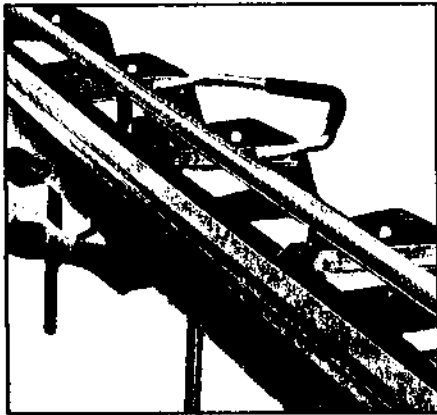
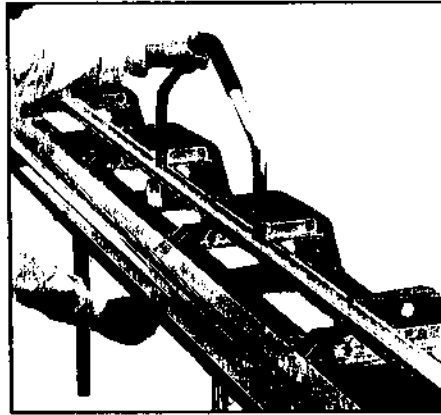


# USING THE PRO III® PORT-O-BENDER®

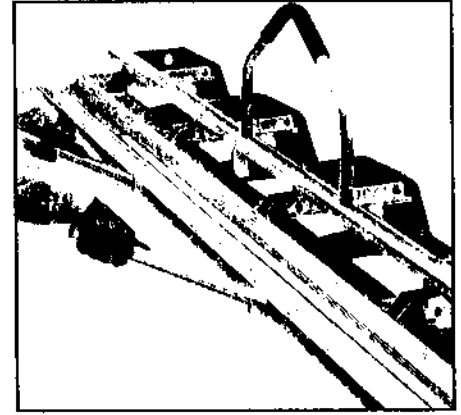
## Basic Hemming and Folding



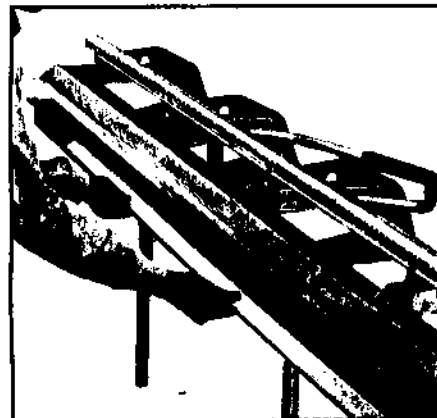
**1** Insert the material you wish to hem into your Port-O-Bender.



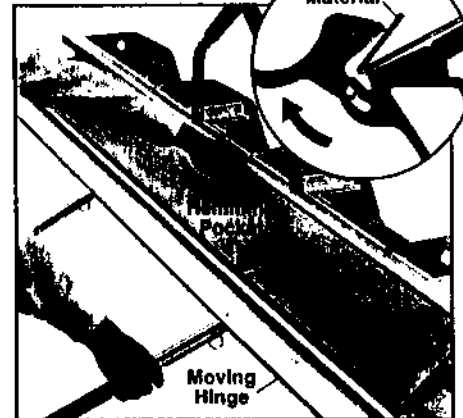
**2** Close and lock Bender on the material.



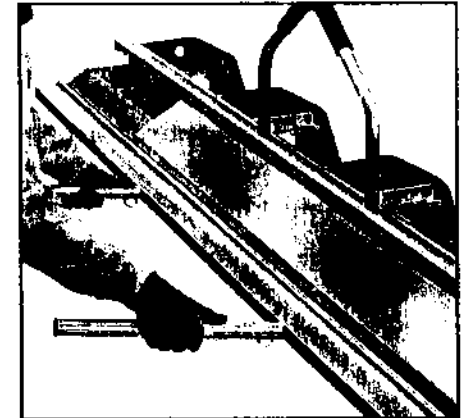
**3** Bend as far as you can go.



