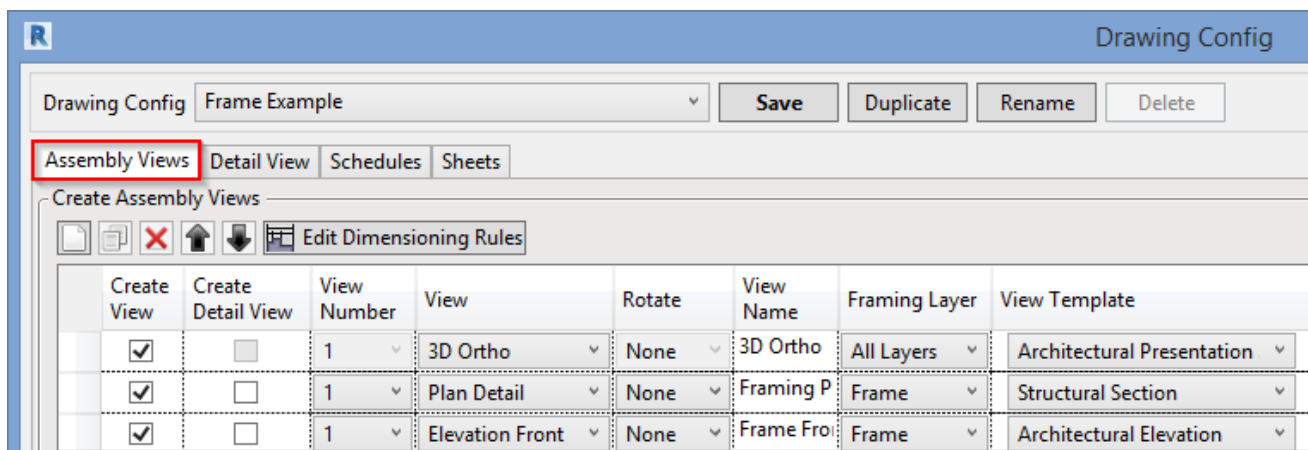
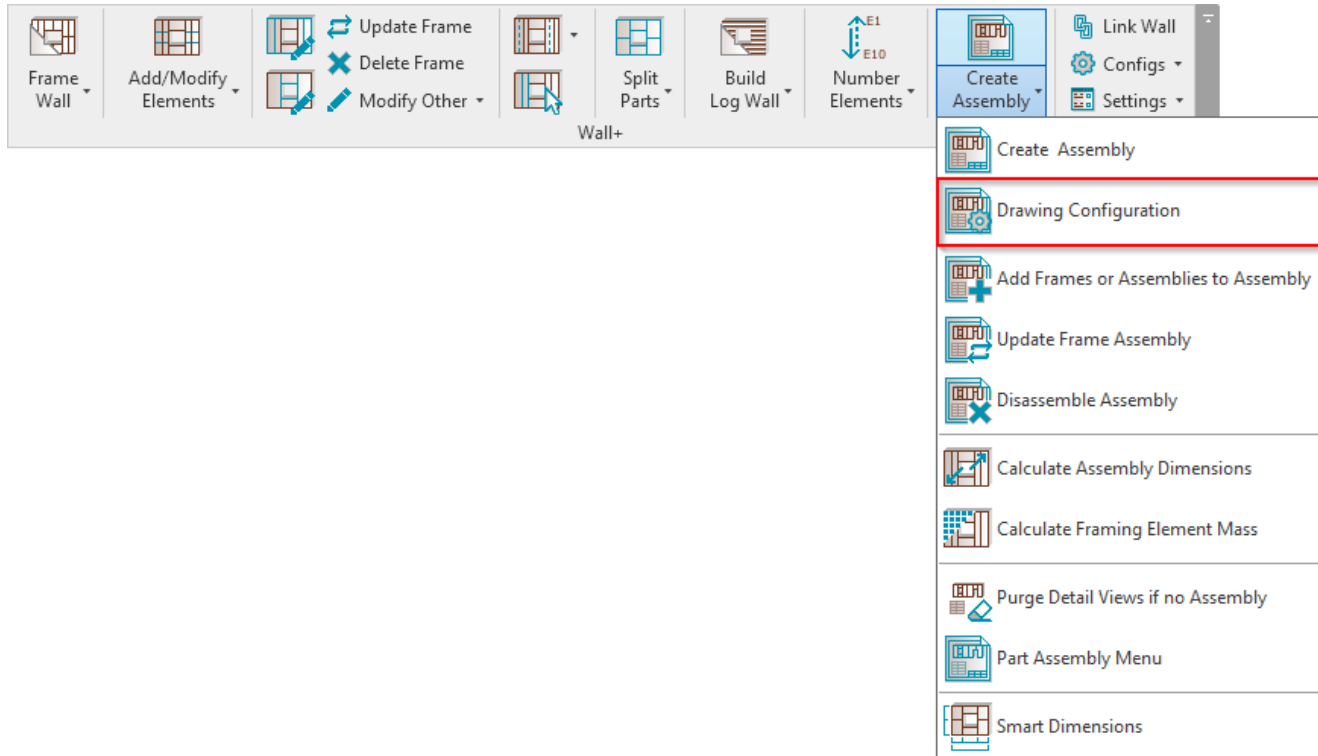


