



## Closed Corner overview

Overview

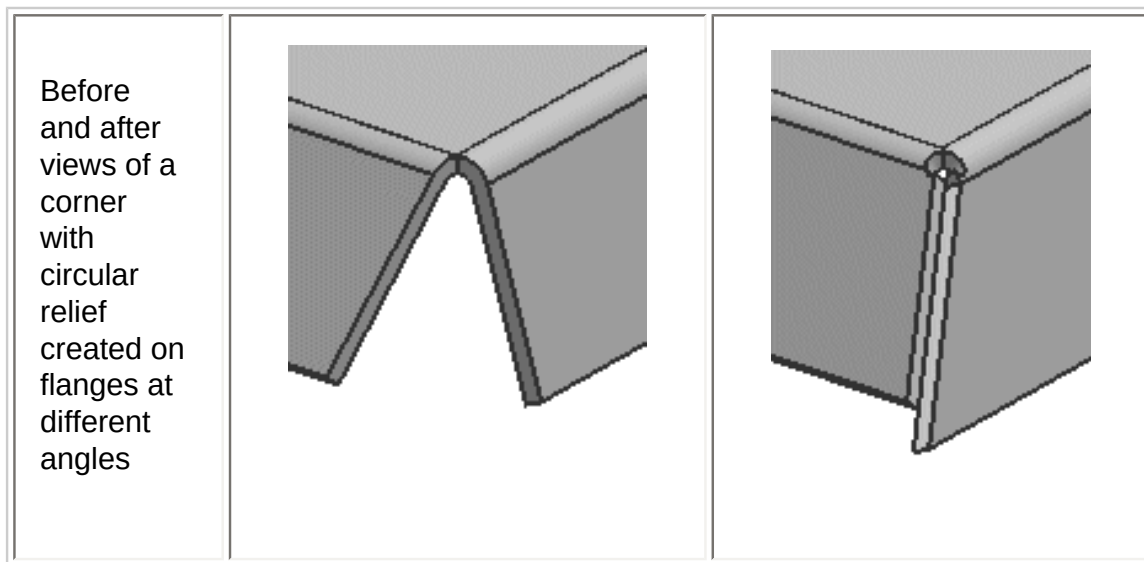
[How To](#)

[Options](#)

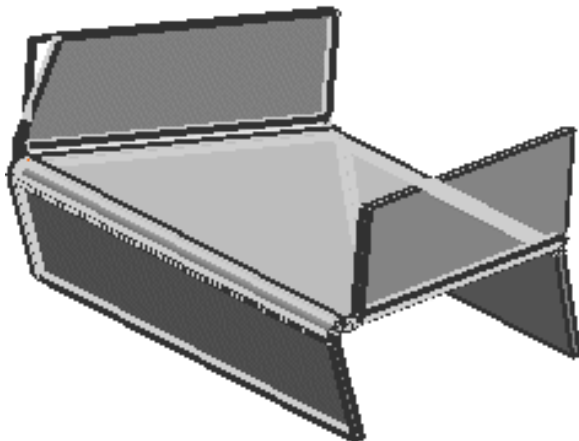
**Closed Corner** modifies two flanges in one operation to close a corner where two flanges meet. During flattening, the corner and relief geometry are made appropriate for a flat pattern.

You can close corners:

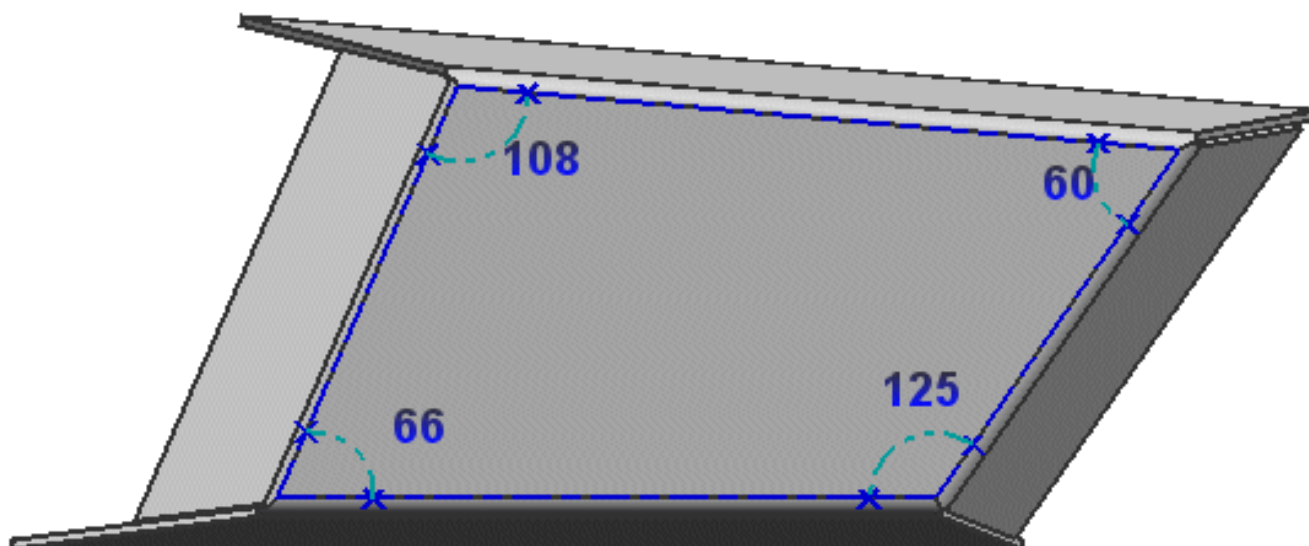
- Between bends of different angles and different radii.