**4** Remove the material from the Port-O-Bender.



**5** Position the bent edge of the material in the Hemming Pocket on top of the Anvil.



**6** Lift the Bending Handles and compress the bend for a completed hem.

## Care and Maintenance of your Port-O-Bender®

Your Tapco Port-O-Bender® is virtually maintenance free and will provide you with years of reliable and trouble-free performance, however, there are a few basic necessities required to keep your Port-O-Bender® like new.

1. Clean the clamping surfaces each day before using. Use only clean shop towels that are free of dirt, oil and metal chips.
2. Do not use your brake around your saw table as the cuttings may get in between clamping surfaces and cause excessive wear or material scratching. Brush away any cuttings or filings that accumulate.
3. Transport your Port-O-Bender® in the unlocked position. You may transport it in the locked position if you clamp a piece of cardboard or vinyl siding between the clamping surfaces.
4. If your material is getting scratched, examine the Stainless Bending Edge, Base Hinge and Moving Hinge for roughness or burrs. Remove burrs with emery cloth or replace excessively worn parts. Optional Pro Cut-Off will help eliminate excessive wear to costly bending edge.
5. Use a lightweight spray oil along the moving pivot hinge after every 40 hours of use.

## Capacities

### PRO-III Bending Capacities

- Up to .030 soft aluminum
- Up to 28 ga. galvanized steel
- Up to 16 oz. copper sheet & coil

### PRO-III HD Bending Capacities

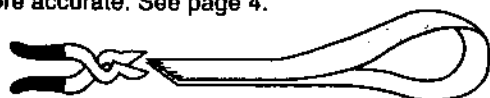
- Up to .040 soft aluminum
- Up to 26 ga.\* galvanized steel
- Up to 18 oz. copper sheet & coil

\* MAX-I-MUM commercial model Port-O-Benders are available to bend up to 20 ga. galvanized steel. (Ask your distributor for details.)

# TRADITIONAL BENDING TECHNIQUES

## Helpful Hints for Trim Work

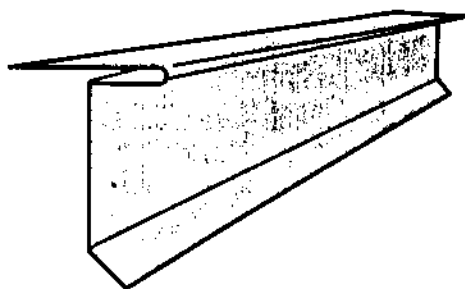
1. Measure the total length of the particular trim area to be covered and divide by the length of your Bender to determine the number and length of trim pieces needed.
2. Determine the dimensions of each section of the desired trim shape by measuring that particular profile to be covered. As an aid, make a pattern out of a 1" strip of coil to get your exact profile.
3. Transfer the dimensions in Hint #2 to each end of a piece of trim coil by making a  $\frac{1}{4}$ " slit in the metal with a pair of shears. These marks now become the bending points and makes the bending marks visible from either side. On longer lengths fold the coil over as shown and snip both ends at once. This saves time and ensures accuracy. The *Tapco Wizzard* was designed to make this time consuming part of your job easier and more accurate. See page 4.



4. Lock the pre-marked coil blank into the Bender with the cut marks located directly under the outer edge of the Stainless Bending Edge. Lock Bender. To cut off the coil with a razor knife, score the metal against the Stainless Bending Edge. Now bend the metal up and push back down by hand until the exposed section breaks off. It may require 2 or 3 repetitions.