SHOP DRAWINGS – Drawing Configuration – Assembly Views

Modified on: Sun, 3 Jan, 2021 at 7:22 PM

Assembly Views



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: Frame Example Save Duplicate Rename Delete

Assembly Views | Detail View | Schedules | Sheets

Create Assembly Views

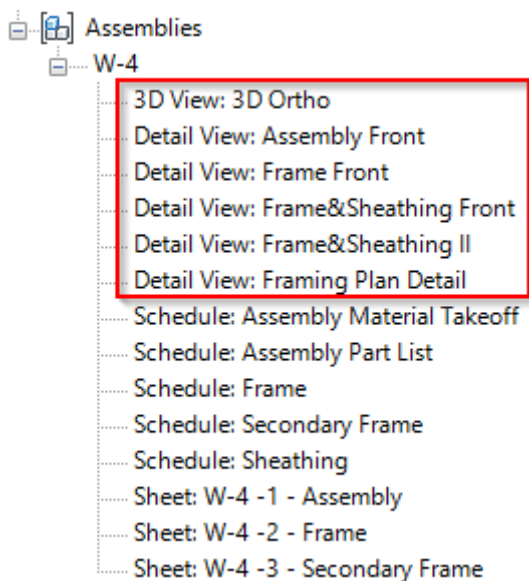
Create View Create Detail View Edit Dimensioning Rules

Create View	Create Detail View	View Number	View	Rotate	View Name	Framing Layer	View Template
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	3D Ortho	None	3D Ortho	All Layers	Architectural Presentation
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Plan Detail	None	Framing P	Frame	Structural Section
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame Fro	Frame	Architectural Elevation

