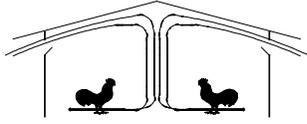




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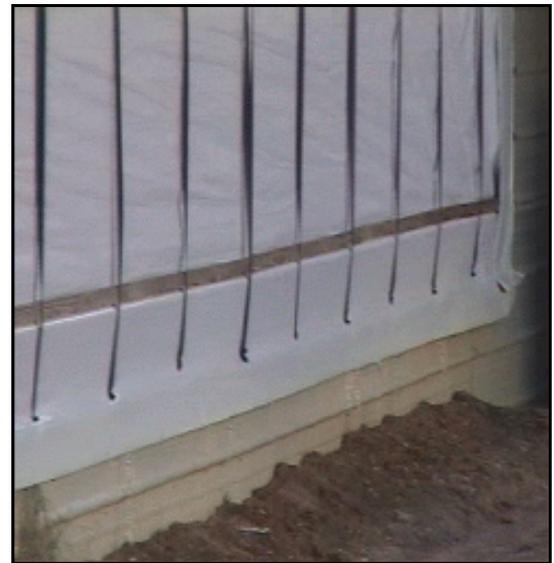


## *Poultry Housing Tips*

### Sealing the Bottom of Side Wall Curtains

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During the winter months many poultry producers have a significant problem with cold air leaking into their houses from along the bottom of their side wall curtains. This is especially true for producers with double hemmed side wall curtains (conduit at both the top and bottom of the curtain). A number of producers have found that this leakage can be eliminated, at relatively little expense, by simply sealing the bottom of their curtains with 1" X 2" wooden strips.

Wood stripping at the bottom of sidewall curtains serves a number of purposes. First, as mentioned previously, stripping the bottom of the curtain reduces the amount of cold air leaking in along the bottom of the curtain, reducing drafts and fuel usage. But, it can also reduce air leakage from the top of the curtain. Since the bottom of the curtain is stripped, the amount of overlap required at the bottom of the curtain is reduced, thereby allowing the curtain to be shifted upward and increasing the curtain overlap at the top of the curtain and making the house significantly tighter.

Last but not least, wooden strips eliminate the problem of ice forming at the bottom of the curtain, a costly problem for many growers during extremely cold weather.

During cold weather, condensation forms when the warm, moist air within the house comes in contact with the cold side wall curtains. The more humid the house, the more condensation that will form. When the condensation runs down below the bottom of the curtain opening between the cold side wall and the cold curtain, it quickly freezes. The ice pushes the bottom of the curtain away from the side wall, making the house much looser. The air that is supposed to be entering through side wall inlets and mixing with the hot air collecting at the ceiling now enters along the bottom of the curtain and moves along the floor chilling the chicks, increasing fuel usage and leading to increased litter caking. The wooden strip prevents the moisture from traveling down between the curtain and the outside surface of the side wall and therefore prevents the formation of ice.

The wooden strips should be placed at the bottom of the curtain opening and attached to the side of the house with wood screws so that the strips can be removed if necessary. It is very important that the wooden strips are not placed below the bottom of the curtain opening, and in fact ideally should stick a little above the bottom of the curtain opening. This is because if the wooden strip is attached to the side wall below the bottom of the curtain opening, shavings can collect between the side wall and the curtain. Over time, the collection of shavings will draw the curtain down, reducing the amount of overlap at the top of the curtain opening and making the house much looser.



Figure 3. Ice forming at bottom of curtain



Figure 4. Curtain without wooden strip



Figure 5. Curtain with wooden strip

Wooden curtain strips are a quick, simple and relatively inexpensive solution to the problem of ice forming at the bottom of curtain openings during cold weather and should be strongly considered. But, it is important to note that though wooden strips eliminate the formation of ice, care must still be taken to properly ventilate. Heavy condensation on a curtain during cold weather is an indicator that you are not ventilating enough to get rid of the moisture produced by the chicks and brooders/furnaces. Over time, this accumulation of moisture will lead to litter caking and increased ammonia levels. If you adjust your timer fans to maintain a relative humidity level below 70% (ideally more toward 60%) you will find that you will minimize the accumulation of moisture on the curtains as well as in the litter.



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