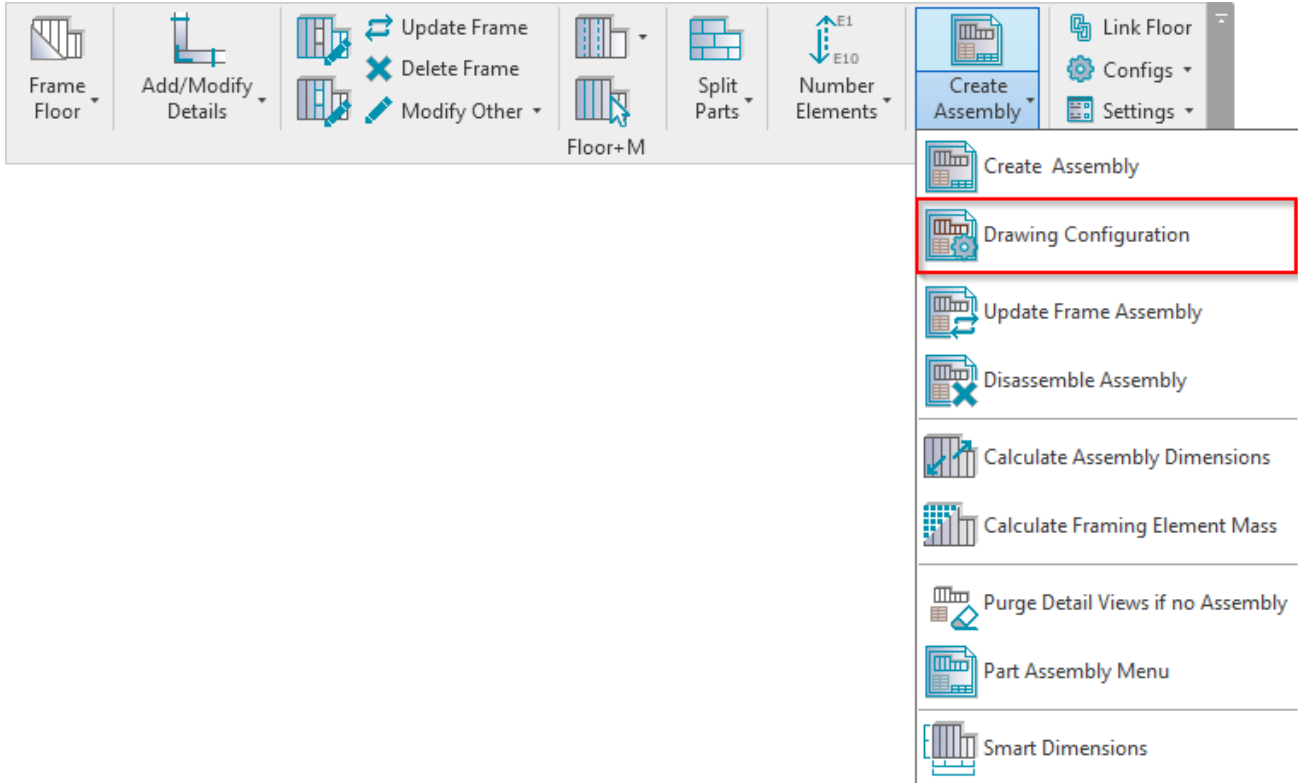


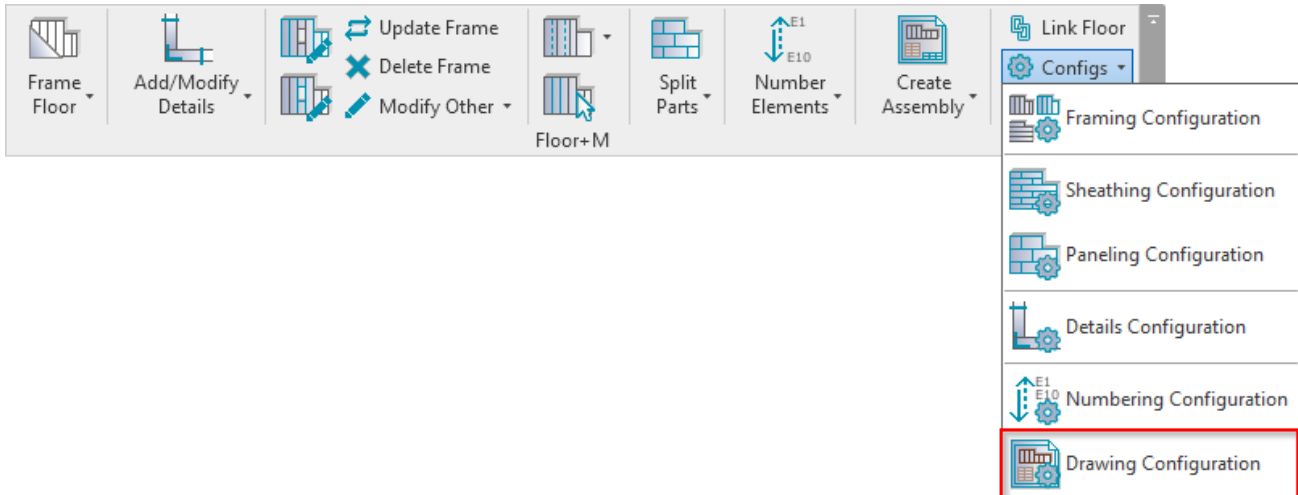
SHOP DRAWINGS – Drawing Configuration – Assembly Views