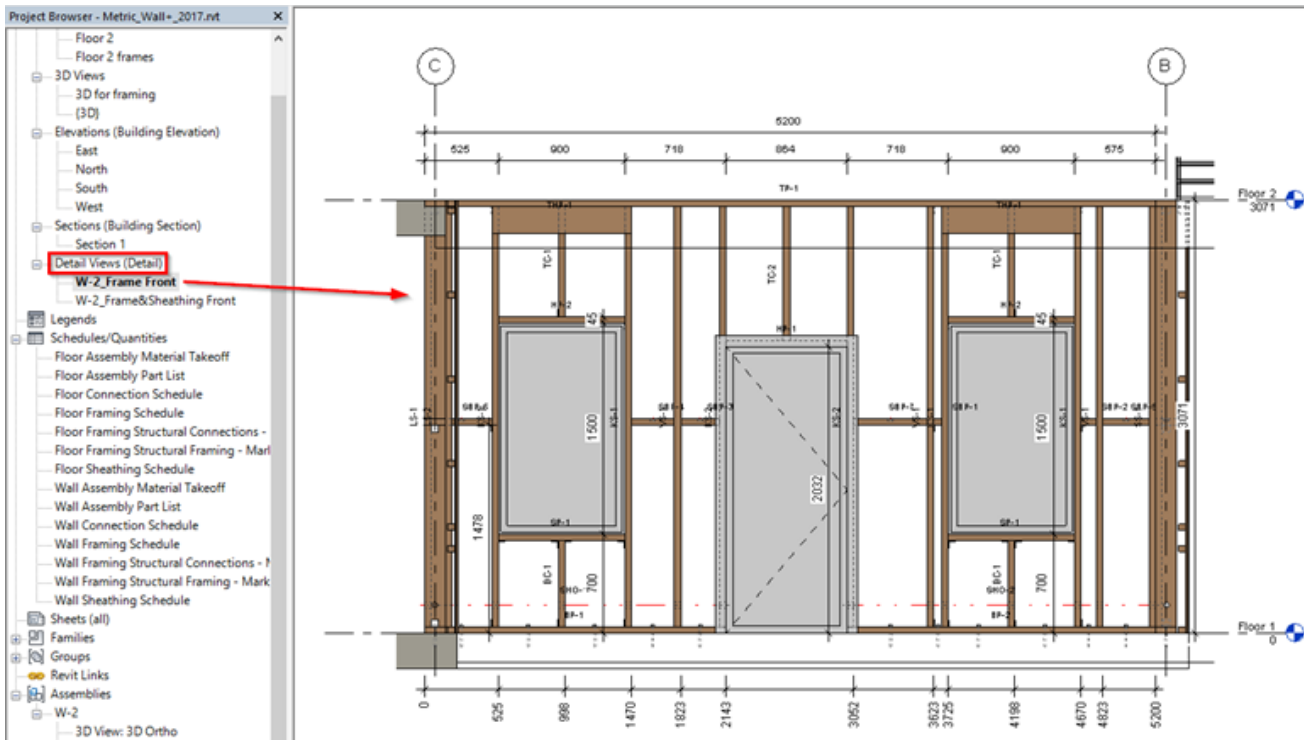
Create View, Create Detail View

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	3D Ortho	None	3D Ortho	All Layers	-- No Template --	-- None --
<input type="checkbox"/>	<input type="checkbox"/>	1	Plan Detail	None	Framing Plan Detail	Frame	Structural Section	Plan Detail
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	Structural Section	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame&Sheathing Front	Sheathing	-- No Template --	Sheathing
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Back	None	Frame&Sheathing II	Sheathing II	-- No Template --	Sheathing

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:

Assembly Views **Detail View** Schedules Sheets

Detail View Name Formula

Available parameters:

Assembly Name

Assembly Mark

Add -->

-- Remove

Detail View Name =

	Parameter Name	Prefix	Suffix
1	Host Mark		-
2	View Name		

Up Arrow Down Arrow

Views and View Templates

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	3D Ortho	None	3D Ortho	All Layers	-- No Template --	-- None --
<input type="checkbox"/>	<input type="checkbox"/>	1	Plan Detail	None	Framing Plan Detail	Frame	Structural Section	Plan Detail
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	Structural Section	Frame
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame&Sheathing Front	Sheathing	-- No Template --	Sheathing
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Back	None	Frame&Sheathing II	Sheathing II	-- No Template --	Sheathing

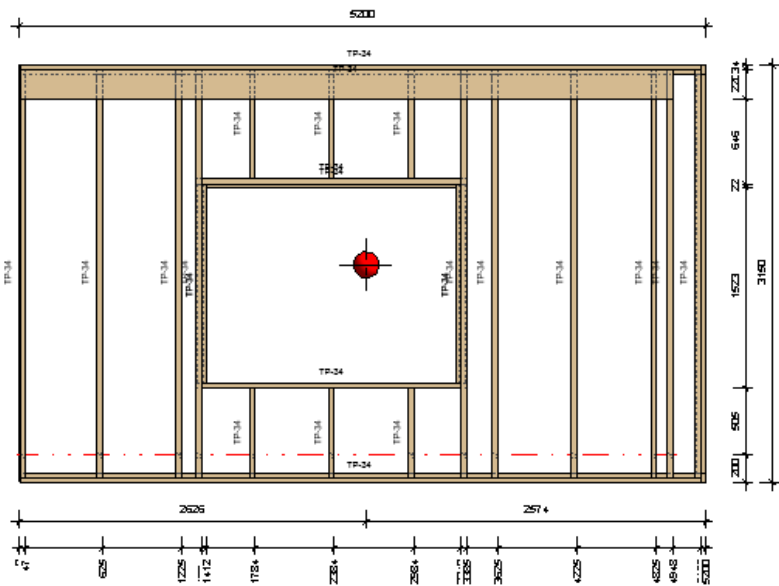
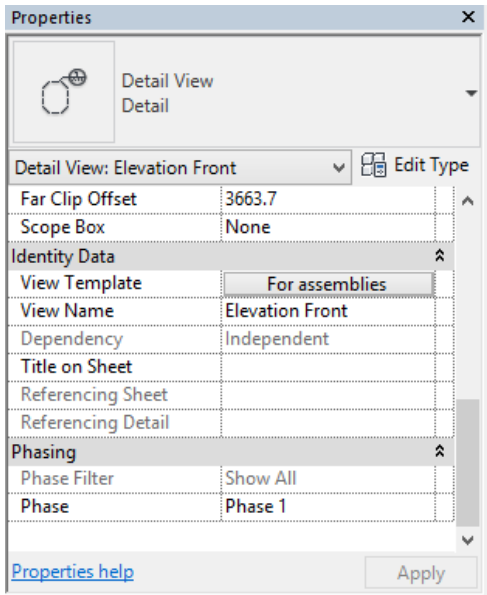
View – select the view type to create in the assembly. The list of view types comes from Revit. It can be: section, elevation, plan view, legend, 3D view, etc.

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, Vertical Nailer, Horizontal Siding, Sheathing, Log, 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**.