5. When breaking material, bending to just  $45^\circ$  will avoid rounding the edge. The Pro Cut-Off was designed to safely and easily cut your material in seconds. See page 3.
5. For bending, follow the suggested sequence of bends on pages 14 and 15. For actual bending techniques see "Bending the Roof Drip Edge" below.
6. Don't fit your trim parts too tight. This will complicate the joints where parts overlap. A one inch (1") lap joint is enough to allow for expansion and contraction. *Trim should be lapped so that laps are facing away from traffic areas.*
7. Try to nail the trim parts on an area that will make the nails less conspicuous. Fasten at laps. When face nailing, use just enough nails to secure trim; **DO NOT DRIVE NAILS TOO TIGHT!!**
8. Remember, when designing shapes you are hanging a cover over the wood parts, not laminating a skin-tight surface. This is called "Floating Your Trim". Allow for irregularities in the wood because your formed trim shapes are straighter than the wood trim moldings or boards you are covering.
9. With practice, you'll learn to overbend or underbend certain sections to achieve a pressure fit of your trim parts which will, in turn, require fewer nails and give your job a more wood-like appearance.
10. Hemming (making a  $180^\circ$  bend on the edge of a sheet) will give your shape a "Factory Edge Look" and will stiffen the entire trim piece to help eliminate "oil canning". See page 12.

## Bending the Roof Drip Edge (General instructions for all examples)



1. This shape is basic to all the other shapes contained in this manual. Practice this shape before you proceed with the other trim pieces illustrated on pages 14 and 15.
2. To begin, cut off a piece of coil  $4\frac{3}{4}$  inches wide by about 1 foot long (As shown at right.)
3. Mark your coil with a pencil at 2",  $2\frac{3}{4}$ " and  $4\frac{1}{4}$ " on both ends. Then snip these marks in about  $\frac{1}{4}$ " (so they will be visible on both sides of the coil).
4. Put your coil into the Bender with the **Finished Side Up**. Bend ① is the  $2\frac{3}{4}$ " mark, so lock the Bender on the mark; then, bend  $90^\circ$ .
5. Remove the coil from the Bender. Bend ② will be at the 2" mark on the coil, so now put the coil into the Bender with the **Finished Side Down**. Lock the Bender on this 2" mark. Note that Bend ② shows the symbol \* which means the bend is to be  $180^\circ$ . Bend this as far as it will go (about  $165^\circ$ ). Then proceed to hem it in the Bender as shown on Page 12 in "Basic Hemming and Folding."
6. Now to Bend ③ put your coil back into the Bender **Finished Side Up** and lock on the  $4\frac{1}{4}$ " mark. Bend this approximately  $45^\circ$  as shown to complete the shape.

### Roof Drip Edge

\* Finish Side Down

②

2"

① Finish Side Up

$\frac{3}{4}$ "

$1\frac{1}{2}$ "

③ Finish Side Up

$\frac{1}{2}$ "

Mark with pencil  
Then snip in from  
edge  $\frac{1}{4}$ "

12"

4 $\frac{3}{4}$ "

2"      2"

2 $\frac{3}{4}$ "      2 $\frac{3}{4}$ "

4 $\frac{1}{4}$ "      4 $\frac{1}{4}$ "

**Material:** Aluminum coil  $4\frac{3}{4}$  inches wide x the desired length. (For practice, use only about 1 foot length coil)

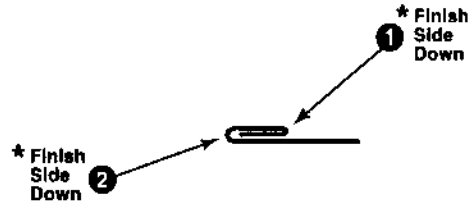
1. Numbers show the sequence of the bends; thus, ① would be the first bend, ② the second bend, etc.
2. "Finish Side Up" indicates that the finished or exposed side of the trim is to be put into the Bender **FACING UP**.
3. "Finish Side Down" indicates that the finished or exposed side of the trim is to be put into the Bender **FACING DOWN**.
4. The symbol \* means the bend is to be  $180^\circ$ .

# EXAMPLES OF COMMON TRIM SHAPES

Finish Side Up\* indicates that the exposed or finish side of the trim is to be placed in the Bender facing up.

