

Space Plan - Building Area Template

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The Space Plan - Building Area Template opens with the Wall Utility toolbar in place. You can use the Wall Utility buttons with the Double Line Wall and other shapes to form a T-joint or corner joint between walls, extend a wall to meet another, match doors and windows to wall thickness and angle, and move and size the building shapes precisely on the page.

For information about how a particular shape behaves, right-click the shape, then choose Shape Help from the shortcut menu.

Before you draw your space plan:

- Measure the space you want to lay out to get its dimensions.
- Measure the size of the objects you want to include in the space you're planning.
- Measure the size of the windows and doors, their distances from corners (or other reference points), and note which direction the doors open.

Laying the foundation

By default, the Space Plan - Building Area Template opens with a scaled drawing page in landscape (wide) orientation. You can change these settings at any time.

To change the page settings and drawing scale:

1. Choose File > Page Setup.
2. On the Page Size tab and Drawing Scale tab, choose the settings you want for the drawing page size, the printed page size, and the drawing scale, then click OK.

To change the measurement units, click the Page Properties tab and choose the unit you want to use from the Measurement Units list, then click OK.

See also:

[Rotating and resizing pages](#)

[Setting page orientation and scale](#)

Drawing to scale

When you're choosing a drawing scale for a space plan, keep the following things in mind:

- In Visio Technical, drawing units are sizes in the real world. Page units are sizes on the printed page. The ratio of page units to drawing units is the drawing scale.
- The smaller the drawing scale, the larger the area you can represent. A scale such as 1/8 inch = 1 foot allows you to draw an entire floor on one page. A scale such as 1 inch = 1 foot allows you to focus on one cubicle.
- When you drop shapes on a scaled drawing page, they adjust automatically to the scale you've set.

See also:

[Setting page orientation and scale](#)

Creating a space plan

The first step in creating a space plan is to use guides and wall, window, and door shapes to build the framework.

To assemble the framework and position walls, doors, and windows:

1. Drag guides from the horizontal and vertical rulers and position them on the page to represent the perimeter, walls, and room partitions in the drawing. Don't worry about correct dimensions at this point.

TIP After you set up the guides that make up the framework, you may want to turn off the drawing page grid and use only the rulers and guides to position and glue shapes. To turn off the drawing page grid, choose View > Grid.

2. Position exterior walls first. For each wall, drag and drop the Double Line Wall shape and glue its endpoints to a guide. The selection handles turn red, indicating that the shapes are glued.

NOTE You don't need to align corner intersections precisely at this point. You can use the Join Walls button on the Walls Utility toolbar to join wall corners and correct the wall geometry. However, if you plan on using the Area Analysis tool, you must join all the Double Line Wall shapes correctly so that their begin and end points are touching on the correct side of the connected wall shapes. When you use the Join Walls option, the walls may appear to be glued together when they actually aren't. Align corner intersections precisely using glue and guides.

For exterior walls, it's best to use fewer shapes. For example, for each straight section, size one Smart Wall shape to the length you need, rather than joining multiple shapes together to create a longer wall.

3. Next, position interior and cubicle walls. For walls that are likely to change widths in the future, join multiple wall shapes together to create a longer wall, rather than sizing one wall shape to the length you need.

TIP You can create a row of cubicles quickly by duplicating wall or panel shapes.

4. To join the wall or panel shapes at corners, use the Join Walls button on the Wall Utility toolbar.
5. Glue Horizontal and Vertical dimension line shapes (from the General - Dimensioning, Architectural stencil) to the endpoints of the walls or to the guides to indicate the length of walls, then move the guides, if necessary, so they represent the exact dimensions of the space you're drawing.
6. Position window and door shapes on the walls, gluing the endpoints to the guide. If necessary, use the Align To/Match Walls button on the Wall Utility toolbar to rotate the window and door shapes to the angle of the wall on which you drop them. To flip or rotate Door shapes so the doors open in the appropriate direction, right-click the shape and choose the appropriate command.
7. To reposition walls, drag the guide to which they're glued. That way, corners remain intact, and windows and doors that are glued to the guide move along with the wall.

After you assemble the framework and wall structure, add shapes for desks, modular furniture, electrical symbols, equipment, and other furniture.

See also:

[About positioning shapes precisely](#)

[Duplicating shapes](#)

[Using the Area Analysis tool](#)

Using layers with space plans

A layer is a named category of shapes. When you create a space plan, Visio Technical places the shapes on layers. For example, the wall, door, and window shapes are placed on the Building Envelope layer; modular furniture shapes are placed on a Non-Movable Furnishings layer; conference tables, chairs, plants, and lamps are placed on a Movable Furnishings layer; and so on.

When shapes are assigned to separate layers, you can treat the layers of shapes separately. For example, you can hide or lock all layers except the one you want to work on or you can print shapes based on their layer assignments. To modify layer settings in a drawing, you use the View > Layer Properties command.

To view only one layer in a drawing:

1. Choose View > Layer Properties.
2. In the Layer Properties dialog box, under Visible, uncheck all the layers except the one you want to

view, then click OK.

See also:

[About layers](#)

Measuring area and perimeter

You can use the Measure tool to calculate the total perimeter and area of any closed shape drawn with the drawing tools, such as a shape that outlines the floor area of a floor plan. To run the Measure tool, choose Tools > Macro > Visio Extras > Measure.

TIP To measure the perimeter and area of a drawing constructed with shapes that contain height and width, first trace the boundary with the pencil tool, then run the Measure tool on the simple boundary shape.

You can use the Area Analysis tool to calculate the area of a room or space created using the Double Line Wall shape. To run the Area Analysis tool, choose Tools > Macro > Facilities Management > Area Analysis. Or if a Facilities Management Template is open, choose Tools > Area Analysis.

See also:

[Using the Area Analysis tool](#)

[Using the Measure tool](#)

Working with shape properties

A custom property is a field in which you can store information. For example, a Desk shape might include fields that contain the name of the person who sits at that desk, and his or her title and extension. To associate additional data with your space planning shapes, you can run the Custom Properties Editor to add properties.

To run the Custom Properties Editor:

- Choose Tools > Macro > Custom Properties Editor.

See also:

[Adding, editing, and deleting custom-property fields](#)

Generating reports from properties

If you've associated custom-property data with your space planning shapes, you can run the Property Reporting Wizard to generate inventory or numerical reports based on the data. For example, you can create an inventory of communications equipment.

To run the Property Reporting Wizard:

- Choose Tools > Property Report.

See also:

[Creating reports from custom data](#)

Linking shapes to other drawing pages, other files, or World Wide Web locations

You can add navigational links to any shape in your diagram, so that users of the diagram can right-click the shape to jump to separate drawing pages, separate files, or documents on an intranet or the Web. For example, you can link a Desk shape to the manufacturer's Web site for ordering and other product information.

To add links to shapes:

- Choose Insert > Hyperlink.

See also:

[About using hyperlinks](#)

Placing Visio drawings on the World Wide Web

You can easily convert a Visio drawing to a format Web browsers can read. Then you can distribute the drawing on an intranet or the Web.

See also:

[Exporting shapes and drawings in .jpg or .gif format](#)

[Saving drawings as HTML pages](#)

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