Making solids from 2D line work

If you are attempting to generate a 3D model from 2D line work, whether drawn in form-Z or imported from a 2D CAD drawing, you will find that while walls are easy (2D derivative extrusions of the wall lines), work involving the floor plate may prove difficult. You can either trace the existing line-work using a single line (while chaning between polyline and arc, etc), thereby creating a unified boundary, or you must construct the boundary from the pieces.

Making the boundary from available line-work



You will need the indicated tools from the following toolbars.

The following description assumes that the boundary line segments and arcs actually touch at their endpoints. If they do not, other tools in the "Line Editing" toolbar may be needed to trim/extend the segments first.

Step 1: Join Lines

Using the join lines tool, pick the boundary segments in order, forming a single perimeter "wire". While it will (eventually) close on itself, it is not truly closed.

Step 2: **Close** the shape

Using the close tool, click on the boundary to indicate that it should be closed.

Step 3: Cover the wire



A closed boundary is still not a polygon, it's just a closed boundary. To make a closed boundary into a polygon, use the "Cover/Uncover wire" tool.

You're done. To test your result, you could render the model in any of the shaded-rendering modes—it should show up as a colored polygon.