Exchange of ambient and interior house air (called infiltration or exfiltration) is a major contribution to heating and cooling costs, as well as discomfort. Doors are sources of air exchange with the ambient. Fortunately, cracks are readily detectable and repairs can generally be made inexpensively with minimal skill requirement.

A homeowner can visually check exterior doors, including the door to the garage. Figure 1 shows a slit over a front door that requires weather-stripping. Rubber or felt strips with glue on one side are inexpensively available from hardware stores; the products are made exactly for this purpose. In some cases small wide-head nails may help keep the strips in place, either on the door top or on vertical jambs.

![Figure 1](image.png)

**FIGURE 1** The crack above this front door will be filled in with rubber or felt weather stripping applied to the frame, or the door top, or both.

If there is a noticeable crack under the exterior door, or if the homeowner can feel a draft during a wind, then either a rubber threshold can be installed on the floor, or a sweep can be installed on the door itself. The semi-circular rubber threshold is mounted in an aluminum frame, which is cut to the width of the door. It is then screwed to the floor, so the door when closing gently rubs against the raised rubber, forming a good air seal. The threshold is designed so people can walk on it without tripping. The second
device is a rubber sweep that screws on to the door and sweeps along the floor when the door is opened. When the door is closed the sweep makes a secure air seal against the ambient.

The above two devices also work for an interior door to a garage or unheated laundry room. But for an interior door a Styrofoam and cloth sliding draft reducer may be practical, as shown in Figure 2, which might be easier to use than a towel to block under-door drafts.

FIGURE 2 The sliding draft reducer is made from two flexible Styrofoam tubes sewed in cloth. It easily slips under the door. When the door moves the unit slides along the floor, and when the door is closed the system provides an effective seal.