





## Using the Wall Utility

### How to

When you open a Home, Space Plan, Security, or Warehouse Template, the Wall Utility toolbar appears in the drawing window. You can use the toolbar buttons with the Double Line Wall and other shapes on the Walls, Shell and Structure stencil to lay out walls, doors, and windows. If you are working on drawings not based on these templates, you can display a dialog box that contains the same commands.

### To use the Wall Utility:

Choose Tools > Macro > AEC > Wall Utility to view the Wall Utility dialog box, or use the Wall Utility toolbar buttons.

- If you want to join two Double Wall Line shapes to create a corner joint, choose Join Walls (.
- If you want to align door and window shapes on a wall and match the thickness, reference line offset, and angle of the door or window to the wall, choose Align To/Match Wall (.
- If you want to move a selected wall until it abuts another wall, without changing the wall length, choose Move To Wall (.
- If you want to extend a selected wall to abut another wall by extending or changing the wall length, choose Extend To Wall (.

### OPTIONS

**Join Walls** Joins two Double Line Wall shapes of similar or different wall settings, creating a corner joint at any angle. If more than two abutting walls are selected, the utility will continue to create a corner at all coincident locations.

**Move To Wall** Moves a selected wall along its current orientation until it abuts your primary wall selection, without changing the wall length. The selected wall moves in the direction in which it is currently oriented to form a T-joint at a selected angle. This button works only with Double Line Wall shapes.

**Align To/Match Wall** Aligns certain door and window shapes to the Double Line Wall shape and matches the thickness, reference line offset, and angle of the door or window to the wall. When used with like shapes, such as only with doors or only with walls, this option matches a shape's thickness and reference line offset to those of the first shape selected, without altering the position or angle.

**Extend To Wall** Extends one or more selected Double Line Wall shapes along its current angle until it abuts another primary wall to form a T-joint at any angle.

## Using Join Walls

### How to

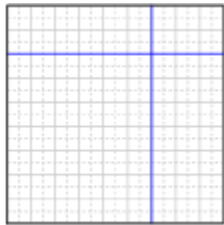
You can use the Join Walls button on the Wall Utility toolbar to join two Double Line Wall shapes of similar or different wall settings, creating a corner joint at any angle. If more than two abutting walls are selected, the utility will continue to create a corner at all coincident locations. (For information about changing a selected shape's size and position, see [Size & Position](#).)

#### To join walls at a corner:

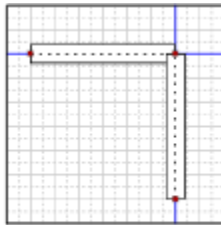
1. Select the walls you want to join.

To ensure that the endpoints of the walls meet at the corners, first drag horizontal and vertical guides from the rulers to define the perimeter of your room or building. Then drag the Double Line Wall shapes onto the guides so that the endpoints of the shapes are glued to the intersection of the horizontal and vertical guides.


Using guides can make it easier to move the walls later; you can simply drag a guide to move or resize all walls glued to it. The selection handles turn red when the shapes are glued.

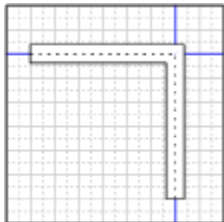


Drag guides onto page



Glue walls to guides

2. Click the Join Walls button () on the Wall Utility toolbar.



Join walls


The utility joins the walls, creating corner joints. If you drag a wall away from the walls it is joined to, the exposed wall ends straighten out and close. You can drag the detached wall back into place to reconnect it with joined corners. You can also join walls at any angle.

## Using Move To Wall

### How to

You can use the Move To Wall button on the Wall Utility toolbar to move a selected wall along its current orientation until it abuts your primary wall selection, without changing the wall length. The selected wall moves in the direction in which it is currently oriented to form a T-joint at a selected angle. The wall length of the selected wall does not change. This button works only with Double Line Wall shapes. (For information about changing a selected shape's size and position, see [Size & Position](#).)

#### **To move a wall to form a T-joint:**

1. Select the wall against which you want another wall to abut, that is, the wall that doesn't move.
2. Press Shift and select the wall you want to move, then click the Move To Wall button () on the Wall Utility toolbar.


You can select more than one wall to move. The utility moves all selected walls so that they abut the first wall and create a T-joint. You can drag the free end of the moved wall to adjust its position without affecting the T-joint. If you detach the wall, the walls return to their original geometry. If you drag the wall back into place, the utility reestablishes the T-joint.

## Using Extend To Wall

### How to

You can use the Extend To Wall button on the Wall Utility toolbar to extend one or more selected double line walls along the current angle until it abuts another primary wall to form a T-joint at any angle. (For information about changing a selected shape's size and position, see [Size & Position](#).)

#### **To extend a wall to form a T-joint with another wall:**

1. Select the wall against which you want another wall to abut (select the wall that doesn't extend).
2. Press Shift and select the wall you want to extend, then click the Extend To Wall button () on the Wall Utility toolbar.

You can select more than one wall to extend. The utility stretches all the selected walls so that they abut the first wall and create a T-joint. You can drag the free ends of an extended wall to adjust its position without affecting the T-joint. If you detach the wall, the walls return to their original geometry. If you drag the wall back into place, the utility reestablishes the T-joint.