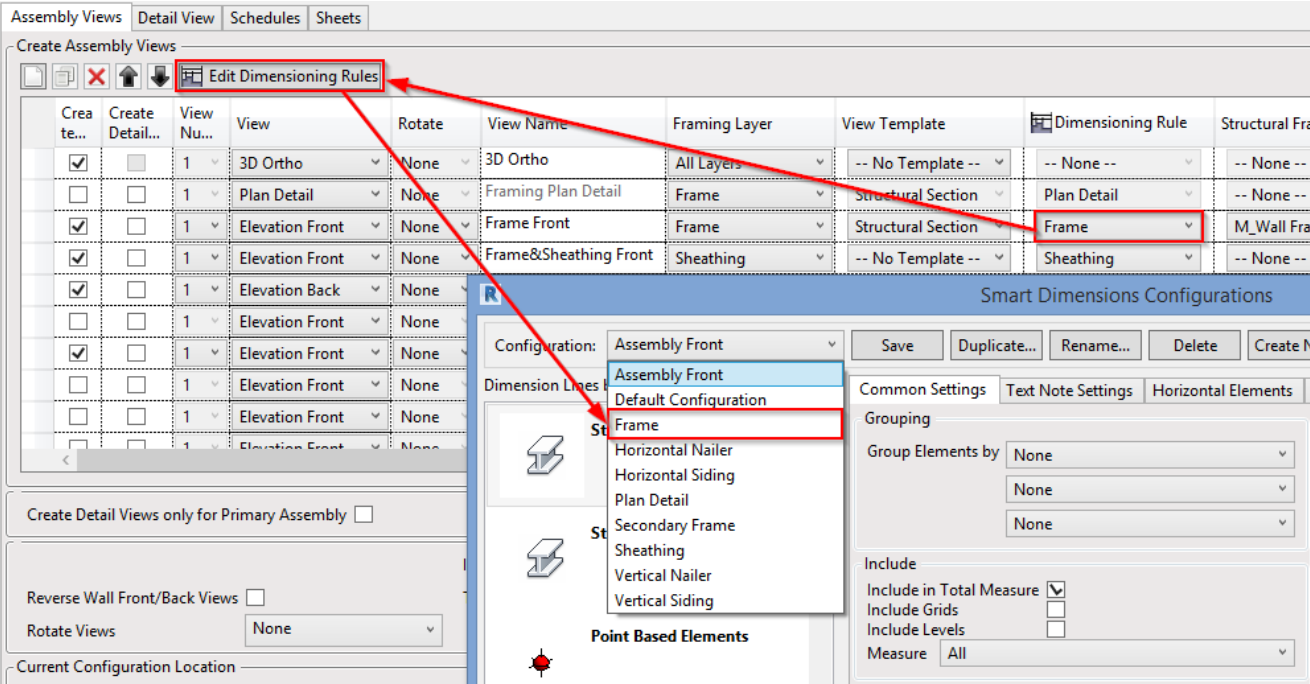


Dimensioning Rule

Create Assembly Views									
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	3D Ortho	None	3D Ortho	All Layers	-- No Template --	-- None --	
<input type="checkbox"/>	<input type="checkbox"/>	1	Plan Detail	None	Framing Plan Detail	Frame	Structural Section	Plan Detail	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	Structural Section	Frame	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame&Sheathing Front	Sheathing	-- No Template --	Sheathing	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Back	None	Frame&Sheathing II	Sheathing II	-- No Template --	Sheathing	

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**.