- Between flanges that bend in opposite directions.

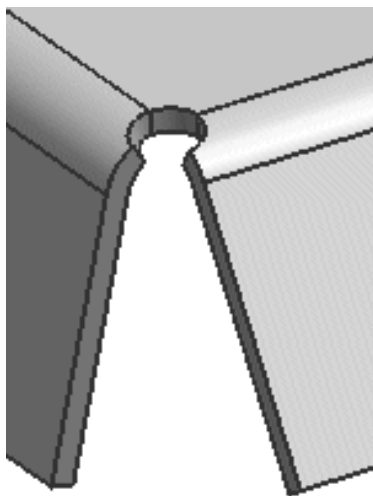


- Between bends forming a wide range of corner angles. In the following graphic, all four corner are closed, and none of the corner angles are 90 degrees.



- With a variety of different shaped reliefs, or no relief.

You can also create reliefs without creating a corner, as shown in the following figure.



### Where do I find it?

|                    |                                                                                                                               |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b> | NX Sheet Metal                                                                                                                |
| <b>Toolbar</b>     | NX Sheet Metal→Corner list  →Closed Corner |
| <b>Menu</b>        | Insert→Corner list →Closed Corner                                                                                             |



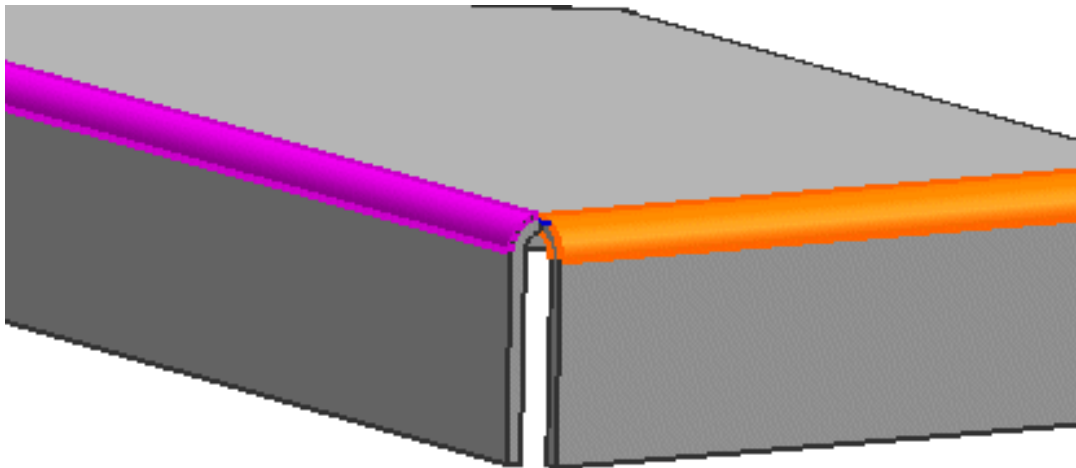
## Create a Closed Corner

[Overview](#)[How To](#)[Options](#)

1. Click **Closed Corner**



2. Select the bends adjacent to the corner you want to close

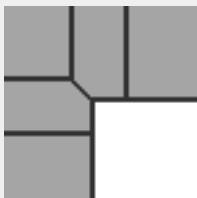
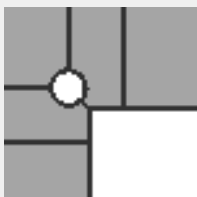


