

# Department of Energy tests conclude...

**Closed vents and mechanical ventilation is the best way to maintain a dry and healthy crawl space with the added benefit of energy savings.**



*Humidex is proven  
mechanical ventilation!*



A research project was conducted to show how crawl space moisture levels can be controlled and reduced. The project was funded by the U.S. Department of Energy. The test monitored 12 identical homes to compare traditional crawl spaces with foundation wall vents to closed crawl spaces without foundation vents and mechanical ventilation.

## General Findings of Study

- Foundation vents add excess moisture to crawl spaces during humid and wet weather, particularly in the summer. This excess moisture promotes conditions conducive to mold growth.
- Ground vapor retarders by themselves do not keep crawl spaces dry enough to prevent mold growth.
- Closed crawl spaces without foundation vents and mechanical ventilation stay dry all year round.

## Lower RH in Closed Crawl Spaces with Mechanical Ventilation

This chart shows that the wall vented crawl spaces stayed above 70% RH 79% of the time while closed crawl spaces never exceeded 60% RH. To help prevent mold growth crawl space moisture levels should be kept below 70% RH.

\* Closed crawl spaces with mechanical ventilation.

RH Threshold	2002		2003		2004	
	Vented	Closed*	Vented	Closed*	Vented	Closed*
Above 90 %	0%	0%	23%	0%	7%	0%
Above 80 %	39%	0%	86%	0%	70%	0%
Above 70 %	79%	0%	98%	5%	92%	0%
Above 60 %	94%	0%	100%	64%	100%	13%
Above 50 %	100%	100%	100%	100%	100%	100%

## Lower Energy Costs with Closed Vents & Mechanical Ventilation

	Wall Vented	Closed	% kWh Savings
Heating & Cooling	4,396 kWh	3,665 kWh	17%

Due to the fact that drier air makes it easier to condition the environment, homes with closed crawl spaces required less electrical output, thus saving homeowners on utility costs.