Tags

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

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

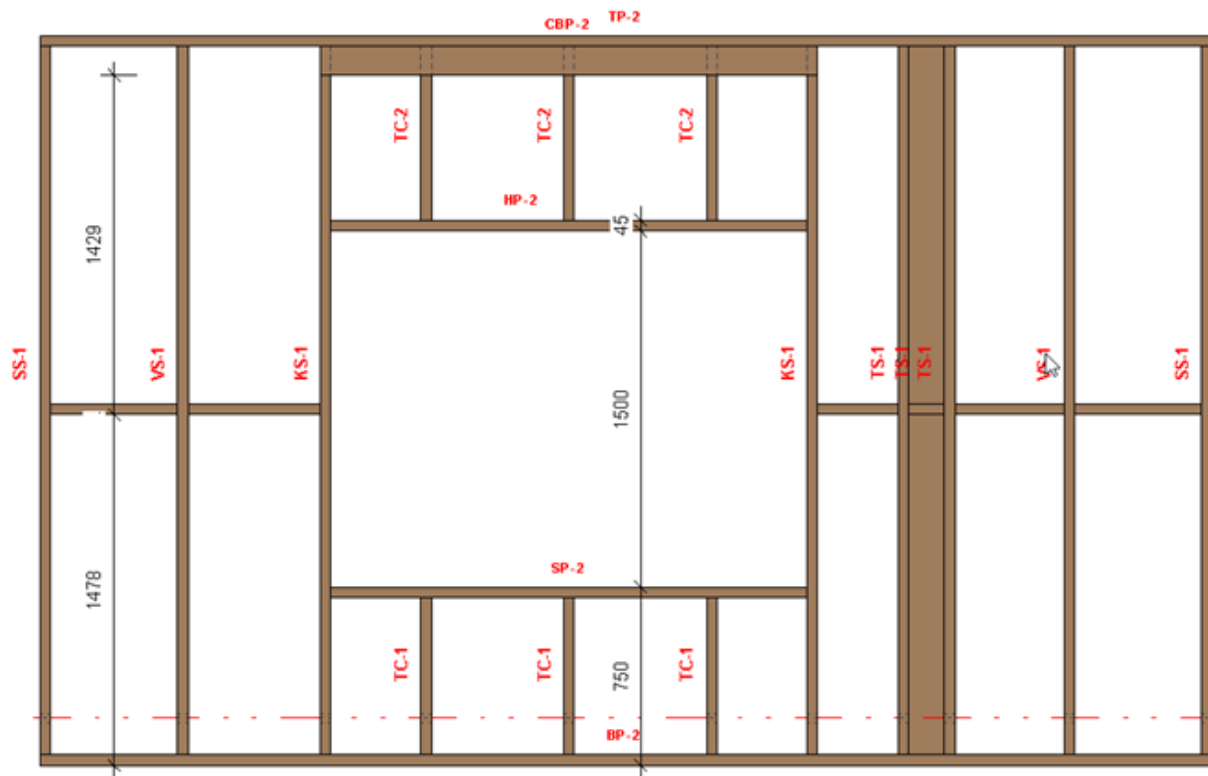
Catalog Name	Load
Log Families	<input type="checkbox"/>
Main Families	<input type="checkbox"/>
Main Families with Shared Cut Angles	<input type="checkbox"/>
Optional-Gravity Center	<input type="checkbox"/>
Optional-Metal Braces	<input type="checkbox"/>
Optional-Special V Studs	<input type="checkbox"/>
Sample Details	<input type="checkbox"/>
Sample Schedules	<input type="checkbox"/>
Sample Tags	<input checked="" type="checkbox"/>
Siding Families	<input type="checkbox"/>
Split & Invisible Families	<input type="checkbox"/>

Notes

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

Overwrite Parameters ☐

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.

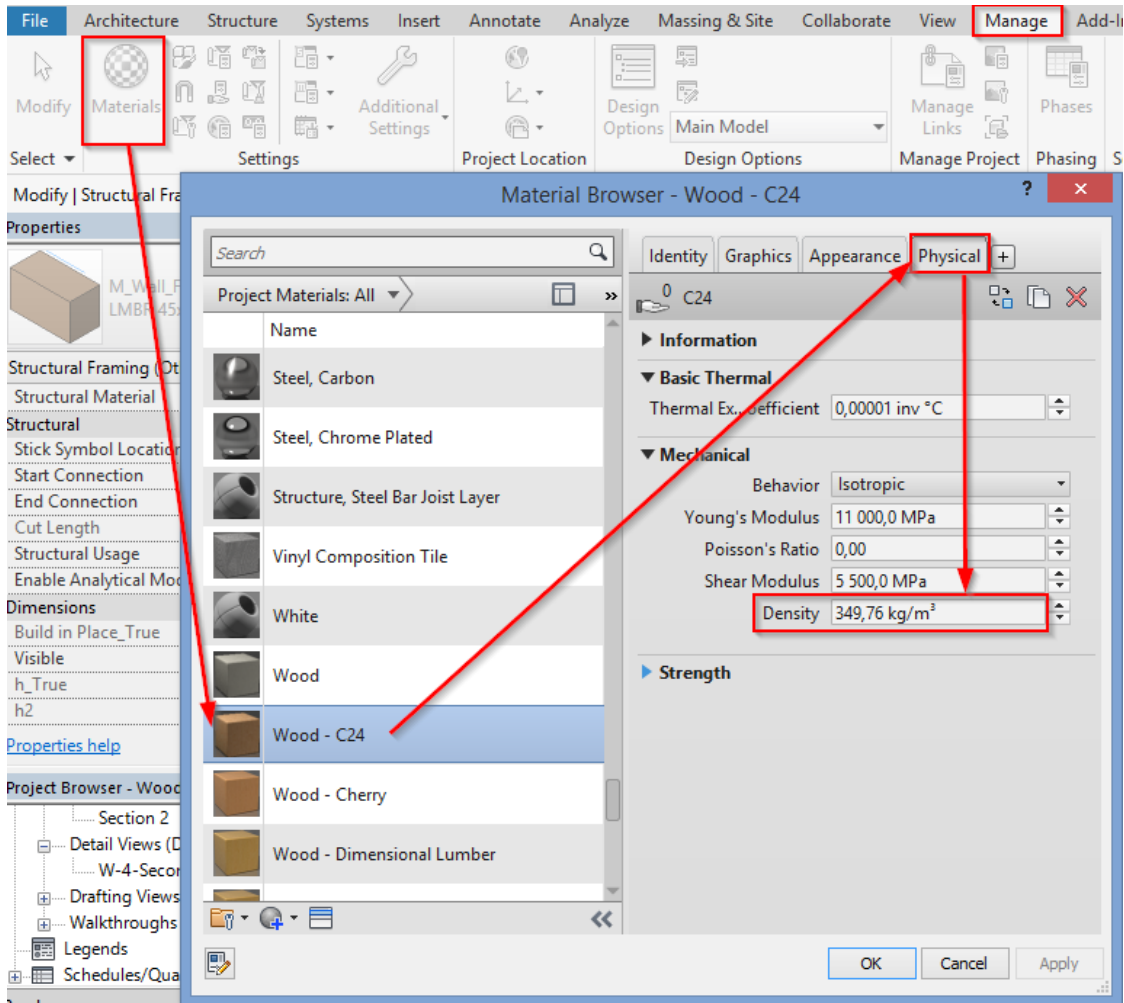
Tag Other – tags other elements, like electrical switches, openings, etc. in the view. Tag families come from **Annotate** tab → **Tag All**.

