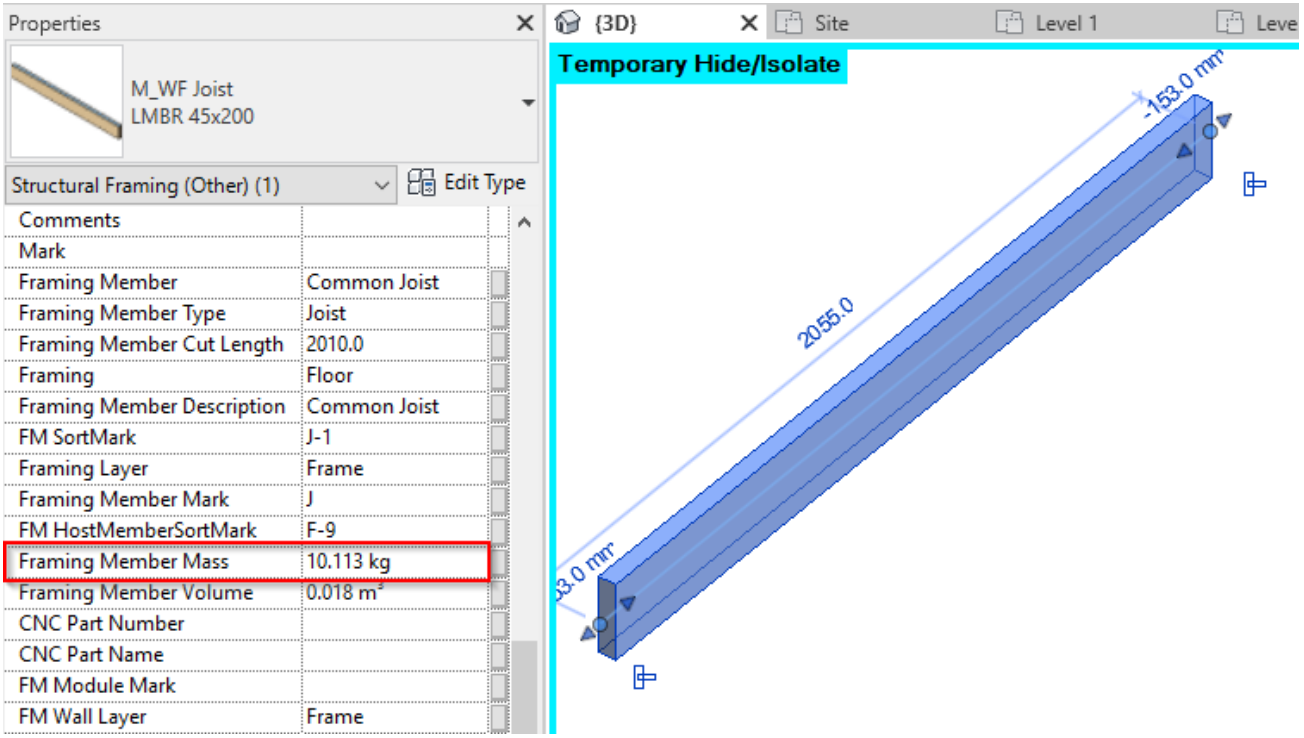
Result:



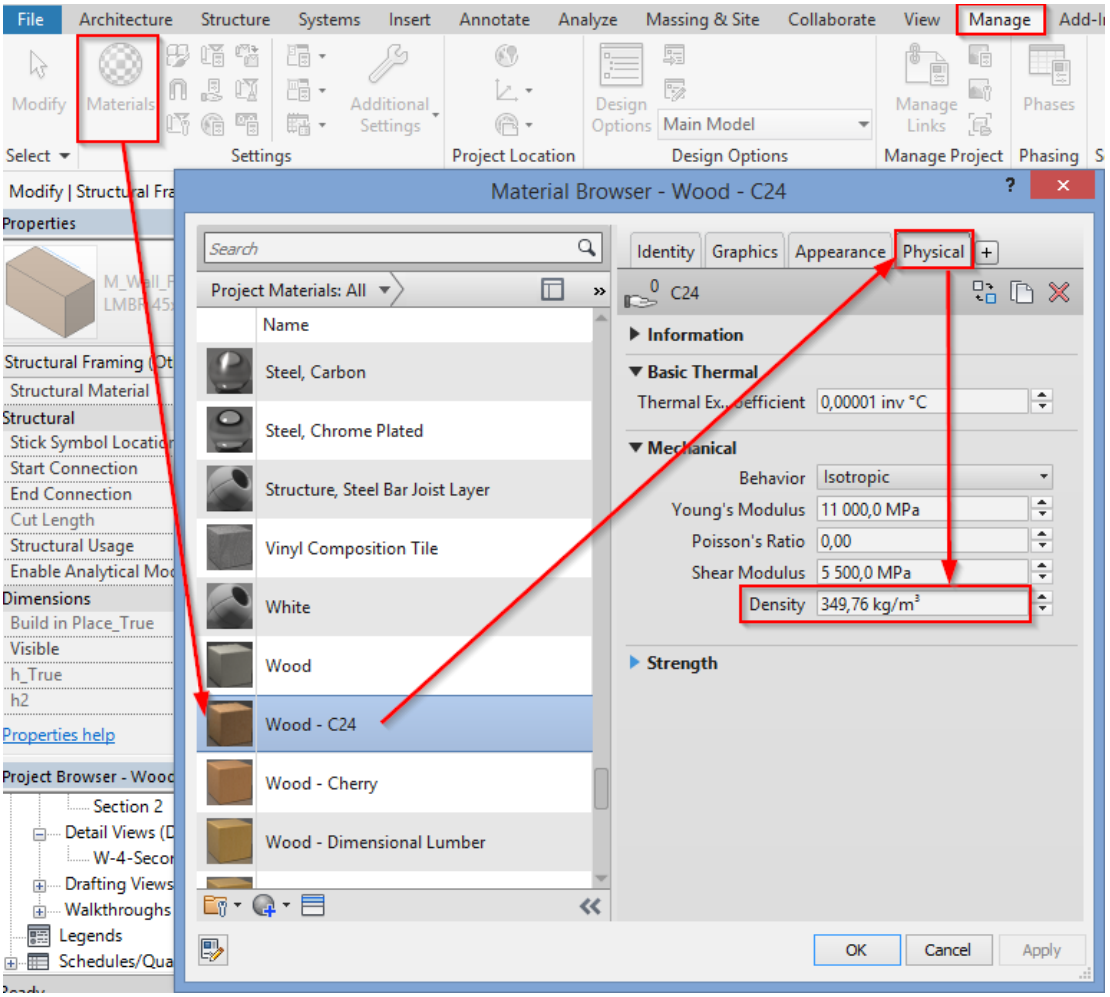
Calculate Framing Element Mass



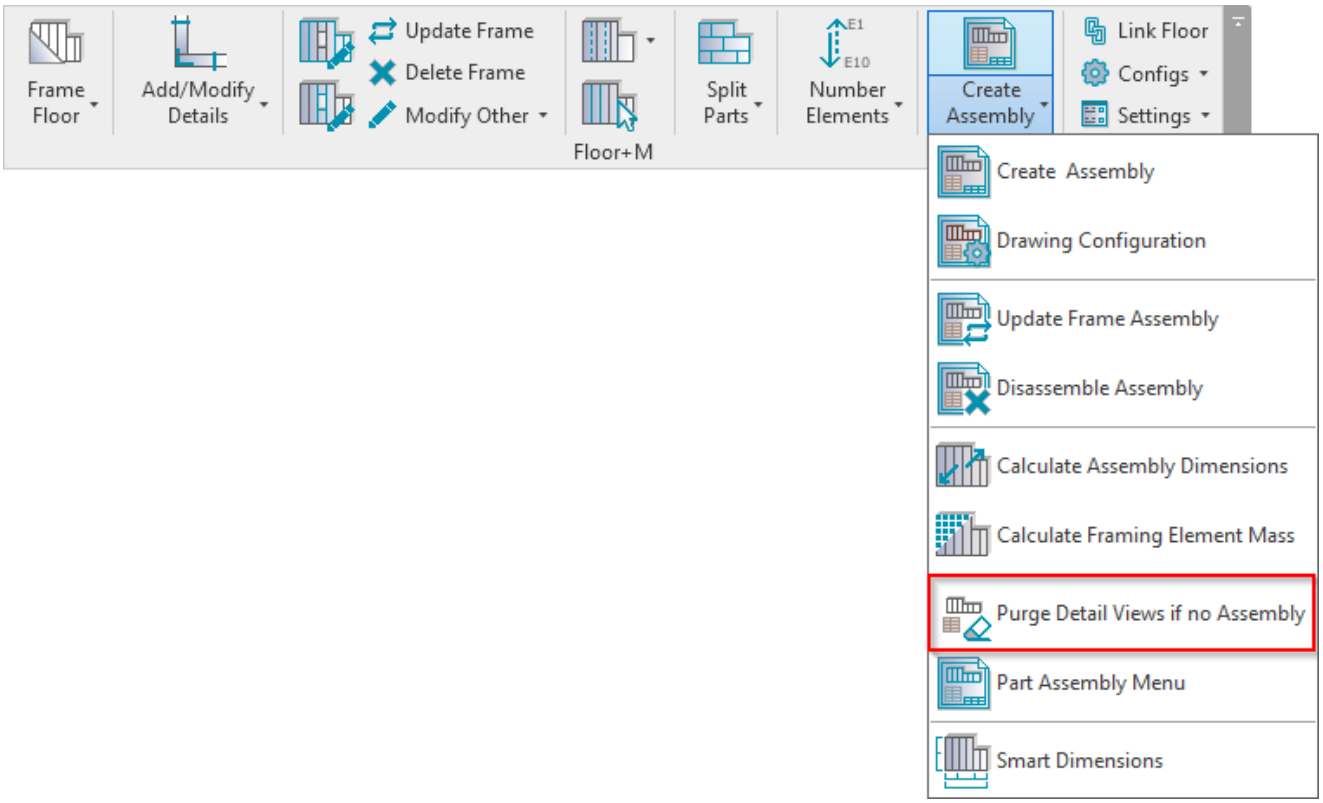
Calculate Framing Element Mass – calculates mass of selected framing elements, and writes result to **Framing