

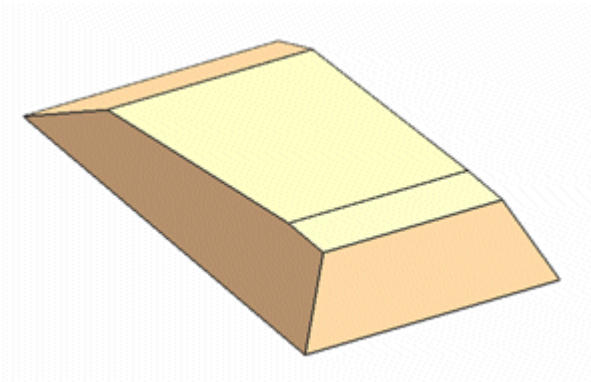
# Creating enclosures with odd shapes or angles

In a typical NX Sheet Metal workflow, you:

1. Set the default values for sheet metal properties. (See [Changing the Defaults](#) for more information.)
2. Create a solid body that encompasses the interior volume of the final enclosure shape, using tools in the Modeling application.
3. Use the **Sheet Metal from Solid** command to wrap that solid body with sheet metal.
4. Add extra features, such as flanges, jogs, and bends to further define the basic shape of the formed sheet metal part.
5. Apply Unbend features to flatten the bend areas where needed, and place holes, cutouts, dimples, or louver-type features on the part.
6. Apply Rebend features to flattened bend areas to complete the part.
7. Create a Flat Pattern of the part for drafting and later manufacturing.

## Constructing a base solid

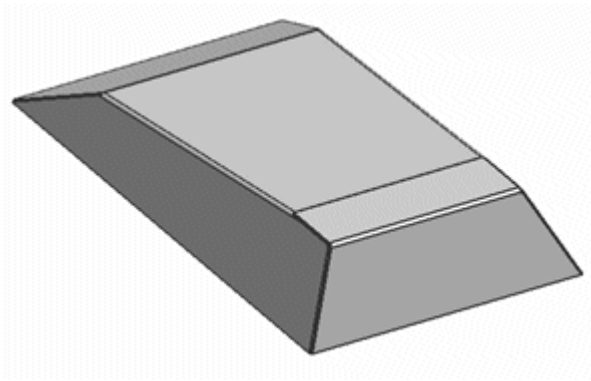
Use normal commands and features from the Modeling application to construct a solid that represents the interior volume of the final enclosure.





## Adding the Sheet Metal from Solid feature



After you have constructed the solid body, use the [Sheet Metal from Solid](#) command to wrap that solid body with sheet metal. You first specify faces on the body that are the web or planar regions of the part, and then specify which edges between those faces have bend regions. NX Sheet Metal then creates a sheet metal part that encloses the volume using default values from the **Sheet Metal from Solid** dialog box or the preferences for bend radius and neutral factor that you specified in **NX Sheet Metal Preferences**.



## Creating a flat pattern

To generate a flat pattern you first use the [Flat Solid](#)  command to create a new solid body in the part file while keeping the original (parent). You then use the [Flat Pattern](#)  command to create a sheet metal flat pattern for export to a machine tool for manufacturing. This step supplements **Flat Solid** by including extra entities such as bend centerlines, tangent lines, and other attributes that provide special machine instructions. You use **Customer Defaults** to specify which entities you want represented, and how you want them annotated.

