Conventionally installed draperies are not effective energy savers as they are only 5-10% efficient. To become more efficient, draperies must be modified. The fabric and the methods of construction and installation should meet certain specifications and a closed top cornice should be installed. The cornice prevents the "tunnel" effect caused by warm air entering the top, cooling as it touches the glass, and becoming a cold floor draft. A modified drapery is 25% efficient. Consider the cost and payback time of the modifications.

For modifying draperies, follow these suggestions:

• Drapery fabric should be tightly woven to reduce air penetration. Lining adds to the effectiveness by trapping a layer of air between the fabrics.

• Rod returns should be reduced to approximately 1\(\frac{1}{2}\) inches. Hardware can be cut to accomplish this.

• Fabric should be sealed at sides by using Velcro strips or pieces, self-adhesive magnetic tape, or hooks. Draperies also may be fastened to the wall or window frame by nailing a piece of lattice through the inside edge of the drapery. The tighter the seal, the more efficient the treatment. A continuous seal such as that obtained by using Velcro, magnetic strips, or lattice is more efficient than spot seals. Magnetic or Velcro tape can be fastened to the outer edge of window casing. Magnets, tape, or matching Velcro strips are then glued or stitched to the lining or the back of the fabric.

• Draperies should touch the sill or floor and preferably should be sealed or held tightly in position so air can not leak out. A couple of inches of fabric may lay on the floor to help seal in the air. With apron length draperies, the lining could be attached underneath the sill with Velcro or magnetic tape.
Consider the following suggestions for making a closed cornice.

- The cornice is most effective when it is as close fitting to the draperies as possible. A cornice is usually 1/6 to 1/9 the height of the finished drapery, depending upon its shape, location of the rod in relation to the ceiling, and the type of curtains or draperies used. However, for aesthetic reasons it may be made with a deeper length to accommodate a complex curved design.

- The cornice may be covered with fabrics, wallpaper, paint, or given a natural finish.

- The base material is usually 1/2 inch interior plywood. Three quarter inch pine may be used for the top and ends and is preferred for the entire cornice if a painted or natural finish is desired.

Materials needed:

**For Cornice**
- 1/2 inch (1.3 cm) plywood and/or
- 3/4 inch (1.9 cm) pine
- Tape measure
- Lead pencil, #2
- Hand or power saw
- Hammer
- Finishing Nails
- 1 inch (2.5 cm) angle irons & screws
- Eye screws

**For Fabric Covering**
- Tailor's chalk
- Padding - flannel or thin polyfoam
- Fabric shears
- Staple gun and staples
- Light to medium-weight fabric

Follow these steps for construction.

**Step 1: Measuring**

Determine the exact size of the cornice needed to cover
your curtain or drapery rod and yet allow the draperies to move freely.

Note: These will be inside measurements.

**Width:** The width of the rod plus 1/2 inch to allow 3/4 inch on each end of the drapery rod for clearance space.

**Length:** The length from 1/2 inch above drapery heading or rod, whichever is highest, to 1 or 2 inches below pinch pleats.

**Depth:** Pull the draperies open and measure out from the wall to the projected fold in the drapery heading between pleats. Add 1/2 inch to this measure for clearance.

**Step 2: Constructing**

Measure and cut out the four pieces for the cornice. Adjust "inside" measurements in the following manner when using 1/2 inch plywood. If using solid lumber adjust for lumber thickness accordingly.

For the front piece add 1/2 inch to the length and 1 inch to width. For the two ends add 1/2 inch to the length. The front overlaps the top and end pieces. The ends overlap the top piece at the top. Nail the pieces together using finishing nails. Joints can be reinforced by applying carpenter's glue to the joint before nailing.

**Step 3: Finishing the Cornice**

The cornice may be painted or given a natural finish. It may also be faced with paneling, wall papered, or covered with fabric.
To cover with fabric:

Measure, mark with tailor's chalk, and cut out a section of padding large enough to completely cover the cornice and wrap about 1/2 inch to the underside of the back of the top and sides, and around to the underside of the back of the top and sides, and around to the underside of the bottom front and sides. The top does not need to be covered unless it is visible from some point in the room.

With the staple gun fasten the padding 1/2 inch (1.3 cm) from the edge along the underside of the top section. Pull firmly over the top and down the front section, and staple padding to the underside of the center front.

If a designed edge is used, clip edges as necessary to conform to the shape of the cornice. Continue working, mitering corners as you go, until cornice is completely covered.

Apply fabric in the same method as padding.

**Step 4: Mounting the cornice**

a) The cornice may be mounted by attaching angle irons to the window casing or to the wall above the casing depending on the
dramery installation. Place the cornice on the angle irons and attach with eye screws.

b) Attach cornice to top of window casing. Bore two small holes in the top back edge of the cornice. Place cornice on window casing and drive finishing nails (headless) through holes into casing. The cornice can easily be lifted on and off the table.

**Lambrequin**

A lambrequin is a closed top cornice with sides continuing down to the apron or floor. The bottom may also be enclosed, as the top, making a four-sided box. Use the same directions for making a cornice.
To simplify information, trade names of products have been used. No endorsement is intended, nor is criticism implied of similar products not named.

Reviewed and revised October, 2000
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