Modified on: Fri, 13 Sep, 2019 at 5:52 PM

Assembly Views



OR:



Drawing Config

Drawing Config: Example Configuration [Save] [Duplicate] [Rename] [Delete]

Assembly Views | Detail View | Schedules | Sheets

Create Assembly Views

[New] [Duplicate] [Delete] [Move Up] [Move Down] [Edit Dimensioning Rules]

Create View	Create Detail View	View Number	View	Rotate	View Name	Framing Layer
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	3D Ortho	None	3D Ortho	All Layers
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame Top	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame&Sheathing Top	Sheathing
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Bottom	None	Batten Bottom	Batten

Assembly Views – predefine assembly views, view graphical presentation, framing layers, and all other information you want to present.

Create new views by clicking the **New** button. Click **Duplicate** to duplicate the selected view. A full row should be selected to activate this option. Click **Delete** to delete the selected view. Select **Move Up/Down** to move the view within the configuration dialog:

Drawing Config

Drawing Config: Example Configuration [Save] [Duplicate] [Rename] [Delete]

Assembly Views | Detail View | Schedules | Sheets

Create Assembly Views

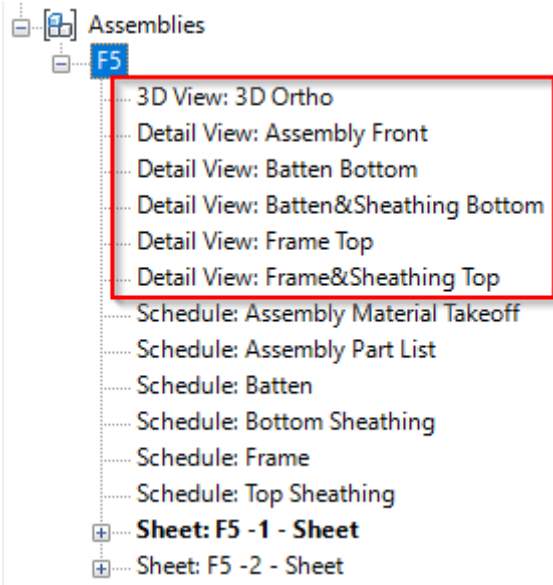
[New] [Duplicate] [Delete] [Move Up] [Move Down] [Edit Dimensioning Rules]

Create View	Create Detail View	View Number	View	Rotate	View Name	Framing Layer
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	3D Ortho	None	3D Ortho	All Layers
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame Top	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame&Sheathing Top	Sheathing
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Bottom	None	Batten Bottom	Batten

