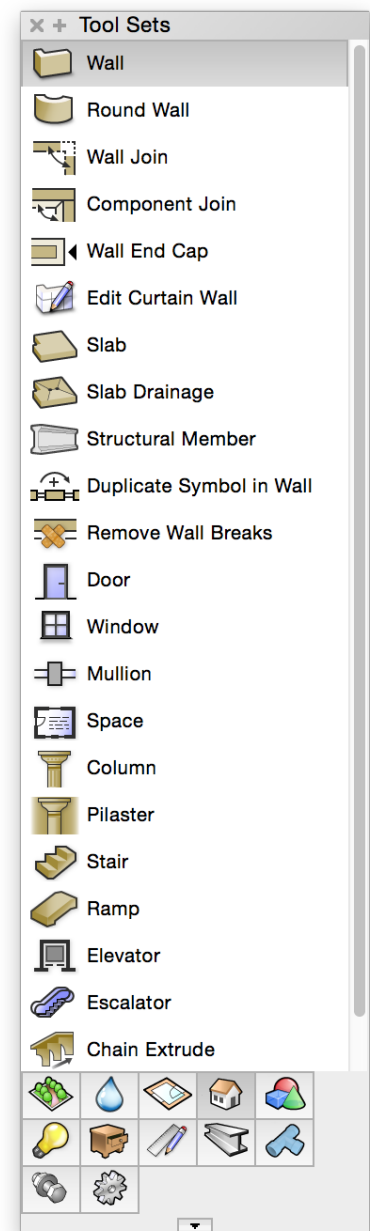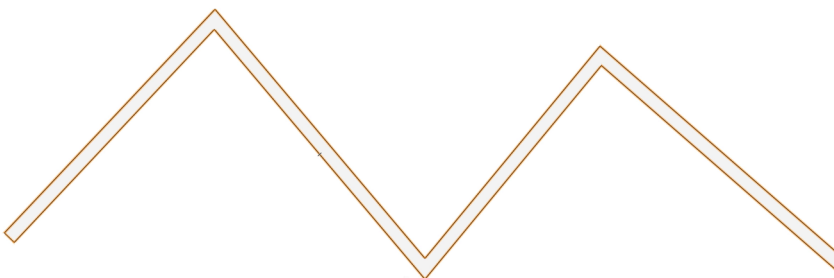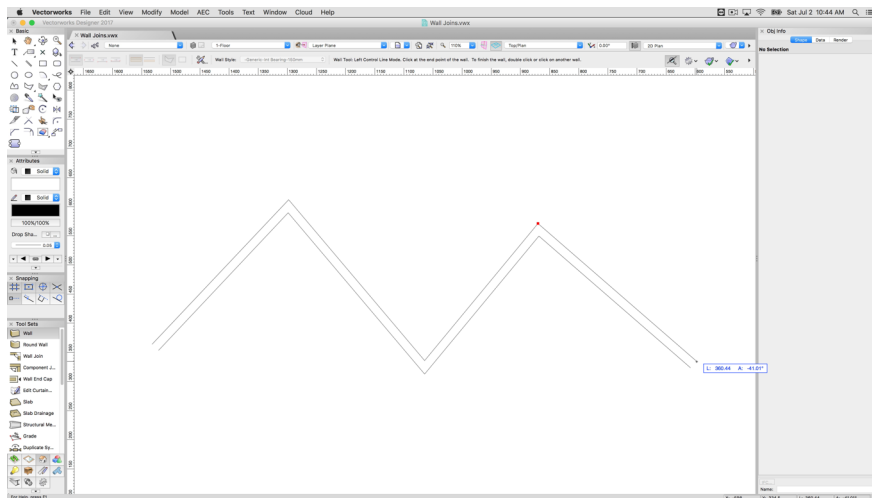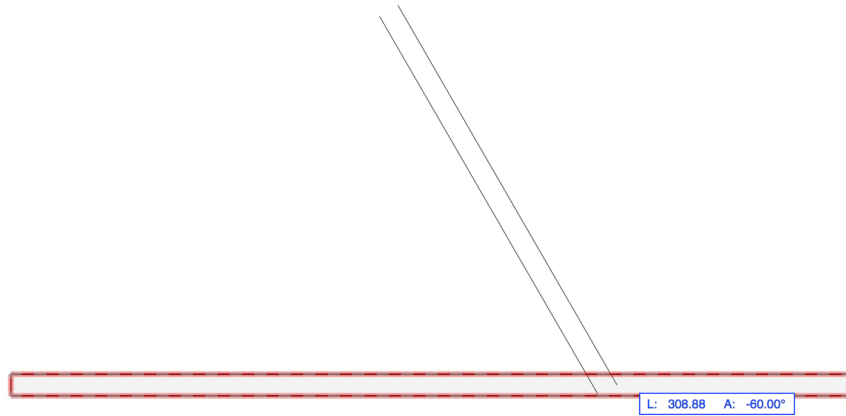# BIM – ARCHITECTUAL
WALL JOINS

