

Insulating In Warm Climates

To vent, or not to vent?

In warm, humid climates, temperatures in vented attics can reach well in excess of 120 degrees Fahrenheit. With the infiltration of moisture laden air from outside and attic pressurization, a myriad of problems are created including low energy efficiency, poor indoor air quality and condensation, all of which result in a lower level of occupant comfort and even "sick building syndrome."

The Florida Solar Energy Center (www.fsec.ucf.edu.com) attributes 65% of infiltration in the average Florida home to the vented attic design (a design which is well suited to northern climates). Coupled with duct leakage, this places a considerable burden on mechanical systems to maintain indoor comfort (humidity levels and consistent temperature) resulting in higher energy usage, lower indoor air quality, shorter lifespan of buildings and mechanicals.

The solution is simple. An unvented (sealed) attic design using ZipFoam spray foam insulation at the roof plane rather than on the ceiling creates a completely closed structure. This prevents moisture from entering the attic and condensing. The result is a completely enclosed, air-tight, sealed building that offers healthier indoor air quality, considerable energy savings and additional storage space due to the lack of extreme attic temperatures. Coupled with duct-sealing, the unvented attic

provides a simple, yet comprehensive, solution.

But doesn't a building need to breathe?

Yes, but in a controlled way. The key to healthy indoor air is control. By eliminating air leakage and allowing your mechanical ventilation system to do its job, you control the quality of the air that you and your family breathe, and in doing so lower your energy bills and improve your health. The ZipFoam solution virtually eliminates condensation, duct sweating, infiltration, humidity and therefore, bacteria growth.

How does the ZipFoam solution eliminate bacteria growth?

An unvented design allows you to control humidity levels to within the 45% to 50% range; a level at which molds, mildew, dust mites and many allergens perish.

THE ZIPFOAM SOLUTION

- Improves Indoor Air Quality
- Improves Energy Efficiency
- Extends Life of the Building
- Extends Life of Mechanical Systems
- Environmentally Friendly
- Architecturally Friendly
- One Application = Lifetime Solution
- American Made