Member Mass** parameter, which you can find in **Element Properties** → **Identity Data**.



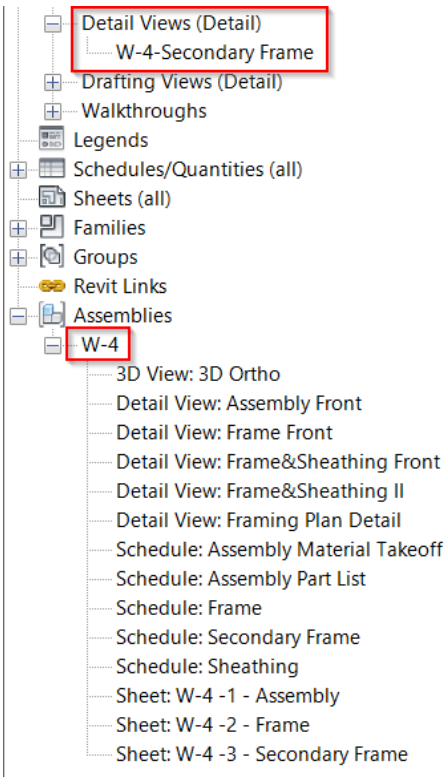
***Density** parameter must be filled in for the element in **Materials** → **Physical** tab:*



