



Tech & Testing Thermal Core Siding

Energy Efficiency

Summary:

Generations[®] Thermal Core Siding exceeds the highest standards and specifications of ASTM International and other standards organizations.

“R”-value:

In the 1970s, the Federal Trade Commission helped create the “R”-value Rule, an objective method for reporting the performance of residential insulation materials. **Generations**[®] Thermal Core Siding provides the long-term efficiency now demanded by the construction industry.

Siding Profile	"R"-value
D-4" (100mm)	2.36
D-5" (125mm) Dutch Lap	2.47
D-6" (125mm)	2.56

Physical Properties

Building Codes (ASTM):

Generations[®] Thermal Core Siding currently meets or exceeds all of the specifications and requirements set forth by the various model building codes.

Moisture Properties

Water Absorption:

The average home produces six buckets of water vapor a day. **Generations**[®] Thermal Core Siding has a perm rating of 5.0 perms per inch. It clearly is not a vapor barrier and will not trap harmful water vapor in your walls.

Water Vapor Permeability:

Generations[®] Thermal Core Siding exceeds ASTM standards testing for superb performance under wet conditions.

Moisture Absorption Comparison:

Architectural Testing, Inc. (ATI) compared the moisture absorption of a wall system with **Generations**[®] Thermal Core Siding to that of an identical system clad with hollow-backed vinyl siding. Tests show that the **Generations**[®] Thermal Core Siding did not appear to absorb or retain moisture!

Weather Resistant Barrier:

Generations[®] Thermal Core Siding uses one of the most breathable foam insulations on the market that is also highly resistant to water absorption. **Generations**[®] Thermal Core Siding however is not, a weather resistant barrier.

Dew Point and Condensation:

A dew point is the temperature at which water vapor in the air condenses. To prevent moisture from moving through the wall, **Generations**[®] Thermal Core Siding has a perm rating of 5.0 (a rating lower than 1.0 is considered a vapor barrier).