

Creating a Sloped Wall in Revit Architecture

This White Paper outlines the steps required to produce a sloped wall in Revit Architecture using an In Place Family.

All Revit Users

A recent support query on sloped walls in Revit Architecture prompted me to write this White Paper on the subject.

Creating a Sloped Wall in Revit Architecture

Open Revit and start a new project or work within an existing project.

On the User Interface Ribbon select the home tab and navigate to the component extended drop down menu and select Model in Place. The Family Category and Dialogue box now opens.

In the Family Category and Dialogue Box, select Walls. For the name type in Sloped Wall. The screen looks greyed out as you are now in sketch mode.

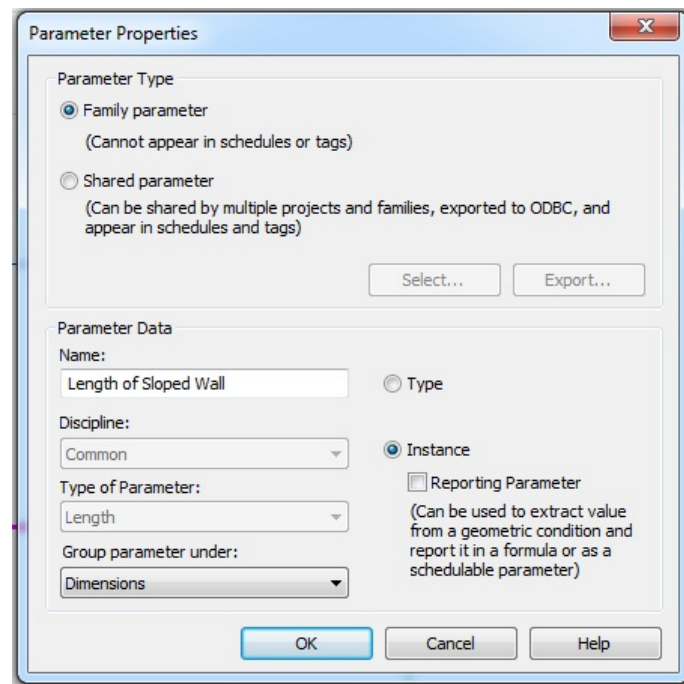
On the Forms Panel select Swept Blend and then select Sketch Path and draw a path similar to fig 1 below



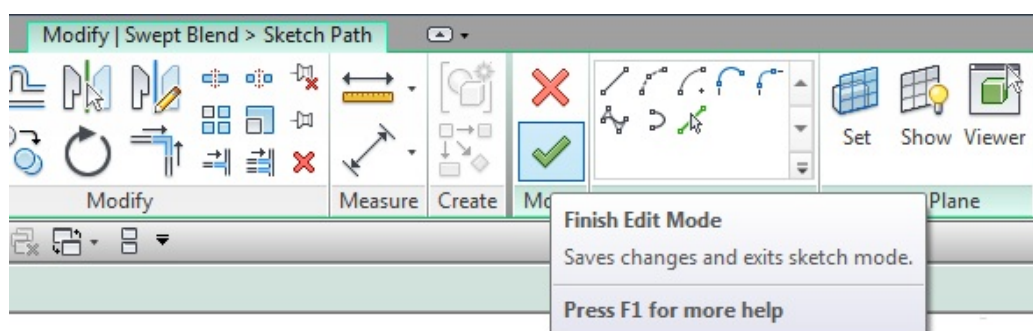
Add a Sloped Wall Length Parameter

Next dimension the wall and lock the endpoints of the sloped wall.

Click on none under label in the options bar and select add parameter. The Property Parameter Dialogue Box now opens. In the Property Parameter Dialogue Box under name field, type in Length of Sloped Wall. Select Dimensions under Group parameter under. Select Instance and then select OK. See fig 2 below:



Click finish edit mode on the Ribbon to apply the sketch of the path for the sloped wall



You are now ready to create the shape of the sloped wall.