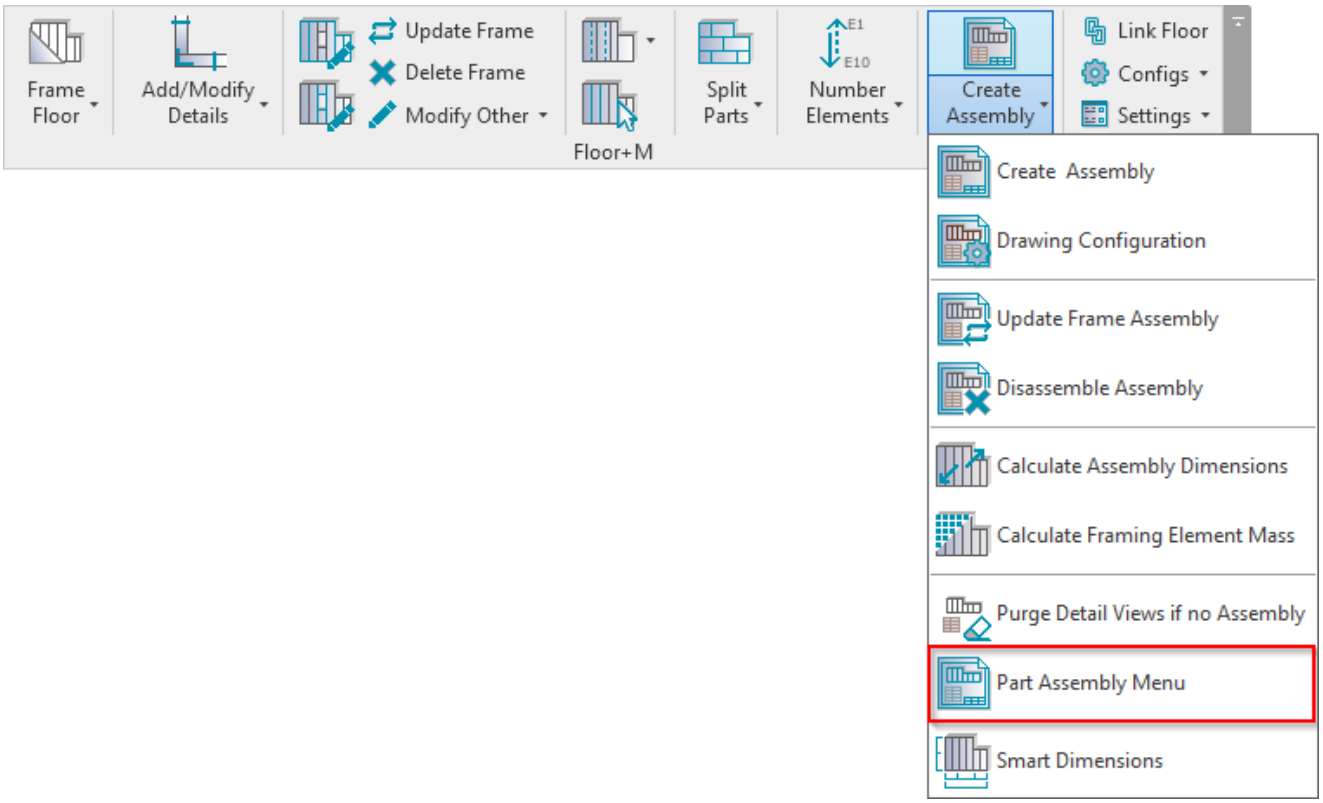
Purge Detail Views if no Assembly



Purge Detail Views if no Assembly – removes detail views if assembly has been disassembled.



