Panel Layout

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- Use the Panel Layout command to subdivide an existing Revit floor into smaller segments.
- You can define Floor Supports beforehand, or you can lay out floor panels independent from floor supports.
- Floor Panel Layout Planning is for dividing and splitting a floor into prefabricated panels.

Note: You can control every division line and automate the division process by modifying rules.





Let's go through the options in Panel Layout.

In the Floor Panel Layout menu, select Panel Layout.



Now select **Region Layout Settings** at the top of the list in the **Floor Panel Layout Planning** menu. Note that Region Layout is for coarse partitioning of floors; these regions can later be divided into panels for prefabrication.

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Floor Panel Layout Planning X	
Region Layout Settings	R Region Layout Settings - 0
Create Region Layout for Floor's Face Create Region Layout for the whole Floor	✓ Use Symbolic Family for Layout Lines □ Place Layout on Bottom Face
Panel Layout Settings Create Panel Layout for Floor's Face Create Panel Layout for the whole Floor Update Panel Layout for Floor's Face Update Panel Layout for the whole Floor Modify Panel Layout Update Panel Layout Alion Layout Lines with Other Element	Split by Openings ✓ Generic Openings Distance from Generic Opening Minimum Generic Opening Width ✓ System Openings Distance from System Opening Z50 mm Minimum System Opening Width
Align Layout Lines with Two Other Elements	Automatically Split Panels Panel Split Setting
Delete Panel Layout from Region Delete Panel Layout from Floor's Face Delete Panel Layout from the whole Floor	Save Close
Split in Half Split by Maximum Spacing Split by Midde to Both Ends Split in Middle and to Both Ends Split Copy from first Selected Split from first Selected Split from Both Ends Join Regions/Panels	

Regions can be created automatically by using floor edges and supports (split lines), as well as using **Generic** or **System Openings** with predefined distances.

Looking in the Region Layout Settings dialog:

R Region Layout Settings - 🗆 🗙			
Use Symbolic Family for Layout Lines			
Split by Openings			
Generic Openings			
Distance from Generic Opening	250 mm		
Minimum Generic Opening Width	500 mm		
System Openings			
Distance from System Opening	250 mm		
Minimum System Opening Width	500 mm		
Automatically Split Panels	Panel Split Settings		
	Save Close		

• Use Symbolic Family for Layout Lines – tick ON to add Symbolic Family to represent layout arrangement and direction

• Place Layout on Bottom Face – tick ON to create Floor Panel Layout on floor's bottom face; tick OFF to create layout on upper face

• Automatically Split Panels – tick ON to create panels along with regions when using either the Create Region Layout for Floor's Face function or Create Region Layout for the whole Floor function.

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R Region Layout Settings	_		×
Use Symbolic Family for Layout Lines Place Layout on Bottom Face	i		
Split by Openings			
✓ Generic Openings			
Distance from Generic Opening	250 mm		
Minimum Generic Opening Width	500 mm		
✓ System Openings			
Distance from System Opening	250 mm		
Minimum System Opening Width	500 mm		
Automatically Split Panels	Pane	el Split Set	tings
	Save	Clos	e

• **Generic Openings** – tick ON to offset splits on both sides by a predefined Distance from Generic Opening that exceeds the predefined Minimum Generic Opening Width

• System Openings – tick ON to offset splits on both sides by a predefined Distance from System Opening that exceeds the predefined Minimum System Opening Width

Panel Split Settings – click this button to open a dialog wherein settings for panel layout planning can be predefined to automatically split floor panels by size, spacing, orientation, or offset.