3. Use the feature dialog box to specify corner options.
4. Click **OK** to finish the corner.



# Closed Corner options

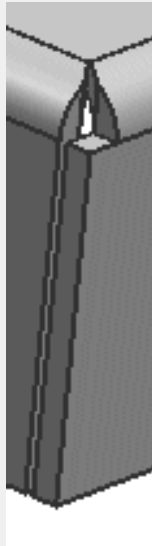
- Overview
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- Options

| Type                                                                                                   |                                                                                                                                                                                      |                                                                                       |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Close and Relief                                                                                       | Closes the corner so that the edges of the flanges meet or have a narrow gap.                                                                                                        |                                                                                       |
| Relief                                                                                                 | Trims the adjoining flanges according to the shape of the relief (see the <b>Corner Properties</b> section below).                                                                   |                                                                                       |
| Bends to Close                                                                                         |                                                                                                                                                                                      |                                                                                       |
| Select Adjacent Bends                                                                                  | Select the bends that meet at the corner you wish to close. They have to share the same edge, but can bend in opposite directions, be at different angles, and have different radii. |                                                                                       |
| Corner Properties                                                                                      |                                                                                                                                                                                      |                                                                                       |
| Treatment specifies the relief and its shape. (These illustrations show corner relief with no offset.) | Open                                                                                                                                                                                 |  |
|                                                                                                        | Closed                                                                                                                                                                               |  |
|                                                                                                        | Circular Cutout                                                                                                                                                                      |  |
|                                                                                                        |                                                                                                                                                                                      |                                                                                       |

**U Cutout****V Cutout****Rectangular Cutout****Overlap**

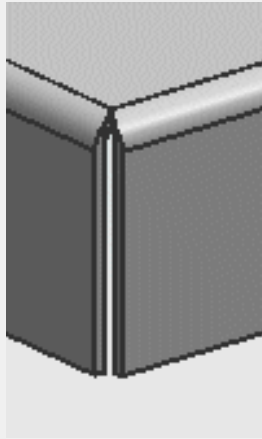
**Closed**  brings the inside edges of the corner together.

**Overlapping**  extends one edge. You use **Overlap Ratio** to specify the amount of overlap. The ratio must be greater than 0 and no more than 1. The following graphic shows a an overlap ratio of 1 and a gap of 1 mm to make the overlap easier to see.