INTRODUCTION

Joining wall objects can occur in several ways. For example, when drawing multiple segments at the same time, all of the segments will join automatically. This is done by activating the Wall tool in the Building Shell tool set.
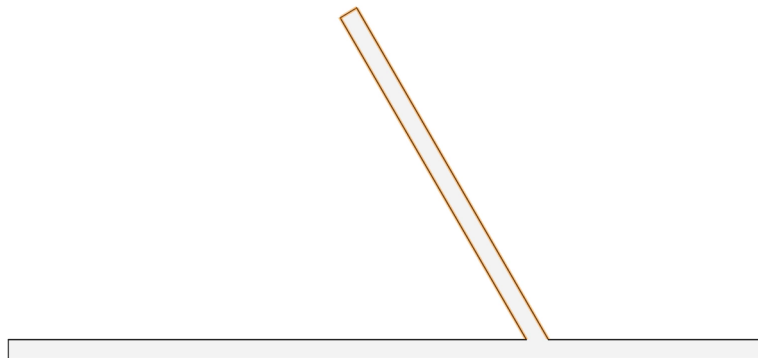
Then, clicking once to start the wall, click a second time to end the first wall segment, then continue clicking to create multiple segments, and finally double-click to end this series of walls. As you can see, all of the wall segments are joined.
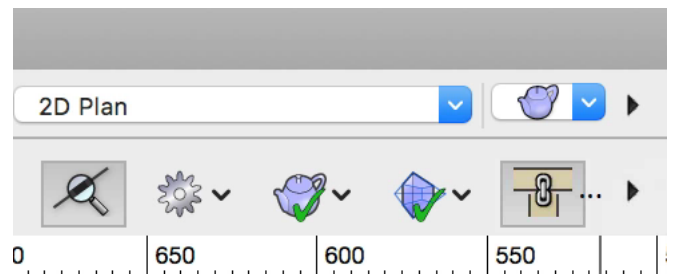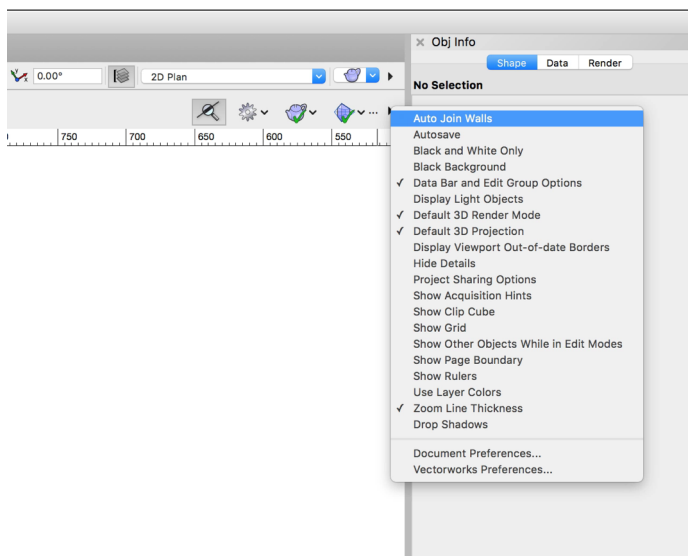
Another instance where walls will automatically join is when you are drawing a wall segment that starts or ends at an existing wall.
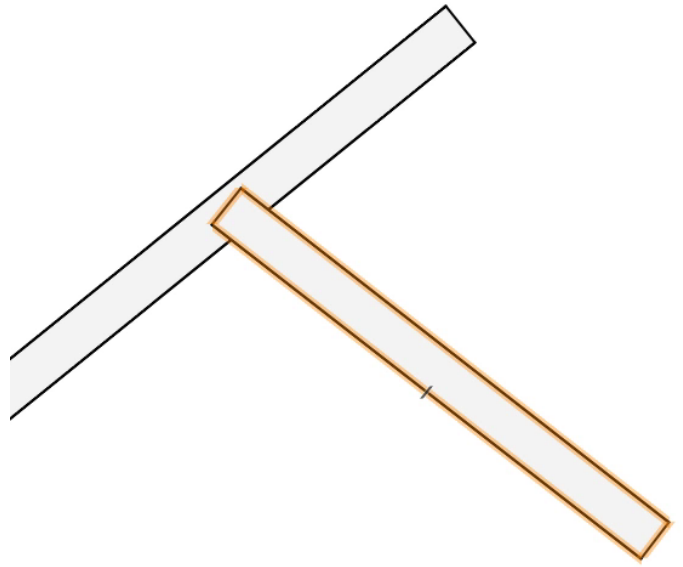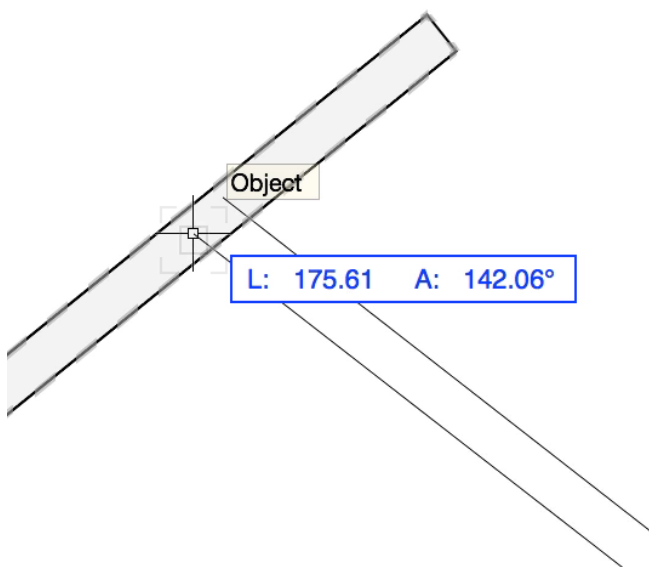

