

# Air Out Your Problems

By George Porter

Do you know what the formula is for ventilation under a home? First of all it is what ever the factory manual says it is. If you don't have the factory manual as in the case of a used home or some other reason, then you can be safe with the recommendations of the ANSI Code A. 225.1. This code says that there has to be one square foot of free vented area for every one hundred fifty square feet enclosed beneath the home.

This means that a 1500 sq. ft. home needs 10 sq. ft. of open vent area. There should also be a vent within three feet of each corner of the home.

There are a few questions that need to be answered here. The first would be, how much free vented area is there in a vent? If you have a piece of vinyl skirting with lots of little perforations or louvers in it, how do you add up the space in all those tiny holes? Well, you don't. What you do is just look in the manufacturers literature or maybe even the box the material comes in and it will tell you. It probably says something like 5 sq. ft. per 12 ft. section but that is not necessarily what the stuff you use might say so you'll have to look and see yourself. For now let's just suppose that we have the 5 in 12 kind and we want to enclose a 1500 sq. ft. home, how do we do it?

Using the formula of 1 sq. ft. of vent per 150 sq. ft. of enclosed area we can easily see that we need 10 sq. ft. of vent or 2 complete 12 ft. panels. If the height of the perimeter of the home is 28 inches then we would cut the two 12 ft. panels into 10 pieces 28 inches tall. If we have any left over that's too short to fill the space then we have to get a piece out of another panel to be sure we have used enough vent panel. This means we may have a total of 11 vented pieces of skirting on the home. Remember we are talking about the minimum here, it is OK to go beyond that minimum standard but don't use less than it calls for. As a practical matter you will probably always have to use an extra piece because to come out exactly even with no scrap left over is nearly impossible.

Using the same rule for a 14 x 70 would mean 924 sq. ft. divided by 150 or 6.16 sq. ft. of free vented area. This is approximately 14.6 feet of panel ( 5 divided by 12 equals .42 sq. ft. of free vent per foot. 6.16 divided by .42 equals 14.6 feet or 175 inches of panel). If you have a height of 28 inches for the skirting then you need 6.25 pieces. You can't install .25 of a panel so you need an extra full piece. In the case of this home you need 7 vented panels.

This venting is required year round and is especially important in the winter months when the ground is wetter around the home. High humidity can destroy a home and can lead to the manufacturer voiding the warranties on the hardboard siding or even the whole home. Proper ventilation is not hard, not expensive, and is the right thing to do. You can solve a lot of problems if you just air them out.