

## Cuts Air Infiltration; Helps You Reach Your Energy Efficiency Goals at Lower Costs!



Up to 40% of home energy loss is due to air leaks...

deliver the level of energy efficiency you want at lower construction costs than housewraps! The US Department of Energy estimates that 40% of a buildings' energy loss is due to air infiltration. The International Energy Conservation Code (IECC), Energy Star and other energy performance programs for new homes are recognizing and incorporating the importance of air changes per hour (ACH) in their standards at an increasing rate. The Enviro-Dri Weather-Resistant Barrier (WRB) System delivers superior air infiltration performance, as measured in air changes per hour, versus housewraps.

By reducing the exchange of conditioned and unconditioned air from the home, the Enviro-Dri WRB System improves the home's energy efficiency, and allows the builder to value-engineer other energy design variables within the home – such as supplemental airinfiltration packages, insulation, window U-Value, furnace efficiency, etc. -- to meet energy-efficiency goals, as well as construction cost objectives.

So whether the goal is to meet minimum energy requirements of the local building code, or to exceed the more stringent energy requirements of Energy Star or to qualify for Federal Energy Tax Credits, the Enviro-Dri Weather-Resistant Barrier System can deliver the energy efficiency you want at lower overall construction costs.

## HOW ENVIRO-DRI COMPARES TO HOUSEWRAPS IN STOPPING AIR MOVEMENT

Just how effective is the Enviro-Dri Weather-Resistant Barrier System at preventing air infiltration? Side-by-side lab tests were conducted to compare the performance of the Enviro-Dri WRB System to typical housewraps, installed per manufacturers' instructions, in the critical measure of air movement through a wall system.

At pressures equivalent to a 25 MPH wind-load, the Enviro-Dri WRB System was **88%** more effective in stopping the flow of air through the wall system! At even greater wind pressures, the Enviro-Dri WRB System performed up to **97%** better than mechanically-fastened and taped housewrap!

What happens in the real world, though? Here's an example of observations of housewrap installations in the Midwest:

- 93% of installations did not tape or otherwise seal joints;
- 75% of installations did not effectively seal windows and doors against air infiltration;

Source: Pennsylvania Housing Resource Center

If your housewrap installations look like those from this study, imagine how much better your WRB would perform with the Enviro-Dri System!

Wind-Load (MPH)



50

ASTM E 283-04



75

## **CONVERTING THE PERFORMANCE OF THE ENVIRO-DRI WEATHER-RESISTANT BARRIER SYSTEM INTO POTENTIAL COST-SAVING TRADE-OFFS**

Enviro-Dri cost-effectively controls ACH (air changes per hour), a key variable in determining the energy efficiency of a home. Enviro-Dri may therefore enable you to achieve your energy efficiency objectives at lower costs by trading off a portion of one or more of the following:

- Reduce extent of current air infiltration package (AIP)
- Replace sill sealers by sealing with Enviro-Dri Joint Fabric and Membrane
- Convert to less expensive windows and doors
- Install lower cost HVAC system
- Reduction in the R-Value of wall cavity, ceiling, above-grade or belowgrade insulation

Consult your local construction energy rater to discuss the exact trade-offs you can make in your construction practices to meet the energy efficiency levels you want.



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