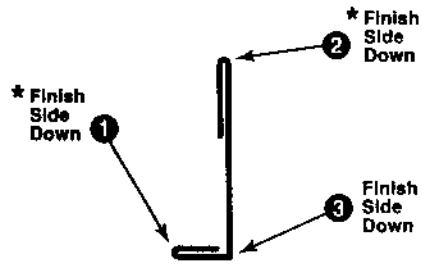
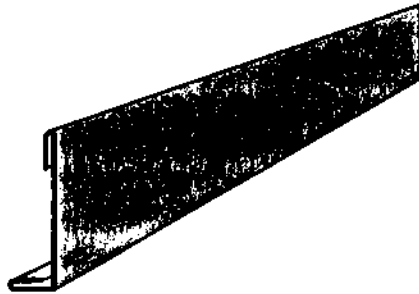
## 1. All Purpose Sill Trim

See notes on Bending the Roof or Drip Edge "General Instructions for All Examples" on Page 13.

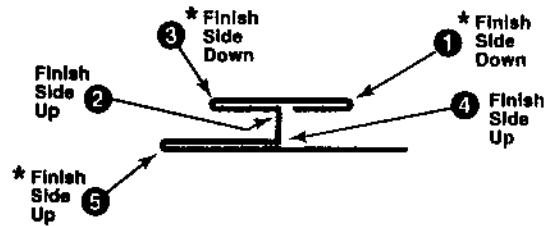
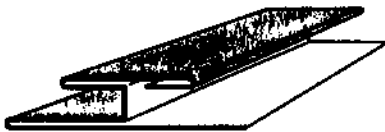


\* Indicates the bend should be 180°.  
Grey color indicates finish side.

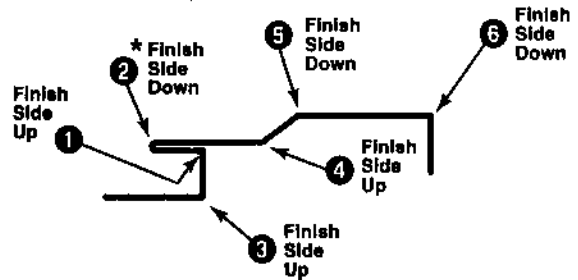
## 2. Facia Trim



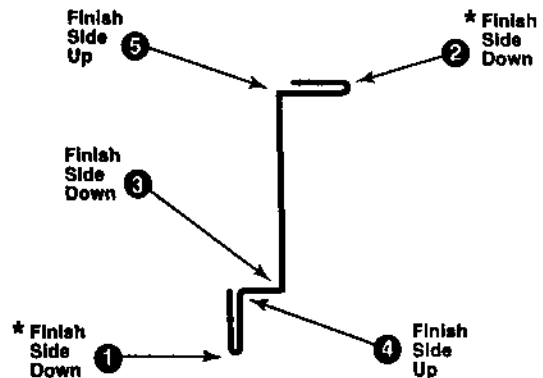
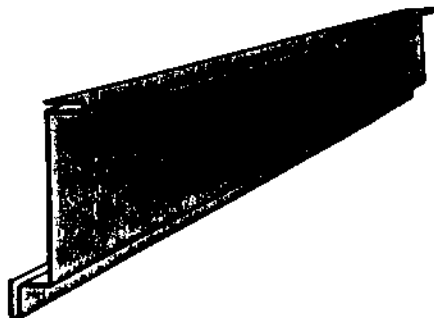
## 3. One Piece Soffit Mitre



## 4. Rake Trim with Built-in "J"-Channel



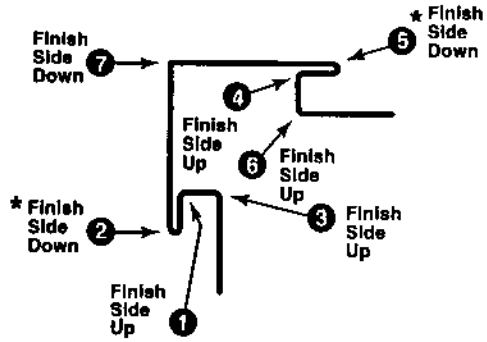
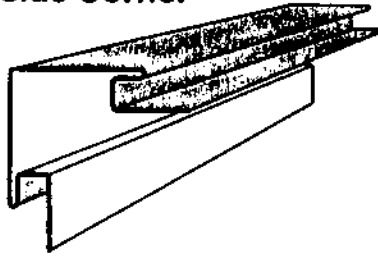
## 5. Soffit and Frieze