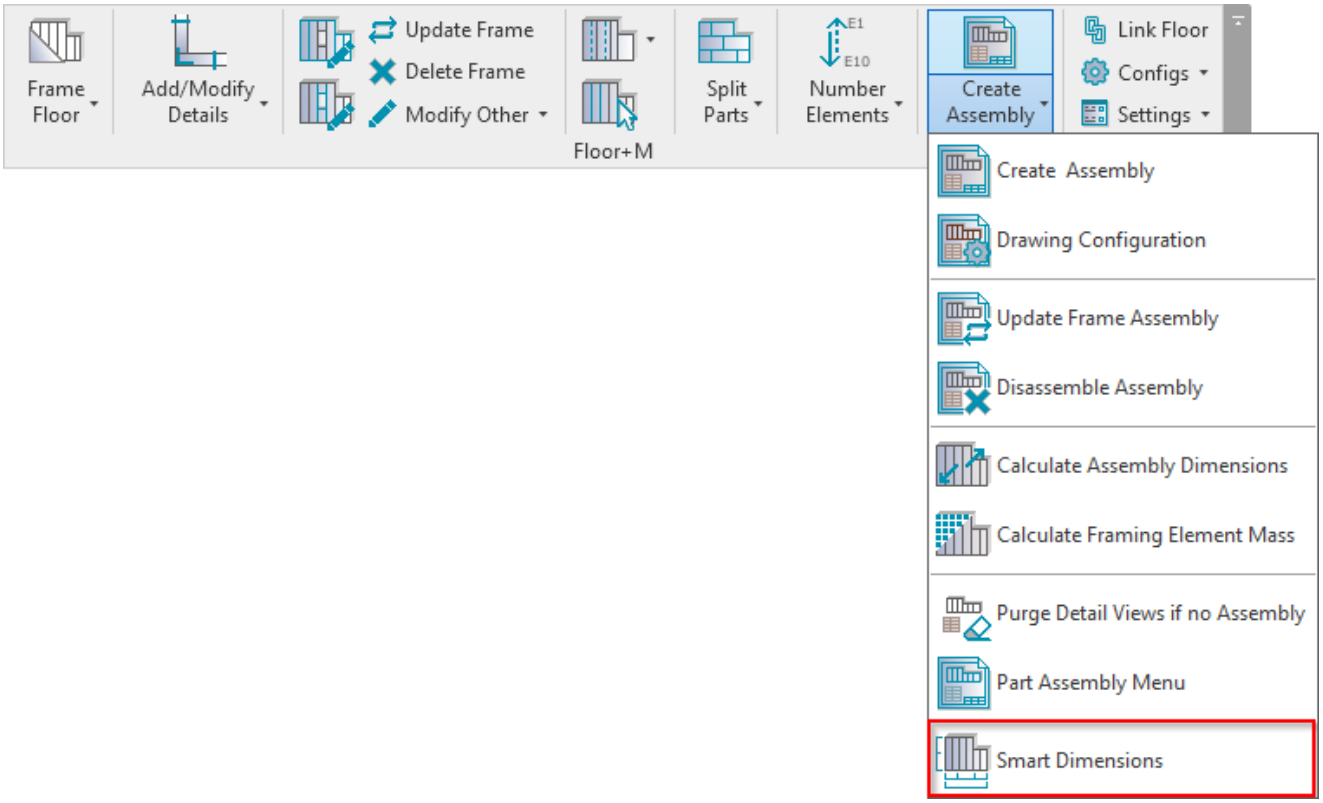
Part Assembly Menu



Part Assembly Menu – features for creating assemblies from parts and different part selection options.

Read more >> (https://agacad.freshdesk.com/support/solutions/articles/44001797870-shop-drawings-%E2%80%93-part-assembly-menu)

Smart Dimensions



Smart Dimensions – features for setting up dimensions in shop drawings.

Read more >> (https://agacad.freshdesk.com/support/solutions/articles/44001797873-shop-drawings-%E2%80%93-smart-dimensions-%E2%80%93-main-features)