R Region Layout Settings – 🗆 🗙	R Panel Layout Settings — 🗆 🗙
 ✓ Use Symbolic Family for Layout Lines Place Layout on Bottom Face Split by Openings ✓ Generic Openings Distance from Generic Opening 250 mm Minimum Generic Opening Width 500 mm ✓ System Openings Distance from System Opening 250 mm Minimum System Opening 250 mm Minimum System Opening Width 500 mm ✓ Automatically Split Panels Panel Split Settings Save 	Panel Split Orientation • Split Vertically Split Horizontally by Slope Split Horizontally Panel Split by Spacing Panel Width/Split Spacing Maximum Panel Width/Split Spacing Iz00 mm Maximum Panel Width/Split Spacing Split by Maximum Spacing Split by Maximum Spacing Split by Middle to both Ends Split from Start Split from End Split from both Ends

· Panel Split Orientation - allows you to orient panel vertically, horizontally by slope, or horizontally

Panel Split by Spacing

- · Panel Width/Split Spacing predefined spacing for panel splitting
- Maximum Panel Width/Split Spacing predefined maximum spacing for panel splitting
- First/Last Panel Offset predefined first/last spacing for panel splitting.

Split by Maximum Spacing - splits selected region by maximum spacing as predefined in configuration in Panel Layout Settings.

Split by Middle to Both Ends - splits selected region from the middle to both ends by spacing as predefined in configuration in Panel Layout Settings.

Split in Middle and to Both Ends - splits selected region in its middle and arrays splits to both ends by spacing as predefined in configuration in Panel Layout Settings.

Split from Start/End - splits selected Region from Start/End by spacing as predefined in configuration in Panel Layout Settings.

Split from Both Ends - splits selected Region from both ends by spacing as predefined in configuration in Panel Layout Settings.

Create Region Layout for Floor's Face/whole Floor



· Multi-select all floors of the same type

• Select Create Region Layout for Floor's Face/whole Floor from Floor Panel Layout Planning menu to create region layout by predefined rules for the selected face of a floor or an entire floor.

Note: Regions are indicated with dashed red lines.

Panel Layout Settings



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- Multi-select all floors of the same type
- Select **Create Panel Layout for Floor's Face/whole Floor** from **Floor Panel Layout Planning** menu to create panel layout by predefined rules for the selected face of a floor or an entire floor.
- Regions can be divided into panels by predefined spacing (as shown previously)
- · Panel layout is used to split a floor into segments for prefabrication
- Panel layout later will be converted into actual Floor panels

Note: Panels are indicated with dotted blue lines

Let's look at the remaining functions available in the Floor Panel Layout Planning menu.



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Update Panel Layout for Floor's Face - updates region and panel layouts according to floor geometry changes for the selected face of a floor. Region and panel layouts will be re-created by the default region and panel layout settings.

Update Panel Layout for the whole Floor - updates region and panel layouts according to floor geometry changes for the entire selected floor. Region and panel layouts will be re-created by the default region and panel layout settings.

Modify Panel Layout - modifies selected panel layout. You can define layout rules and spacing. **Update Panel Layout** - updates panel layout according to **Modify Panel Layout** settings.

Align Layout Lines with Other Element - aligns all layout lines in one region with one selected line from another region.

Align Layout Lines with Two Other Elements - aligns all layout lines in one region with two selected lines from another region.

Delete Panel Layout from Region - deletes panel layout from the selected region. **Delete Panel Layout from Floor's Face** - deletes region and panel layouts from the selected face of a floor. **Delete Panel Layout from the whole Floor** - deletes region panel layouts from the entire selected floor.

Split in Half - splits selected region or panel in half.

Split by Maximum Spacing - splits selected region or panel by maximum spacing as predefined in configuration in panel layout settings.

Split by Middle to Both Ends - splits selected region or panel from the middle to both ends by spacing as predefined in configuration in panel layout settings.

Split in Middle and to Both Ends - splits selected region or panel in its middle and arrays splits to both ends by spacing as predefined in configuration in panel layout settings.

Split Copy from first Selected - creates a copy and splits selected region or panel from the first selected line by spacing as predefined in configuration in Panel Layout Settings.

Split from First Selected - splits selected region or panel from the first selected line by spacing as predefined in configuration in panel layout settings.

Split from Both Ends - splits selected region or panel from both ends by spacing as predefined in configuration in panel layout settings.

Join Regions/Panels - joins two regions or panels into one by deleting the selected line.