Radiant Heat through Roof

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Older homes contain ventilated attics that buffer the heat radiated through roofs. However, it is common for people today to inhabit their attics or construct cathedral ceilings. Both of these design situations require the rafters to contain sufficient insulation to buffer the radiant heat and conversely, do not ventilate heated air. General question, is the traditional design feature of a well insulated and properly ventilated attic the most appropriate means for buffering radiant heat through a roof? The proposed research will involve the evaluation of an alternative design proposal that allows the attic spaces to be inhabited.





The MSU Southern Climatic Housing Research Team is a collaborative effort involving Architecture, Civil Engineering, Electrical Engineering, Forest Products, Landscape Architecture, and Mechanical Engineering. The MSU Southern Climatic Housing Research Team is affiliated with the Coalition for Advanced Wood Structures (CAWS) as a partnership with the USDA Forest Service, Forest Products Laboratory in Madison, Wisconsin. CAWS is a partnership between universities, industry and government to advance research for wood structures related to residential, non-residential and transportation uses.