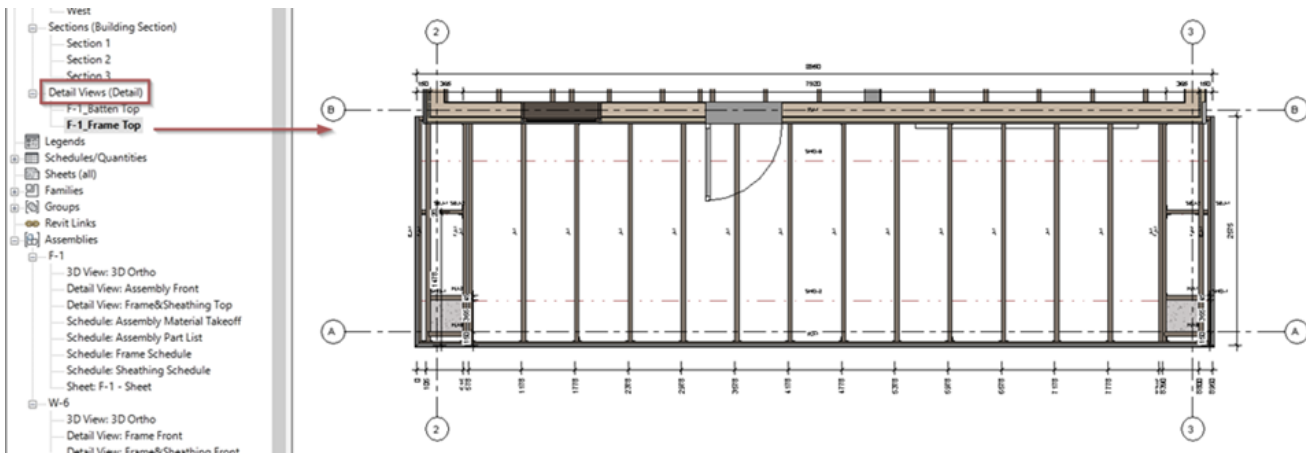
Create View, Create Detail View

Create View	Create Detail View	View Number	View	Rotate	View Name	Framing Layer	View Template	Dimensioning
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	3D Ortho	None	3D Ortho	All Layers	3D Ortho Assembly	-- None --
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame Top	Frame	Structural Section	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame&Sheathing Top	Sheathing	Framing - Sheathing	Sheathing
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Bottom	None	Batten Bottom	Batten	Structural Section	Batten
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Assembly Front	All Layers	Framing - Sheathing	Assembly
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Elevation Bottom	None	Batten&Sheathing Bottom	Sheathing II	Framing - Sheathing	Sheathing
<input type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	Structural Section	Frame

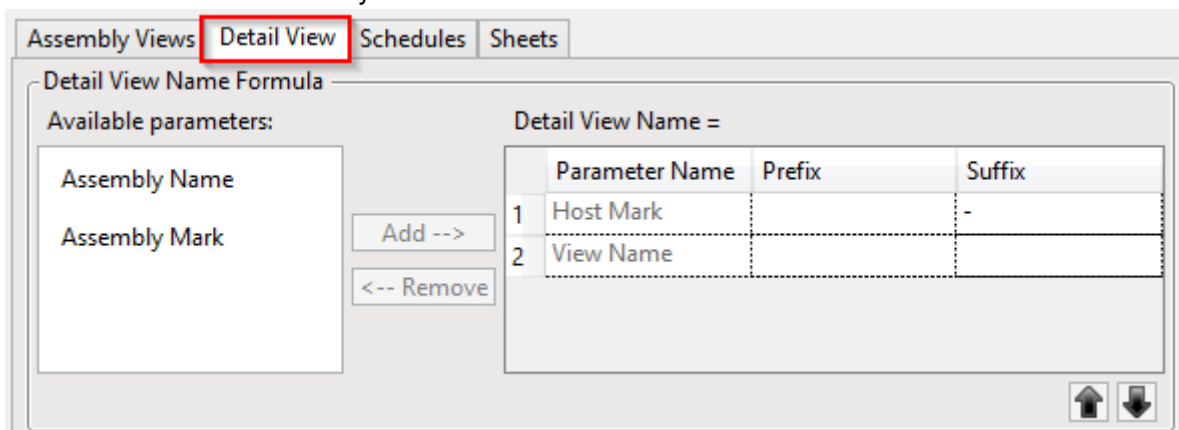
Create View – select the views you want to create in the assembly.



Create Detail View – whereas with a simple assembly view you see only the assembly itself – in isolation from other parts with which it interacts – Detail Views lets you see how a given assembly relates to other pieces of the pie, like walls, floors, elevations, grids, etc.



The next tab **Detail View** lets you control the view name:



Views and View Templates

Create View	Create Detail View	View Number	View	Rotate	View Name	Framing Layer	View Template	Dimensioning
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	3D Ortho	None	3D Ortho	All Layers	3D Ortho Assembly	-- None --
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame Top	Frame	Structural Section	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame&Sheathing Top	Sheathing	Framing - Sheathing	Sheathing
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Bottom	None	Batten Bottom	Batten	Structural Section	Batten
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Assembly Front	All Layers	Framing - Sheathing	Assembly
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Elevation Bottom	None	Batten&Sheathing Bottom	Sheathing II	Framing - Sheathing	Sheathing
<input type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	Structural Section	Frame

View – select the view type to create in the assembly. The list of view types comes from Revit. It can be: section, elevation, plan view, legend, 3D view, etc.

