# Creating a Sheet Metal Part

Surface to Sheet Metal Method (Bends from cylindrical surfaces)

This method is good for imported models of sheet metal parts that have no sheet metal attributes or history.

1. Create a part that looks like what is shown. This can be an imported part (orphan history), or even open surfaces. The bends MUST be cylindrical and the flat faces MUST be tangent to these cylindrical surfaces.
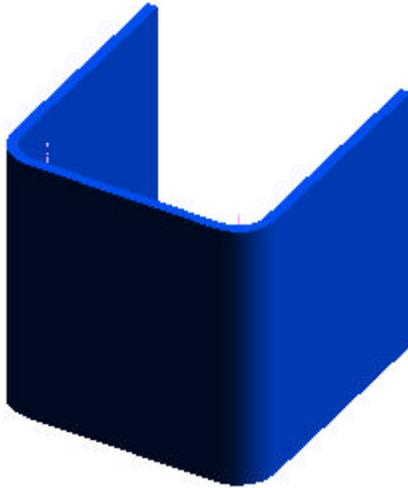

2. Open the Sheet Metal subpanel found under row five, center column, at the bottom. Select Sheetmetal from the subpanel then pick the part.
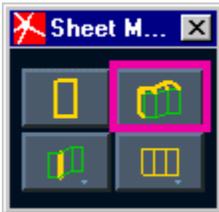

3. Accept the default material on the Materials form. The Sheet Metal form automatically appears. Notice that you have several options particular to sheet metal creation. These options are not necessary for this method of Sheet Metal creation so accept the defaults.
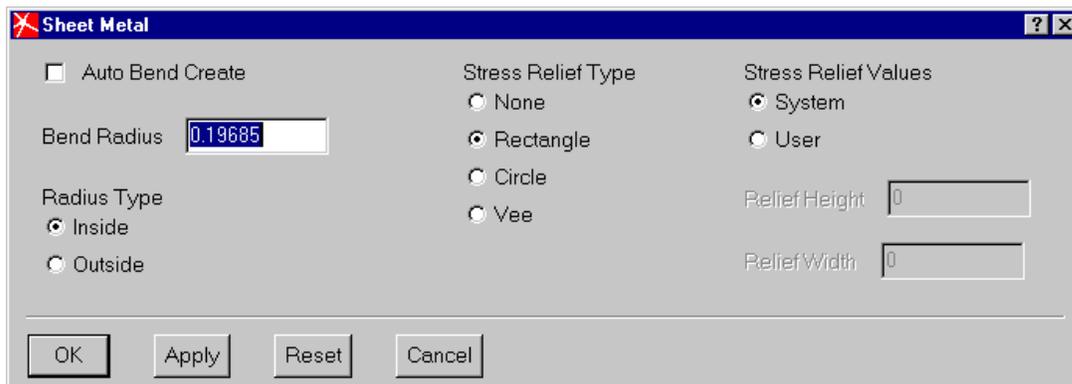
4. Pick the surface shown as the Ground Panel. This is the panel that remains stationary when the part is unfolded. The software will then ask for a thickening direction. Select the direction shown.
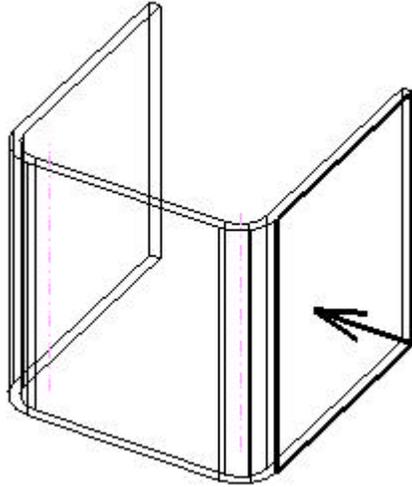

5. Sheet Metal will now prompt you to Pick Panel Faces. One by one, starting with the cylindrical surface next to the ground panel, pick, then MB2, until all of the outer surfaces are picked.
Note that as each is picked a section is placed on the boundary. If this does not happen there is probably something wrong with the adjoining edges such as non tangent edges or non cylindrical surfaces.
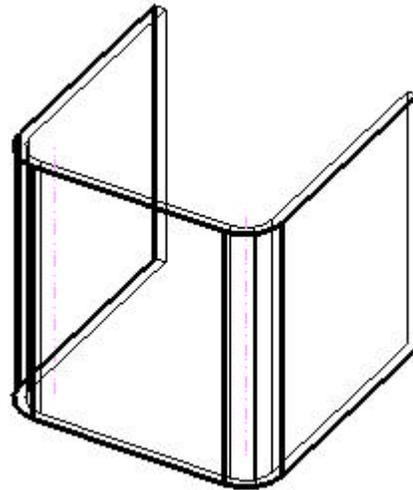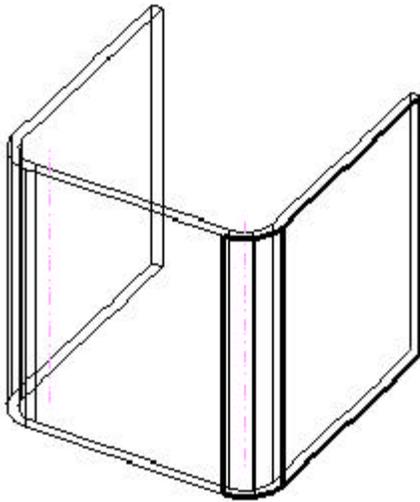
6. When all outside surfaces are picked press the middle mouse button twice.
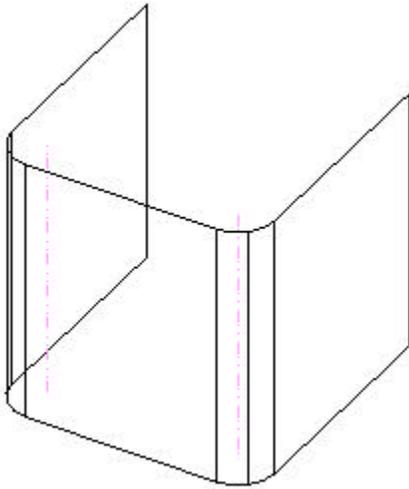
7. Shell the part. Notice that the options for thickness and direction are unavailable. These are determined from the material selected and the thickening direction selected from step 5.
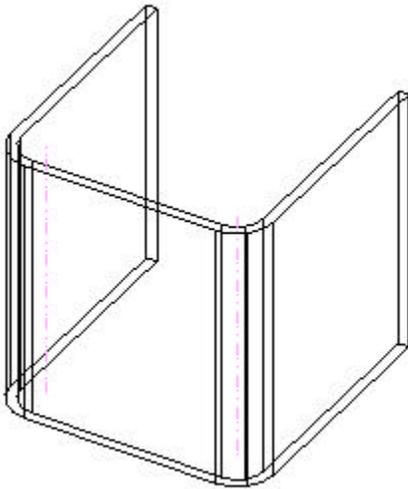
Although the part looks as it did when it was first created (or imported) the part now has all the necessary sheet metal attributes and can be folded and unfolded.

8. Use Fold and Unfold Panels to show a preview of the new state. Pick Update to complete the task.