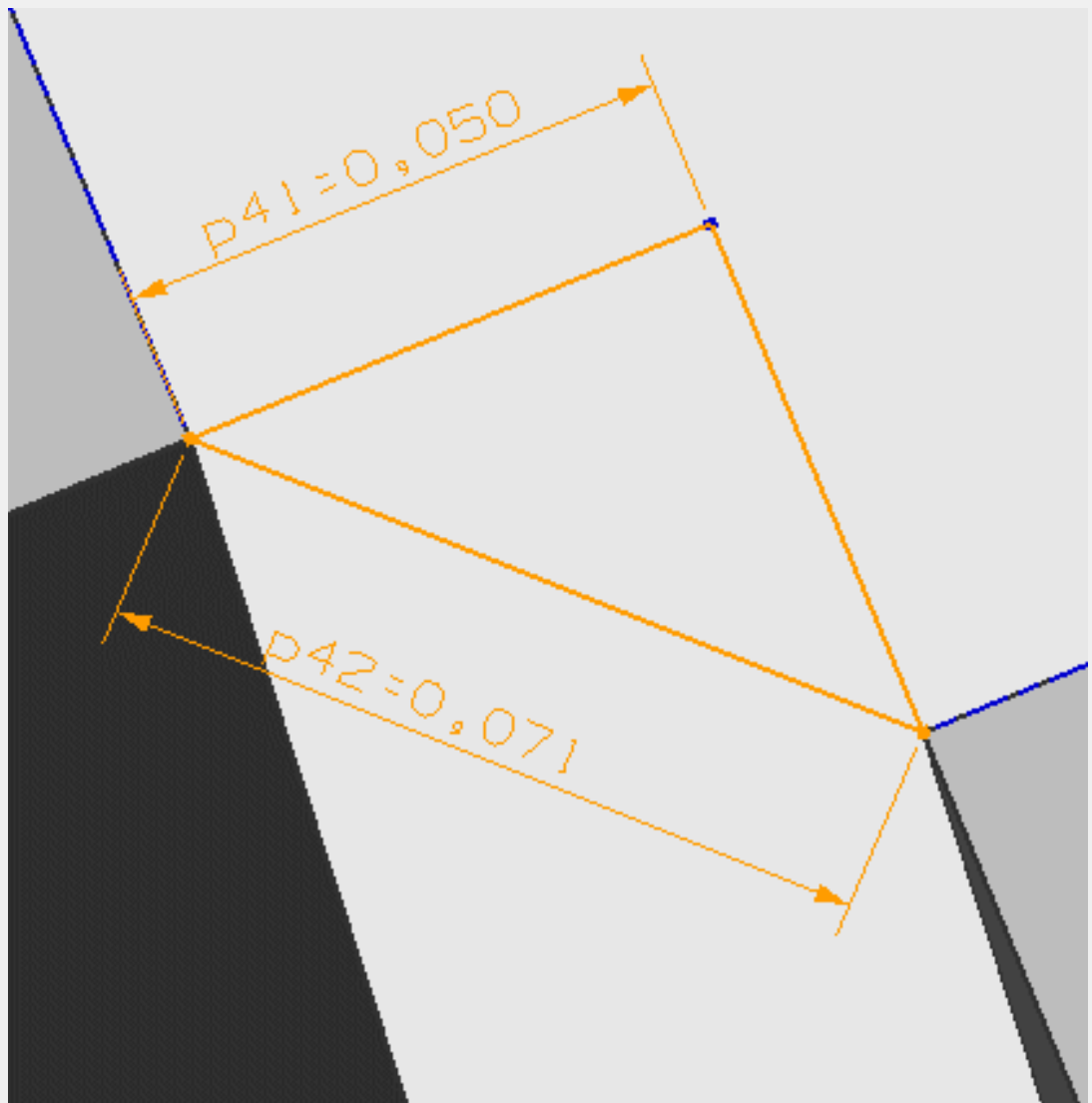


**Gap**

Specifies the amount of gap between the edges. 0.0 is the default. The following figure shows a gap of 1 mm with no overlap. (The gap cannot be negative or greater than the material thickness.) Note that the gap is the distance between the intersection of inner flange faces to the flange side face.



Note that the gap measures the distance between the intersection of inner flange faces and the flange side face. In the following figure, the actual gap is. 0.07, not 0.05



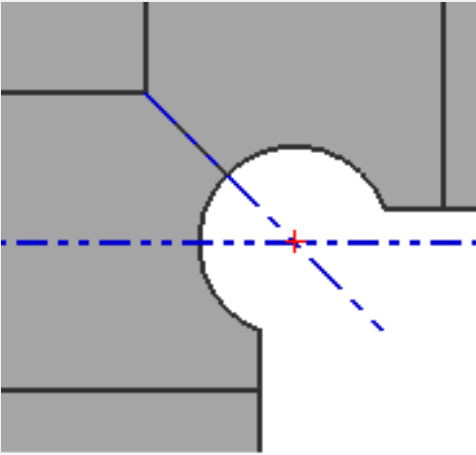
Overlap Ratio

Specifies the amount of overlap, which must be greater than 0 and no more than 1.

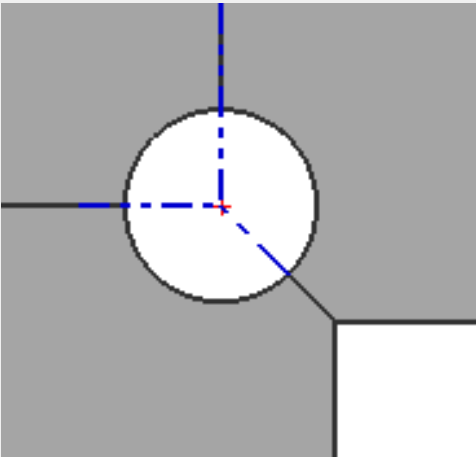
Relief Properties

Origin specifies the location of the relief's center point.

**Bend Center** locates the center point at the intersection of the bisection of the corner angle between the two bends and the centerline of the first bend you picked.



**Corner Point** locates the center point at the intersection of the inner bend lines.



Diameter

Specifies the diameter of the cutout. The **Legend** illustrates how the diameter is measured for each relief type.

Offset

Specifies an offset from the origin of the cutout. A positive value moves the origin away from the edges of the part. In the following graphics, the figure on the left has no offset, the one in the middle has an offset of 10 mm, and the one on the right a negative offset of -5 mm.



Angle 1 and Angle 2

**V Cutout** only: specifies the angles of the sides of the V measured from the bisection of the corner angle between the two bends.

**Length and Width**

**Rectangular Cutout** only: specifies the length and width of the sides of the rectangle.

**Legend** illustrates the relief shape and its parameters for each type.