Rotate – rotate the view 90, -90, or 180 degrees. Usually used for floors and roof panels.

View Name – enter a name for the selected view.

Framing Layer – select the framing layer you want to filter in the view. It can be: Main Frame, Flooring, Sheathing, etc. If None is selected, then all layers will be visible in the view.

View Template – select the view template for every assembly view. View templates bring things like scale, graphical presentation, etc. into the view. The list of view templates comes from your current Revit project. You can find and modify your project view templates in **Revit** → **View** → **Graphics** → **View Templates** → **Manage View Templates**.

The screenshot displays the Revit software interface. On the left, the Properties palette is open for a 'Detail View: Frame Top'. The 'Identity Data' section is highlighted, showing the following properties:

Property	Value
View Template	Structural Section
View Name	Frame Top
Dependency	Independent
Title on Sheet	
Sheet Number	F5 -1
Sheet Name	Sheet
Referencing Sheet	
Referencing Detail	

On the right, a structural section drawing is shown. The drawing features a grid of vertical framing members (labeled F1.0 through F10.0) and horizontal members (labeled H1.0 through H10.0). Dimensions are indicated on the right side of the drawing, with labels A through J. The drawing is titled 'Frame Top' and is located on sheet 'F5 -1 - Sheet'.

Dimensioning Rule

Create Assembly Views

Edit Dimensioning Rules

Create View	Create Detail View	View Number	View	Rotate	View Name	Framing Layer	View Template	Dimensioning Rule
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	3D Ortho	All Layers	3D Ortho Assembly	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame Top	Frame	Structural Section	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Top	None	Frame&Sheathing Top	Sheathing	Framing - Sheathing	Sheathing
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Bottom	None	Batten Bottom	Batten	Structural Section	Batten
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Assembly Front	All Layers	Framing - Sheathing	Assembly
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Bottom	None	Batten&Sheathing Bottom	Sheathing II	Framing - Sheathing	Sheathing
<input type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	Structural Section	Frame

Dimensioning Rule – dimensioning rules for the selected view. Dimensioning rules are saved under separate names and can be used for other projects.

Dimensioning rules can be created and modified under **Edit Dimensioning Rules**.

Assembly Views | Detail View | Schedules | Sheets

Create Assembly Views

Edit Dimensioning Rules

Cre...	Cre...	View Nu...	View	Rotate	View Name	Framing Layer	View Template	Dimensioning Rule	Structural Fr
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	3D Ortho	None	3D Ortho	All Layers	-- No Template --	-- None --	-- None --
<input type="checkbox"/>	<input type="checkbox"/>	1	Plan Detail	None	Framing Plan Detail	Frame	Structural Section	Plan Detail	-- None --
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	Structural Section	Frame	M_Wall Fra
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame&Sheathing Front	Sheathing	-- No Template --	Sheathing	-- None --
<input type="checkbox"/>	<input type="checkbox"/>	1	Elevation Back	None					
<input type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None					
<input type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None					
<input type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None					

Smart Dimensions Configurations

Configuration: Assembly Front

Dimension Lines:

- Assembly Front
- Default Configuration
- Frame
- Horizontal Nailier
- Horizontal Siding
- Plan Detail
- Secondary Frame
- Sheathing
- Vertical Nailier
- Vertical Siding

Point Based Elements

Common Settings | Text Note Settings | Horizontal Elements

Grouping

Group Elements by: None

Include

Include in Total Measure

Include Grids

Include Levels

Measure: All

Tags

Dimensioning Rule	Structural Framing Tag	Sheathing Tag	Structural Connections Tag	Tag Other	GP is Visible	Number of Visible Layers	Views are Visible
Frame	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>
Frame	M_Floor	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>
Sheathing	-- None --	Framing Par	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>
Batten	M_Floor	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>
Assembly	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>
Sheathing	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>
Frame	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>

Elements in the views can be tagged. The list of tag families comes from your current project. Sample tags are loaded into your project using **Load Families**:

Select Family Catalogs for Loading

Catalog Name	Load
Main Families	<input type="checkbox"/>
Sample Details	<input type="checkbox"/>
Sample Schedules	<input type="checkbox"/>
Sample Tags	<input checked="" type="checkbox"/>