A red highlight will appear over the existing wall indicating that the new wall will be joined.
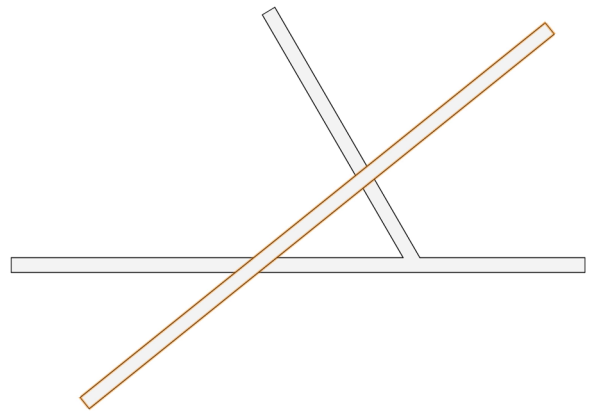

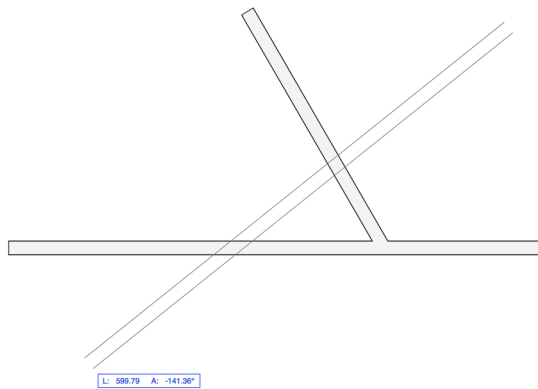This automatic joining is controlled by the Auto join walls preference setting. This can be added as a Quick Pref button in the Tool bar.