# EXAMPLES OF COMMON TRIM SHAPES

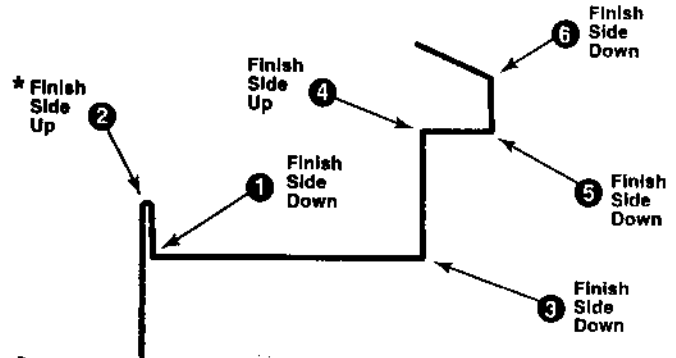
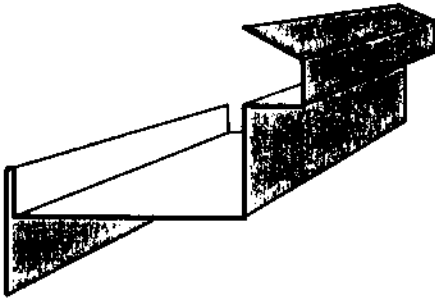
Finish Side Up" Indicates that the exposed or finish side of the trim is to be placed in the Bender facing up.

## 6. One Piece Outside Corner

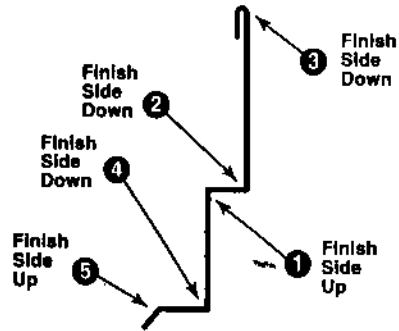
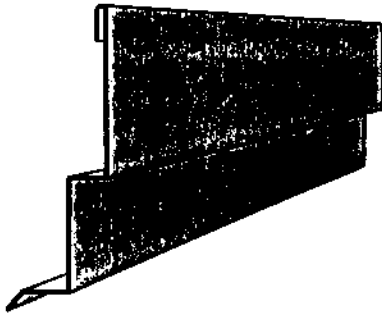


\* Indicates the bend should be 180°. Grey color indicates finish side.

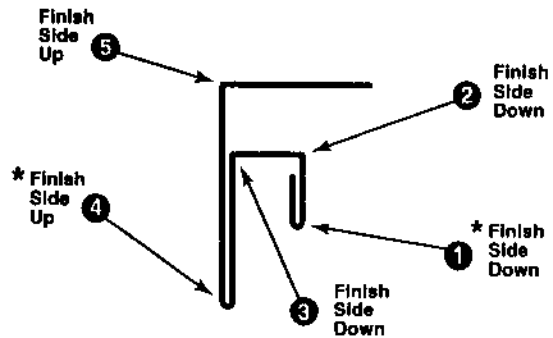
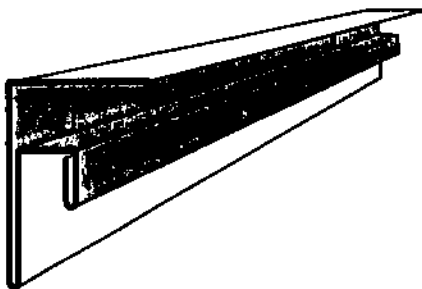
## 7. Overhang Trim with Built-In Undersill



## 8. Brick Frieze



## 9. "F" Channel or Inside Corner



## 10. Window or Door Casing with Built-in "J" Channel

