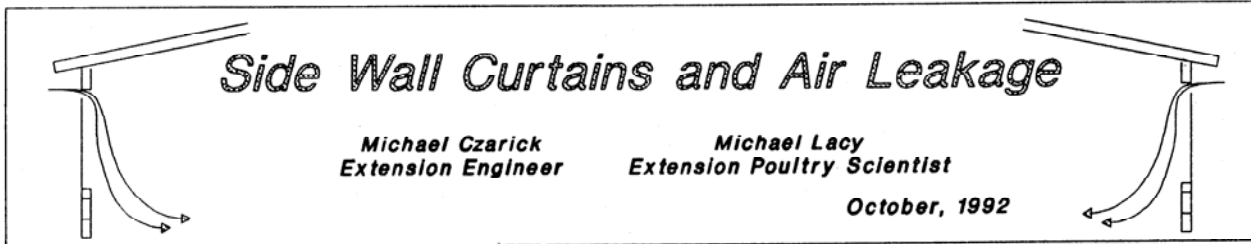




The University of Georgia Cooperative Extension Service

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Keeping a poultry house warm without using excess fuel or feed is a problem many producers face during cold weather. The key to solving this problem is to concentrate on those areas responsible for the greatest amount of heat loss, namely side-wall curtains. Heat loss through side-wall curtains accounts for more than 30 percent of the cost of heating a poultry house. This percentage can more than double if the curtains are not held tightly against the house.

If a curtain doesn't seal tightly against the side wall, warm air can easily leave the house. Think about it; a 1/4" crack, running the length of a house, between the side wall and the curtain is the same as a 10 square foot hole in the side wall. That is like leaving a side wall door open. In houses with very loose curtain straps, it is not uncommon to see a curtain move from the side wall an inch or more when the wind blows. If there are young birds in the house, this could cost a grower \$20 or more on a 30°F night.

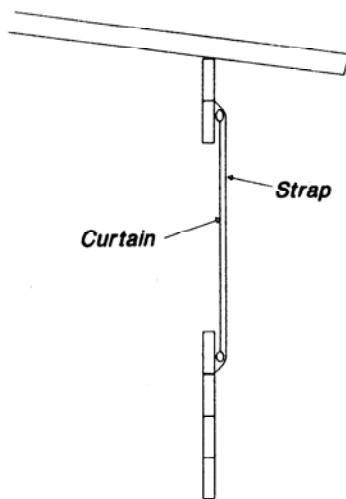


Figure 1

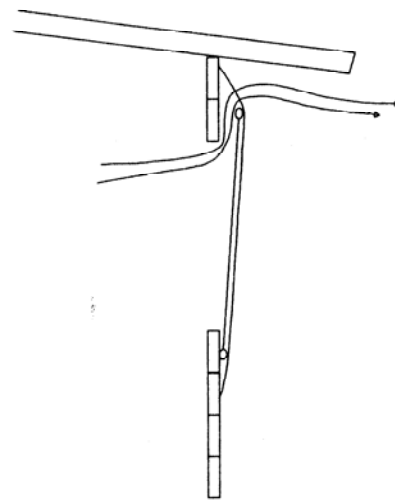


Figure 2

When curtains are closed they must be held tightly against the side wall by curtain straps to avoid fuel wastage. This can be accomplished by nailing curtain straps an inch or two above where the curtain rests when it is completely closed (Figure 1). Nailing straps six inches or more above the top of a closed curtain will not hold it in place. A small breeze will easily blow the downwind curtain away from the side wall an inch or two (Figure 2). To ensure consistent curtain tightness down the length of the house, straps should be no farther than

PUTTING KNOWLEDGE TO WORK

5' apart.

It is important that the bottom as well as the top of the curtain is held tightly against the side wall. If a double-hemmed curtain is used, nail the strap just below where the bottom rod rests when the curtain is closed. If the bottom of the curtain is nailed to the side wall, make sure that it is fastened at the base of the curtain opening. This will help prevent shavings getting trapped between the side wall and the curtain. Nail the bottom strap far enough below the side wall opening so that when the curtain is lowered, it will not obstruct the opening.

Curtain straps should be checked each year for tightness. Broken straps should be replaced. Consider replacing curtain straps every other year. Due to curtain shrinkage and the stretching of the straps, what held the curtain tight against the house last year may be too loose this year. The time and money associated with replacing straps will more than pay for itself in reduced fuel usage and litter caking. To increase strap life by reducing the flapping of straps in the wind, nail the bottom of the strap, give it a half twist then nail the top of the strap.

When replacing a curtain, make sure that the new curtain overlaps the opening on both the top and the bottom by at least five inches. These overlaps allow for the natural shrinking of the curtain material over time. Also, as exhaust fans come on, the overlapped curtain is drawn up against the side of the house. The seal provided by the overlap, along with the curtain rod seal, results in double protection against air leakage (Figure 3). With an overlap of only an inch or two, the curtain is unable to seal against the side of the house, increasing the likelihood of drafts (Figure 4).

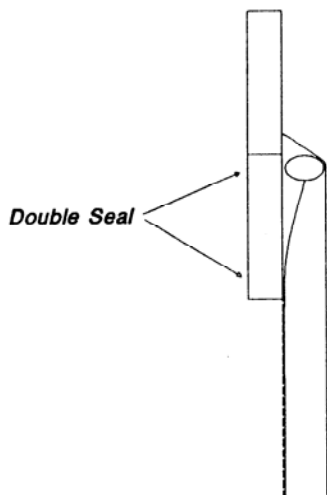


Figure 3

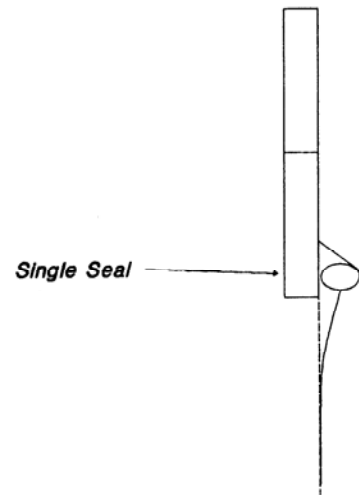

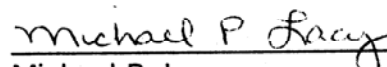


Figure 4

Providing a double seal against air leakage will ensure that when the fans are off very little air will enter the house and that when the fans are on air will only enter through the inlets. This not only reduces fuel usage, but drafts, caking, and ammonia as well.


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