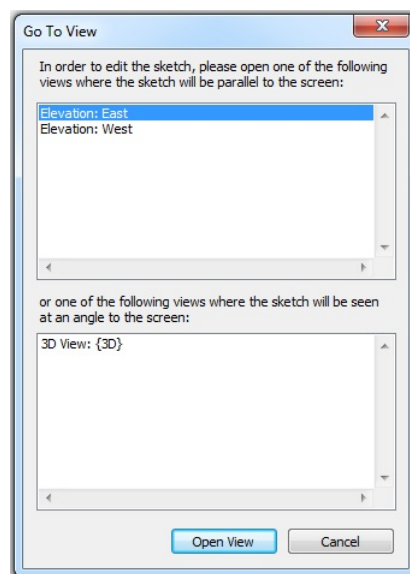
Create Sloped Wall Profile

On the Ribbon

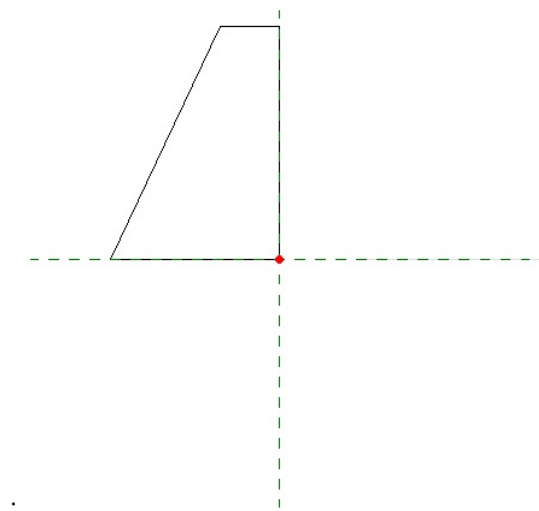
Click Modify Profile 1 in the Swept Blend panel.

Click Edit Profile on the Swept Blend panel.

In the go to view dialogue box select Elevation East. See fig 4 below:



Sketch the profile of the sloped wall, and then click finish profile. See Fig 5 below

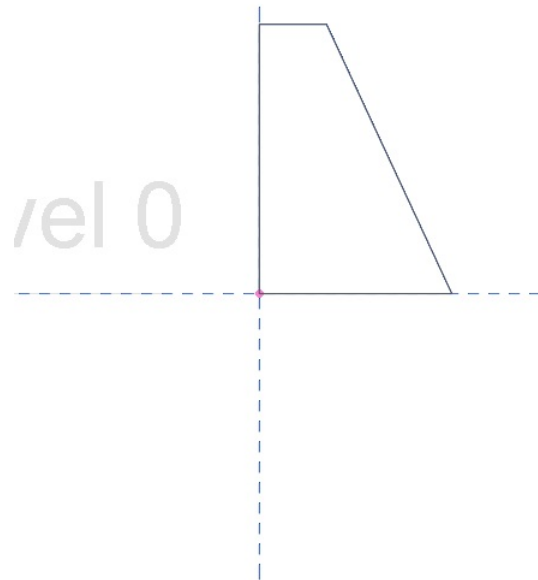


Repeat the process for profile 2

Click Modify Profile 2 in the Swept Blend panel.

Click Edit Profile on the Swept Blend panel

Change the view in the project browser to the other side of the sloped wall (choose West Elevation). Fig 6

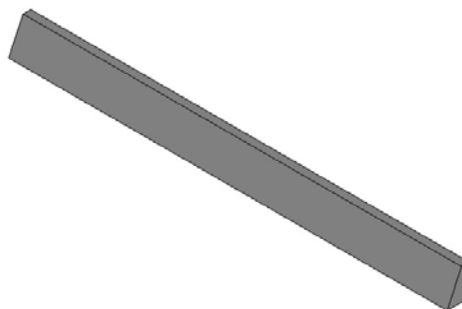


Sketch profile 2 as above to mirror profile 1 (Fig 5)

Click finish Swept Blend to complete the design of the sloped wall.

Click finish model.

Change view to 3D to see result:



Because a length parameter was applied earlier, the length of the wall can be changed in the wall properties palette.