## Using Align To/Match Wall

### How to

You can use the Align To/Match Wall button on the Wall Utility toolbar to align door and window shapes on a wall, and match the wall thickness, reference line offset, and angle of the door or window to the wall.

When used with like shapes, such as only with doors or only with walls, Align To/Match Wall matches a shape's thickness and reference line offset to those of the first shape selected, without altering the position or angle. (For information about changing a selected shape's size and position, see [Size & Position](#).)

#### **To align doors and windows to a wall:**

1. Drag a door or window shape into position beside the Double Line Wall shape that you want to place it on.
2. Select the wall, then press Shift and select one or more door or window shapes.
3. Click the Align To/Match Wall button () on the Wall Utility toolbar.

The utility moves the door to the nearest location along the wall. Then the utility aligns the door or window on the wall and matches the shape's thickness, angle, and reference line offset to those set for the wall.

**TIP** To change the direction that a door opens, right-click the shape, then choose the appropriate command from its shortcut menu.

#### **To match one wall's properties to those set for another wall:**

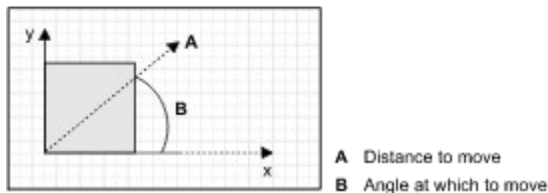
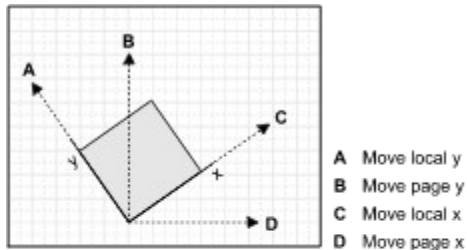
1. Set the first wall's properties by right-clicking the shape, then choosing Set Wall Dimensions from its shortcut menu. Set Wall Thickness and Reference Line Offset, then click OK.
2. Select the wall, then press Shift and select another Double Line Wall shape for which wall properties have not been set.
3. Click the Align To/Match Wall button on the Wall Utility toolbar.

The utility sets the second wall shape's properties to match the first wall.

## Using the Move tool

### How to

Use the Move tool to move a shape or a copy of the shape a specified distance.



### To use the Move tool:

1. On the drawing page, select the shape or shapes you want to move.
2. Choose Tools > Macro > AEC > Move.
3. In the X and Y boxes, specify the horizontal and vertical distances you want the shape or shapes to move.
4. Under Relative To, specify whether the distance to move is with respect to the page or to the shape's local coordinates.
5. Under Coordinates, specify the coordinate system to use.
6. Uncheck Duplicate if you want to move the original shape and not a copy of the shape. Duplicate, which is checked by default, moves a copy of the selected shape or shapes, and keeps the original shape or shapes in the original position.
7. Click OK to move the shape or shapes or a copy of the shape or shapes.

### DIALOG BOX OPTIONS

**X** Specifies the distance to move the shape along the x-axis (horizontal direction) with respect to the page or local coordinate system. This option is available only when X-Y is checked under Coordinates.

**Y** Specifies the distance to move the shape along the y-axis (vertical direction) with respect to the page or local coordinate system. This option is available only when X-Y is checked under Coordinates.

**Length** Specifies the radial distance to move the shape. This option is available only when Polar is checked under Coordinates.

**Angle** Specifies the angle along which the shape is moved. For example, an angle of 0 degrees moves the shape horizontally along the x-axis to the right. Angles are measured positively in a counterclockwise direction. This option is available only when Polar is checked under Coordinates.

**Relative To** Specifies the origin's coordinate system.

**Page** Changes the text boxes so that they specify the distance to move horizontally (X) or vertically (Y) with respect to the page.

**Local** Changes the text boxes so that they specify the distance to move in the x-axis or y-axis

direction with respect to the shape's local coordinates. For example, if a shape is rotated 90 degrees, local-x is up, and local-y is to the left.

**Coordinates** Specifies the coordinate system used to move the shape.

**X, Y** Changes the text boxes so that they specify a distance along the x-axis (horizontal direction) or y-axis (vertical direction).

**Polar** Changes the text boxes so that they specify a distance along an angle to move the shape.

**Duplicate** Moves a copy of the selected shape and keeps the original shape in its original position.

## Setting wall dimensions

### How to

To change the appearance of all Double Line Wall shapes in a drawing, the thickness of a wall, or the amount to offset its reference line, you can set a wall's properties. (For information about changing a selected shape's size and position, see [Size & Position](#).)

#### **To set the appearance of all wall shapes:**

- Right-click a wall shape, then choose the appropriate command from its shortcut menu: Double Line, Double & Reference Lines, or Single Line.

#### **To change the wall thickness or reference line offset:**

1. Right-click a wall shape, then choose Set Wall Dimensions from its shortcut menu.
2. For Wall Thickness, specify the thickness of the wall.
3. For Reference Line Offset, specify the distance from the inside of the wall.
4. Click OK.

Changing the wall thickness or reference line offset affects only the selected shape. You can set the properties for another wall shape on the page so that it matches the properties you just set by using the [Align To/Match Wall](#) button on the Wall Utility toolbar.