Gravity Point

Wall+ 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.

Assembly Views | Detail View | Schedules | Sheets

Create Assembly Views

Edit Dimensioning Rules

Cre e Vi...	Create Detail Vi...	View Number	View	Rotate	View Name	Framing Layer	View Template	Dimensioning Rule	Structural Framing...	Sheathing Tag	Structural Connections...	Tag Other	GP is Visible
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	3D Ortho	None	3D Ortho	All Layers	For assemblies	-- None --	-- Nc	-- N	-- None	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Plan Detail	None	Framing Plan Detail	Frame	For assemblies	Plan Detail	-- Nc	-- N	-- None	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame Front	Frame	For assemblies	Frame	M_W	-- N	-- None	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Front	None	Frame&Sheathing Front	Sheathing	For Sheethings	Sheathing	-- Nc	Frar	-- None	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Elevation Back	None	Frame&Sheathing II	Sheathing II	For Sheethings	Sheathing	-- Nc	Frar	-- None	<input type="checkbox"/>	<input type="checkbox"/>

Create Detail Views only for Primary Assembly ☐

Reverse Wall Front/Back Views ☐

Rotate Views

None

Insert Gravity Point (GP) ☒

Lock 3D Views ☐

Tag with Leaders ☐

Sync 3D View Orientation from Template ☐

Result:

The figure is a technical drawing of a wall assembly in an assembly view. It shows a cross-section of a wall with various layers and components. A red circle with a crosshair, representing the Gravity Point (GP), is located in the center of the wall assembly. A red arrow points from the 'Insert Gravity Point (GP)' checkbox in the software interface to this red circle. The drawing includes numerous dimension lines and numerical values. The overall width is 5200. The overall height is 3180. The wall thickness is 200. The drawing is divided into several vertical sections with dimensions: 625, 1225, 1412, 1184, 2384, 2984, 3388, 3625, 4225, 4825, 4948, and 5200. The drawing is also divided into several horizontal sections with dimensions: 1200, 505, 1523, 22, 645, and 22034. The drawing is labeled with 'TP-34' in several locations.

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

<https://agacad.freshdesk.com/support/solutions/articles/44001705274-shop-drawings-drawing-configuration-assembly-views>

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Smart Dimensions Configurations

Configuration : **Assembly Front** [Save] [Duplicate] [Rename] [Delete] [Create New] [Configuration Settings]

Dimension Lines by Priority

- Structural Framing
- Point Based Elements**
- Point & Face Based Details
- Hosted Point Based Details
- Parts
- Walls
- Structural Columns

Common Settings | Text Note Settings | Elements In View

Grouping

Group Elements by: None

Dimension Type

Dimension Type: Linear - 3mm Arial

Include

Include in Total Measure: ☒
 Include Grids: ☐
 Include Levels: ☐
 Measure: All

Join Dimension Lines

	Category
<input type="checkbox"/>	Structural Framing 1
<input type="checkbox"/>	Structural Framing 2
<input type="checkbox"/>	Point Based Elements
<input type="checkbox"/>	Point & Face Based Details 1
<input type="checkbox"/>	Point & Face Based Details 2
<input type="checkbox"/>	Point & Face Based Details 3
<input type="checkbox"/>	Hosted Point Based Details