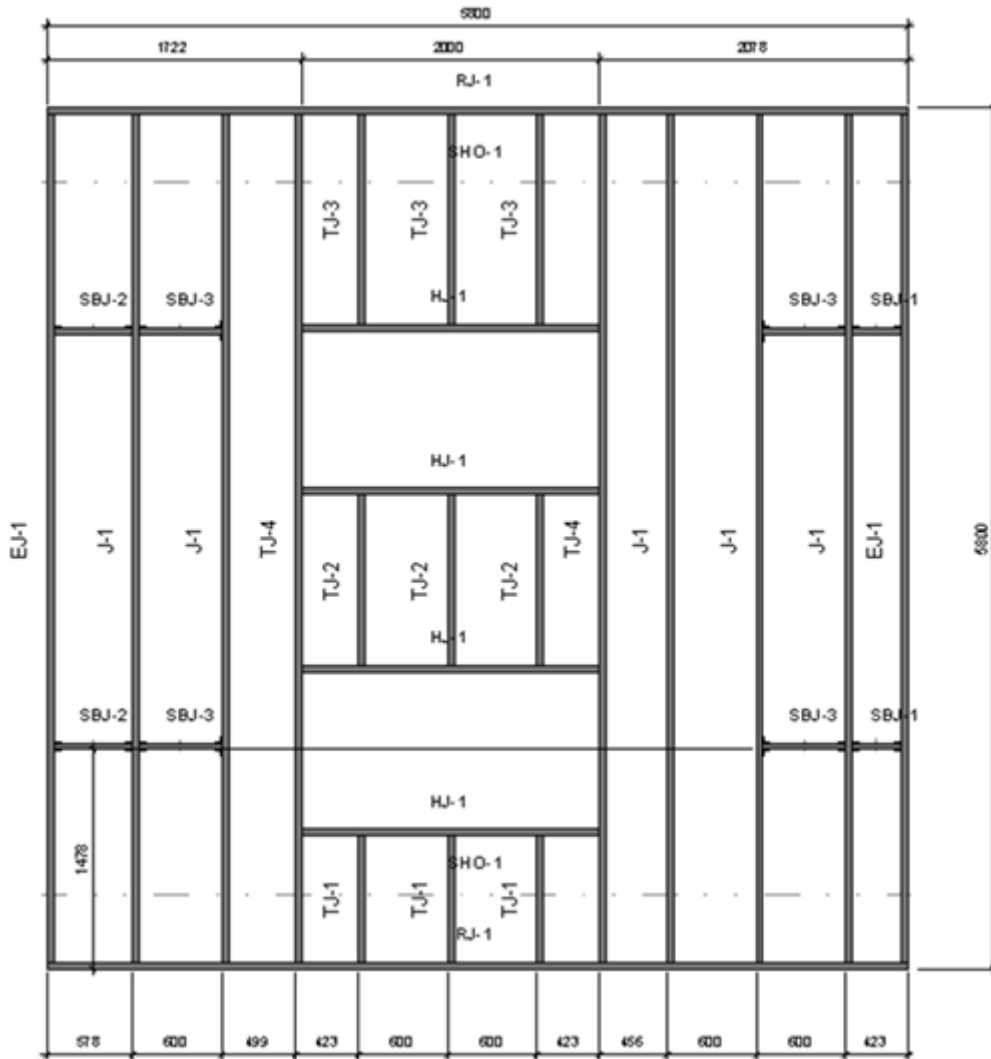
Notes

Company Catalog Name	Browse	Load
	Browse..	<input type="checkbox"/>

Overwrite Parameters

Load Additional Types Cancel OK

Structural Framing Tag – select a family for tagging all studs and plates in the view.



Sheathing Tag – select a family for tagging all sheathing panels (Parts) in the view.

Structural Connections Tag – select a family for tagging all details, like anchors, clip angles, etc. in the view.

