Technical Bulletin: 
VENTILATION AND BREATHABILITY

Most roofing materials including underlayments and surface coverings breathe very little except through the seams and joints. RoofTopGuard II underlayment, in the same manner as 30-pound felt and other underlayments, for the most part also breathes through its seams and joints. Although RTG II does have some inherent breathability levels.

The International Residential Code, developed by the International Code Congress, now being used as a model by the major building codes, recognizes the lack of breathability in most contemporary roof systems and addresses the avoidance of heat and moisture build up in attic spaces and cathedral ceilings through the use of positive ventilation using convective airflow. When buildings, either new construction or through retrofit upgrades, are vented according to code, there should be no concern about damaging results from excessive heat or moisture buildup.

In actuality, geographic location, the direction that a roof faces and the color of the shingle have greater influence on the life expectancy of asphalt/ fiberglass shingles than does proper ventilation. However, proper ventilation should be highly recommended.

Specifically: speaking with the technical departments of Asphalt Shingle Manufacturers, they have advised that there is no prohibition on any underlayment product such as a synthetic underlayment under their shingles. Their product warranties cover manufacturing defects of their shingles and is not related to any other independent products used in that installation. Also, using a peel and stick ice and water product over 100% of the roof under their shingles has no effect on their warranties. That is perhaps the ultimate in being a so-called “vapor barrier”.

Enhanced Warranties from shingle manufacturers usually consists of using four (4) of their products. Asphalt Shingle, Hip & Ridge Shingle, Ridge Vent and a Self Adhesive Underlayment. The fact that a “self adhesive underlayment system” is recommended says it all and magnifies the need for a proper roof ventilation system.

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