Filtering

Filter by:

None

none

And

Filter by:

None

none

And

Filter by:

None

none

Filter Material: None

[OK] [Cancel]

Number of Visible Layers

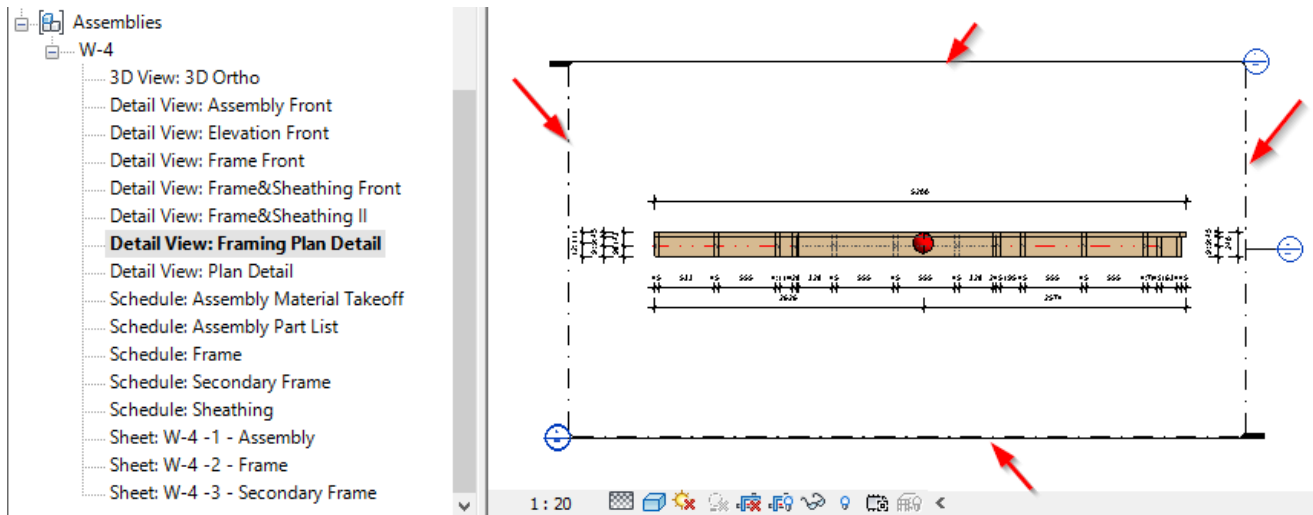
Dimensioning Rule	Structural Framing Tag	Sheathing Tag	Structural Connections Tag	Tag Other	GP is Visible	Number of Visible Layers
-- None --	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2
Plan Detail	-- None --	-- None --	-- None --	<input type="checkbox"/>	<input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