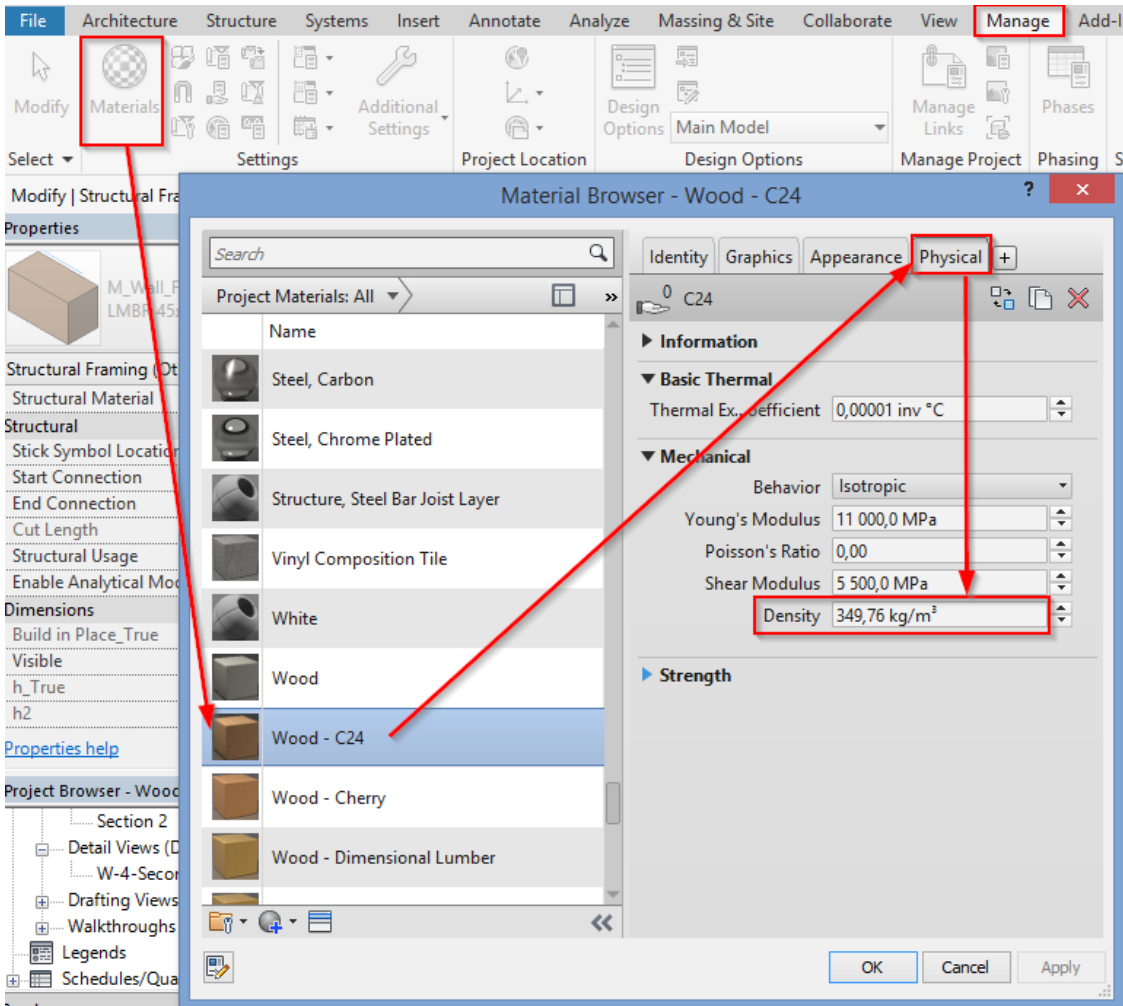
Tag Other – tags other elements, like electrical switches, openings, etc. in the view. Tag families come from **Annotate tab** → **Tag All**.

Gravity Point

Floor+M can calculate all element masses and insert the **Gravity Point** at the center of gravity of a given assembly.

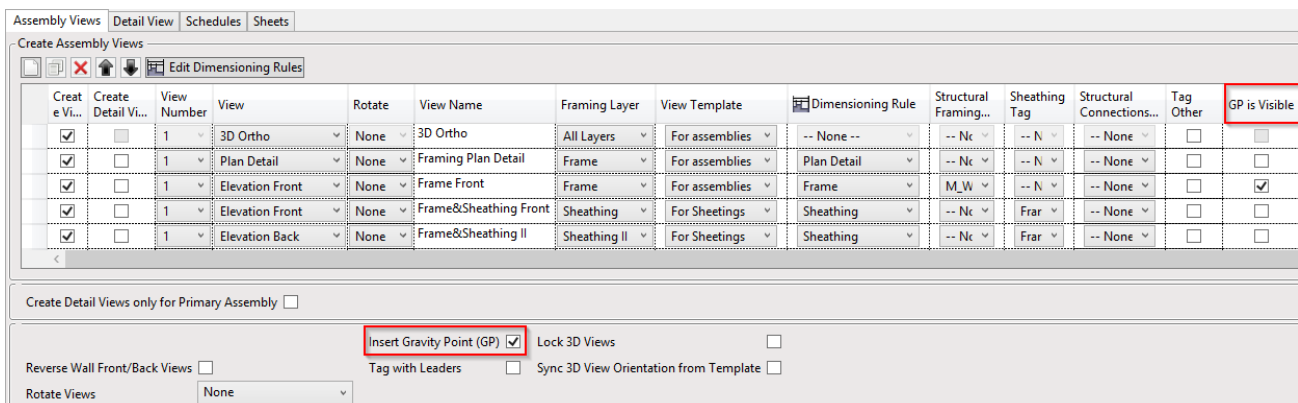
To insert **Gravity Point** into the assembly views, a few requirements must be fulfilled:

1. All elements in the assembly must have a **Density** parameter assigned in the **Material's Physical** properties:

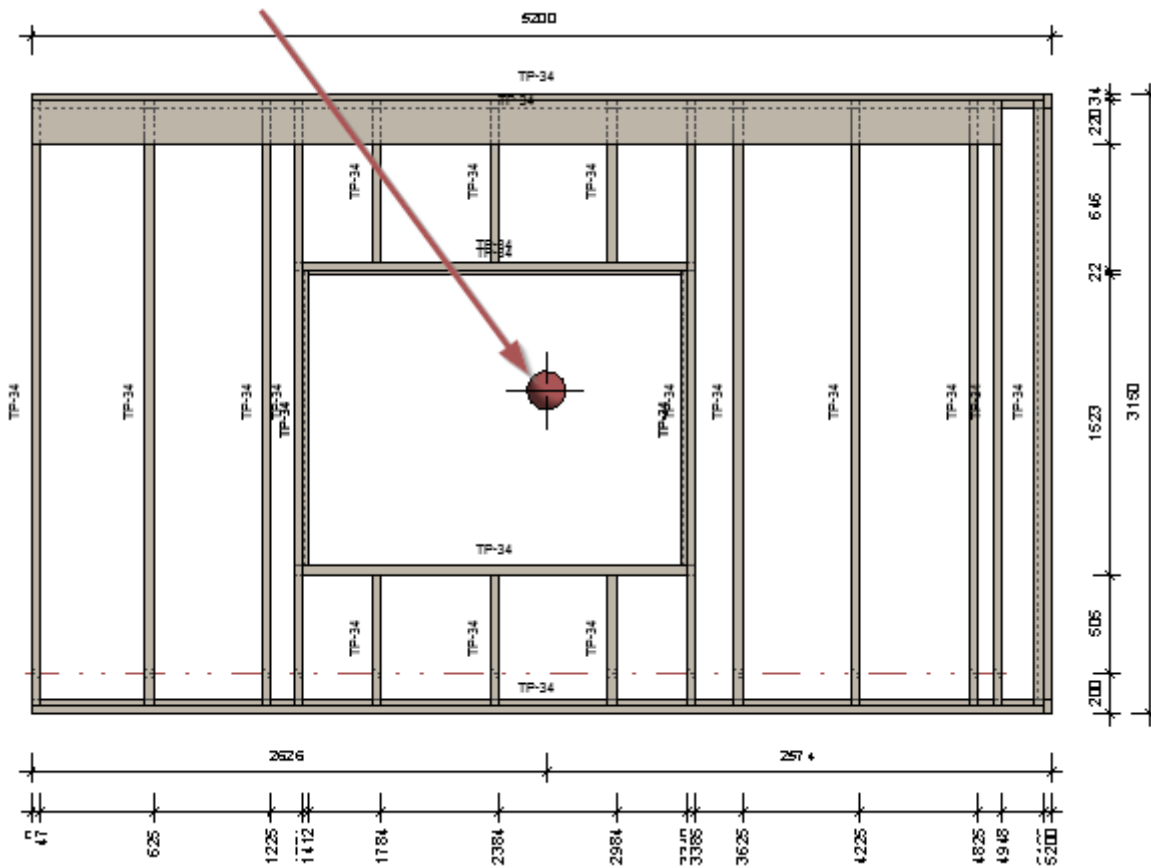


2. Tick **Insert Gravity Point (GP)**.

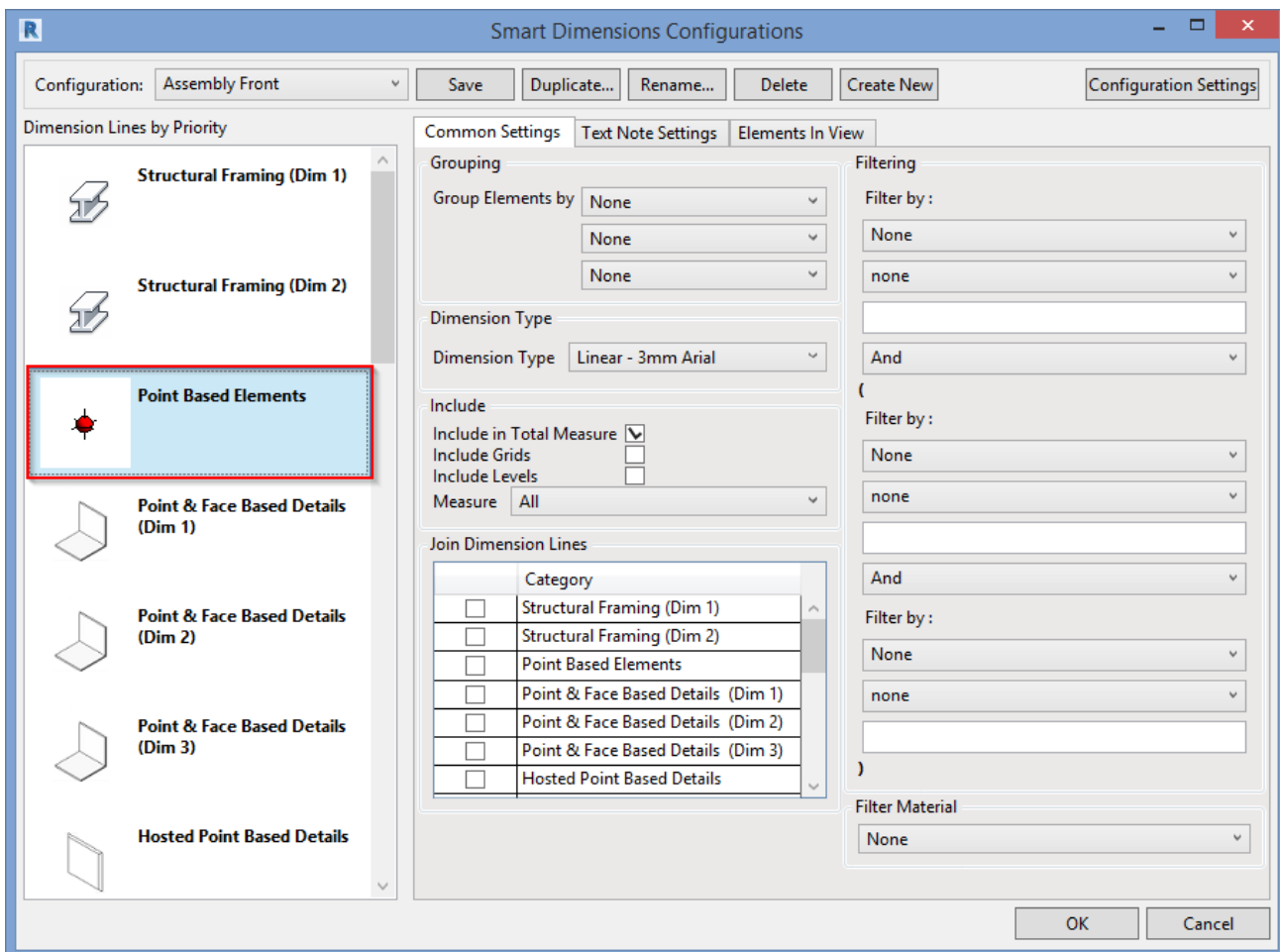
3. **GP is Visible** – select assembly views in which the gravity point will be visible.



Result:



The Gravity Point also can be dimensioned in the assembly view. All dimensioning rules are in **Smart Dimensions**:



Number of Visible Layers

Dimensioning Rule	Structural Framing Tag	Sheathing Tag	Structural Connections Tag	Tag Other	GP is Visible	Number of Visible Layers
-- None --	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2
Plan Detail	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2
Frame	M_Wall Fra	-- None --	-- None --	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2
Sheathing	-- None --	Framing Part Tag	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2
Sheathing	-- None --	Framing Part Tag	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2
Vertical Nailer	M_Wall Fra	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2

Number of Visible Layers – allows you to add the number of visible layers in the view.

Views are Visible

GP is Visible	Number of Visible Layers	Views are Visible	Insert Grids
<input type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>

Views are Visible – select which views will be visible in the selected view.

The screenshot shows the software interface. On the left, a tree view under 'Assemblies' shows 'W-4' with several sub-views. 'Detail View: Framing Plan Detail' is highlighted. On the right, a technical drawing of a wall section is shown with dimensions and grid lines. Red arrows point to the drawing area, indicating the selected view.