

# PAC BENDING GUIDELINES

## METAL BENDING GUIDELINES

Proper bending techniques must be followed when fabricating PAC-CLAD steel and aluminum. Failure to follow bending guidelines can result in product and/or paint failure. To remain in compliance with Petersen's finish warranty for PAC-CLAD metal, follow the guidelines outlined in this document.

## BENDING TOLERANCES

The PAC-CLAD finish is engineered to be durable, but it can be stretched, cracked or exhibit compromised adhesion if bent beyond its tensile strength limits. Additionally, metal can crack, fracture or become weakened if bent improperly. The following tolerances apply when bending PAC-CLAD metal into 180-degree angles.

MATERIAL THICKNESS	BEND TYPE
.032" aluminum	2T
.040" aluminum	2T
.050" aluminum	2T
.063" aluminum	2T
22 gauge steel	2T
24 gauge steel	2T

## FINISH WARRANTY COMPLIANCE

Reference to proper bending of Petersen's PAC-CLAD metal can be found in Part II, Section 3 of the 30-year finish warranty as follows:

"This warranty does not apply to failure of the coating in the following additional circumstances: forming where the bend is tighter than 2T, forming which involves severe reverse bending, or which subjects the coating to alternate compression and tension..."

## QUESTIONS

Consult factory representative with questions or concerns.



HQ: 1005 Tonne Road  
Elk Grove Village, IL 60007  
P: 800-PAC-CLAD  
F: 800-722-7150

9060 Junction Drive  
Annapolis Junction, MD 20701  
P: 800-344-1400  
F: 301-953-7627

10551 PAC Road  
Tyler, TX 75707  
P: 800-441-8661  
F: 903-581-8592

102 Northpoint Parkway  
Acworth, GA 30102  
P: 800-272-4482  
F: 770-420-2533

1800 S. 7th Ave., Suite 130  
Phoenix, AZ 85007  
P: 833-750-1935  
F: 602-254-6504

9817 233rd Ave. E Suite A  
Bonney Lake, WA 98391  
P: 253-501-2450

## TERMINOLOGY

Metal bends are given descriptions such as 0T, 1T, 2T, etc., where T refers to the thickness of metal. These designations are used to measure the inner radius of the bend applied to sheet metal in 90 and 180-degree bends. Typical bends are defined as follows:

**RECOMMENDED**

**90° 2T (TWO-T) BEND** 👍  
The **outside** radius of the bend is equal to 2x the metal thickness.

**180° 2T (TWO-T) BEND** 👍  
The **inside** radius of the bend is equal to 2x the metal thickness.

**VOIDS WARRANTY**

**90° BEND** ❌  
The **inside** angle of the bend is 90 degrees. The thickness at the bend is less than the thickness of the material. Example: If using .040 aluminum the outside radius must be .080 or greater.

**180° 0T (ZERO-T) BEND** ❌  
The **inside** radius of the bend is zero. The legs of the bend are fully compressed together.

**180° 1T (ONE-T) BEND** ❌  
The **inside** radius of the bend is equal to 1x the metal thickness.