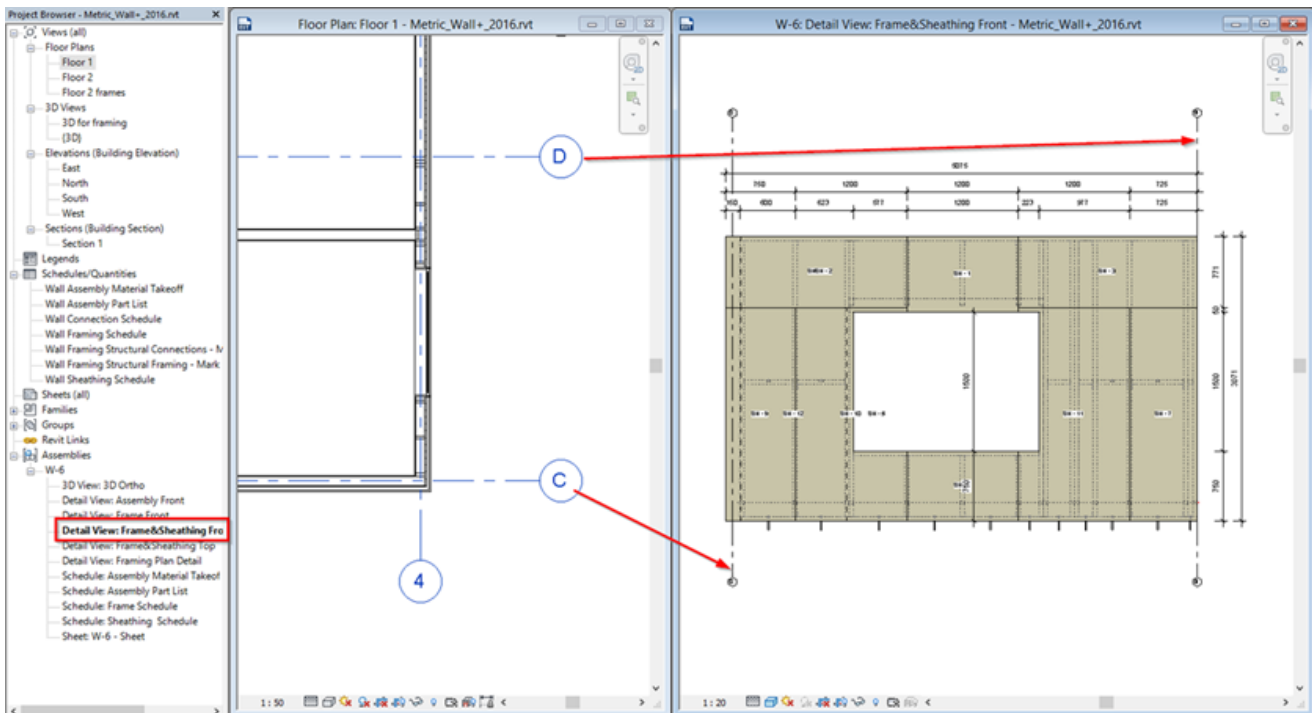
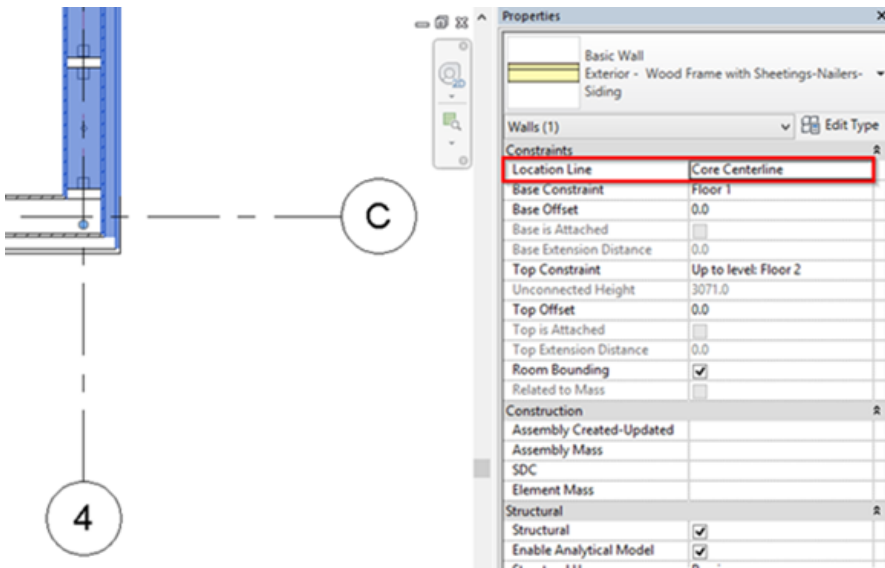


Insert Grids

View Name	Framing Layer	View Template	Dimensioning Rule	Structural Framing Tag	Sheathing Tag	Structural Connections Tag	Tag Other	GP is Visible	Number of Visible Layers	Views are Visible	Insert Grids
3D Ortho	All Layers	For assembl	-- None --	-- Nor	-- ↑	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>
Framing Plan Detail	Frame	For assembl	Plan Detail	-- Nor	-- ↑	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Frame Front	Frame	For assembl	Frame	M_Wa	-- ↑	-- None --	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Frame&Sheathing Front	Sheathing	For Sheetin	Sheathing	-- Nor	Frai	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Frame&Sheathing II	Sheathing II	For Sheetin	Sheathing	-- Nor	Frai	-- None --	<input type="checkbox"/>	<input type="checkbox"/>	2	<input type="checkbox"/>	<input type="checkbox"/>

Insert Grids – adds Grid symbol to assembly views with shop drawings.

Original grids need to be created by the location line of the wall in the plan view.



The Grid symbol is a special family that we created. You can predefine its design, end segment length, head radius, etc.

The screenshot displays the AGACAD software interface. On the left, a drawing of a wall section is shown with a vertical grid line labeled 'D'. Horizontal dimensions of 725 are indicated on the wall, and a vertical dimension of 771 is shown for the wall height. A red arrow points from the 'Grid' tab in the Properties panel to the grid line 'D'. The Properties panel on the right shows the following settings:

Properties	
Grid	
Detail Items (2) Edit Type	
Constraints	
End Segments Length by Sc...	500.0
Length	3955.3
Radius by Scale	50.0
Construction	
End Segment 1	<input checked="" type="checkbox"/>
End Segment 2	<input checked="" type="checkbox"/>
Dimensions	
End Segments Length	25.0
Identity Data	
Image	
Comments	
Mark	
Model Properties	
Scale	20
Data	
Value	