



This letter contains information on dense packed cellulose insulation in unvented cathedral ceilings. Nu-Wool and other cellulose manufacturers abide by the position that this is the best way to insulate cathedral ceilings.

Compared to vented cathedral ceilings, dense packed ceilings have better moisture control and better thermal performance. In 1939 (when ventilation was first recommended) insulation levels were low or nonexistent. This allowed warm and humid indoor air to easily travel through ceilings. The ceiling space needed ventilation to evacuate this moist air. When insulation R-values rose, the warm humid air stayed inside the home, but the problem then became moisture from the outdoor air. Dense cellulose stops this air movement. Fiberglass does not.

The Moisture Control Handbook published by Oak Ridge National Laboratory states that if a cathedral ceiling is tightly packed with insulation, the ceiling does not need to be ventilated. An article in "Roofing Siding & Insulating magazine brought up the issue. "Must cathedral ceilings be ventilated? ... if properly constructed and sealed to prevent air leakage, no." Other studies performed by ASHRAE, Canada Mortgage and Housing Corp, the parent company of CertainTeed, and the U.S. Department of Agriculture Forest Products Laboratory, have provided the scientific support of dense pack cathedral ceilings. Surprisingly, there is no sound scientific support for current cathedral ceiling venting requirements.

Nu-Wool has insulated hundreds of thousand of homes since our foundation in 1949. It is in our best interest to give you correct information. We do not provide recommendations until we are absolutely certain of long term effects. All other cellulose manufacturers will tell you the same.

Be assured that Nu-Wool backs our recommendation with our lifetime warranty. This warranty is in effect for any condition caused by properly installing our insulation. Please feel free to contact me if you would like copies of the above studies or any other information.

Sincerely,

Robert De Vries
Technical Services