If this preference is disabled, walls will not automatically join when connecting new walls to existing walls.
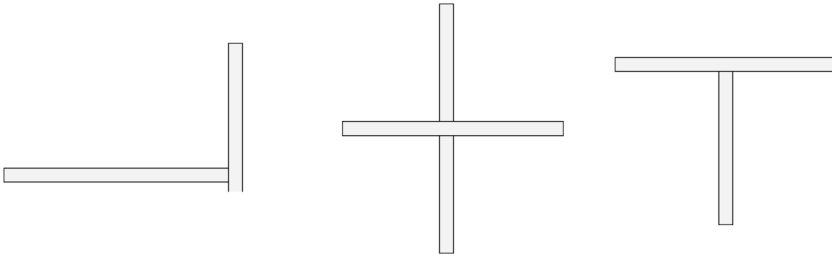
Object

L: 175.61   A: 142.06°

With this preference on or off, new walls that cross over existing walls with not connect automatically.
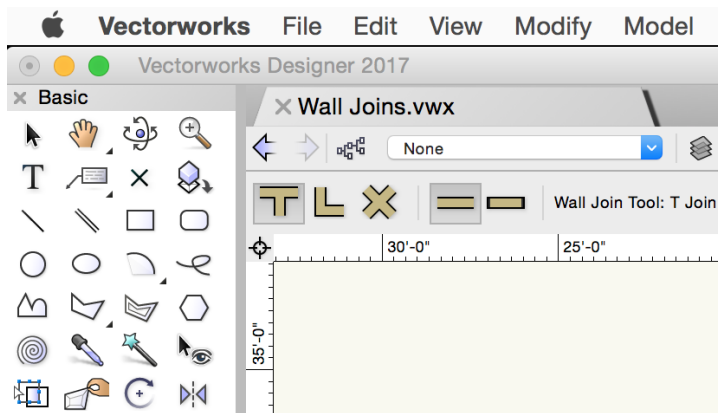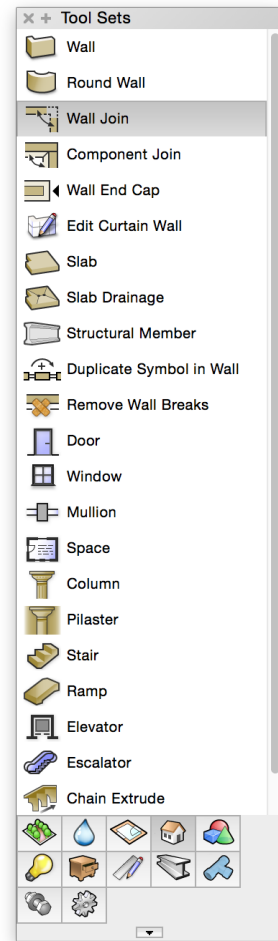
L: 599.79   A: -141.36°

When walls do not automatically join, the Wall Join tool found in the Building Shell tool set can be used to join the walls.

Here we have 3 common wall join examples. A typical L join, X join and T join.
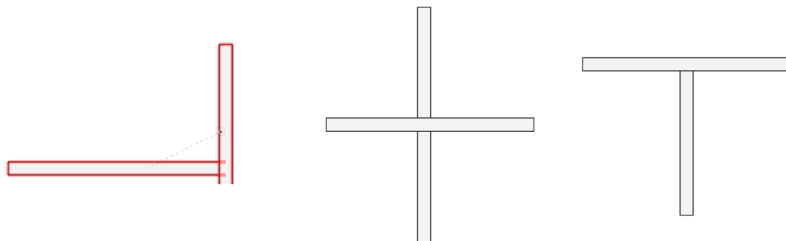

Each of these conditions require a different mode of the Wall Join tool. There are separate modes for the T, L, and X joins. So to join two walls, you first need to determine the type of join you need. Also, you need to determine if the walls joins should be capped or uncapped. In most cases, the Uncapped Join mode will be used.

To create a mitered join, like the first two walls in our example, we will use the L Join and Uncapped modes.

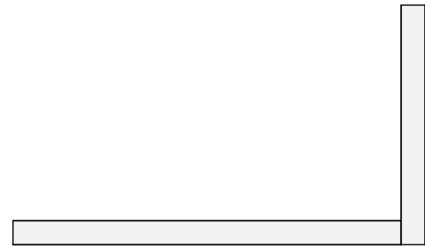When you move the cursor over a wall it will highlight in red.

