Revit Architecture – Family Editor
Method for Tilting Geometry in Elevation
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Rotation in the family editor is fairly easy, and is often used for doors, etc. It's also useful for, say, moving furniture items to non-orthogonal positions.

Rotation of a object (geometry) in elevation views, however, takes a little more care. The following method should help when trying to make an object "tilt up" in an elevation view. For the purposes of this demonstration, a simple rectangular box will be created with instance parameters for length, width, and height (l,w,h). An angular dimension will be added so that the box can be tilted up on edge.

Before using this method, it is highly recommended that the user familiarize themselves with the general operation of the Family Editor. Note that this method is a result of my own experimentation, and therefore may leave some details unanswered, depending on the intended application. However, it is hoped that the method will help others with the dilemma I faced in trying to tilt an object in elevation view, and being faced with seemingly endless error messages.

1. Create a new family with "Generic- Face Based" template.
2. Go to one of the elevation views. I will choose the "Front" elevation for the purposes of this method. The "slab" will be at the bottom, and act as the surface to be tilted from.
3. Place a reference line at the origin of the Ref Level and the Center L/R plane, and tilt it at any angle between 1 to 89 degrees (just choose 45 degrees).. It may be a good idea to hide the slab, to ensure that the ref line origin is tied to the planes (instead of the slab) during placement. To align the ref line for proper rotation, use the align tool to align to the "blue dot" at the intersection of the two planes.
4. Assign an angular rotation parameter between the reference line and the Ref Level. Call it tilt. Flex it within the range of 1 to 89 degrees to ensure proper tilt action. If you have problems, return to step 3 and make sure that the ref line origin is aligned with both Center L/R and Ref Level planes.
5. Create a "box" somewhere on the tiltable reference line, comprised of three more reference lines placed orthogonally to the tiltable reference line.   Note: only draw the remaining three sides of the box. The existing tiltable ref line will comprise the fourth side of the box.
6. Add length and height parameters to the reference lines you just created (using the TAB button to choose the blue dots at the ends of the ref lines). Flex your creation to make sure that the angular and length parameters hold up.
7. Create an extrusion around the path created by the four reference lines. Since you are making a box at an angle to the orthogonal Ref and Center L/R planes, you'll have to use the line tool (not the box tool) to draw each leg of the extrusion. Complete the extrusion (green checkmark).
8. Flex to make sure that you can change length, height, and angular parameters without the model blowing up.   If not, go through the previous steps again to make sure you didn't miss something.
9. Now it's time to add the "width" dimension to the box (in the left or right elevations). In one of those views, simply add a reference plane on the side of the extrusion that has none. Then add a "width" instance parameter. Note that you use a ref plane instead of a ref line, since you won't be tilting in this view (at least not for the purposes of this method).

That should do it – Feel free to respond with suggestions to improve on this method.