You then click once on the wall, then click a on wall you want to join it to when it highlights in red.

The two walls will join in an L configuration without caps.

If we perform the same operation with the the Capped Join mode enabled, the wall will butt up against the other wall with a capped end.
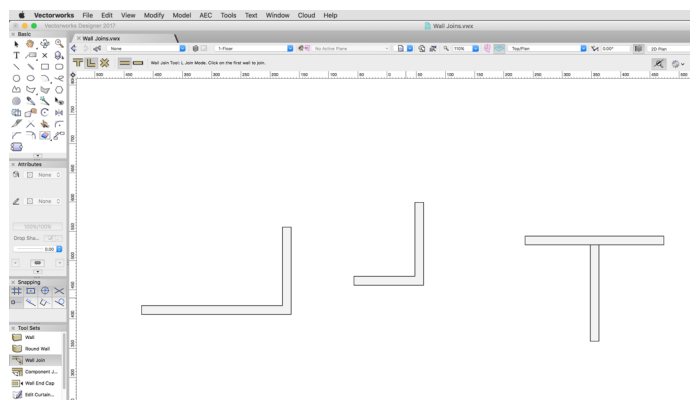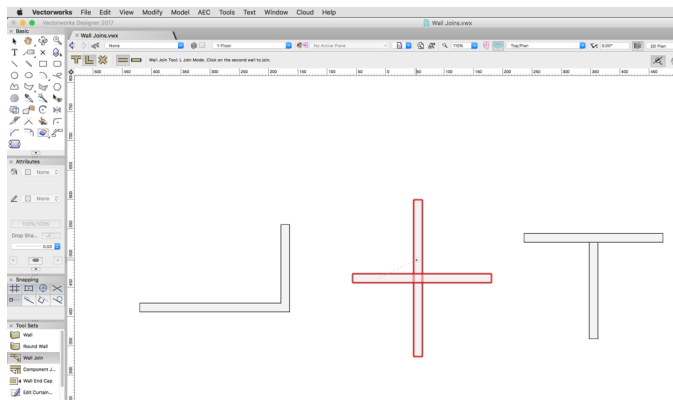
The order you click on the walls determines which wall butts up against the other. The first wall selected will butt up against the other.
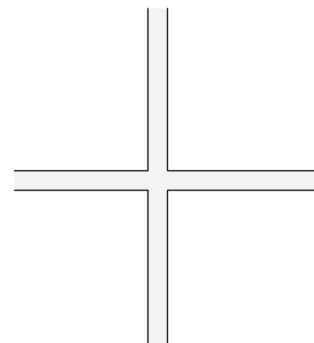
The next set of walls cross each other, so we need to use the X Join mode.
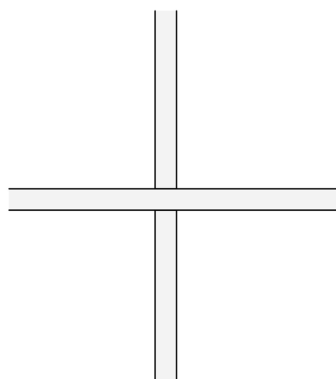
But, what if we were to use the L Join mode on this configuration? The sections of the walls that cross over each other will be removed and all that will be left is the sections that were joined. This is why you always want to make sure you choose the correct mode when joining walls.

If we repeat this same action on those original walls using the X Join mode, they join as expected.
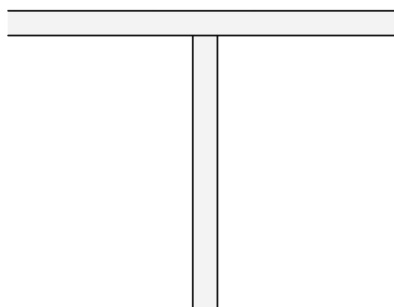
If the Capped Join mode is used on these walls with the X Join mode instead, this will break the crossing wall that is clicked on first into two separate segments capped on each side of the other wall.

Since this wall is now split into two segments, the X Join mode will no longer work on these walls. So again, this is why you want to check your Wall Join tool mode settings before attempting a join.

Finally, we have the T Join mode. We will use this mode on our last set of walls.

With this mode, the order you click on the walls does matter. You need to click on the wall that is intersecting the other wall first. This will properly join the walls in a T configuration.