

# STRUCTURAL BUILDING COMPONENTS MAGAZINE

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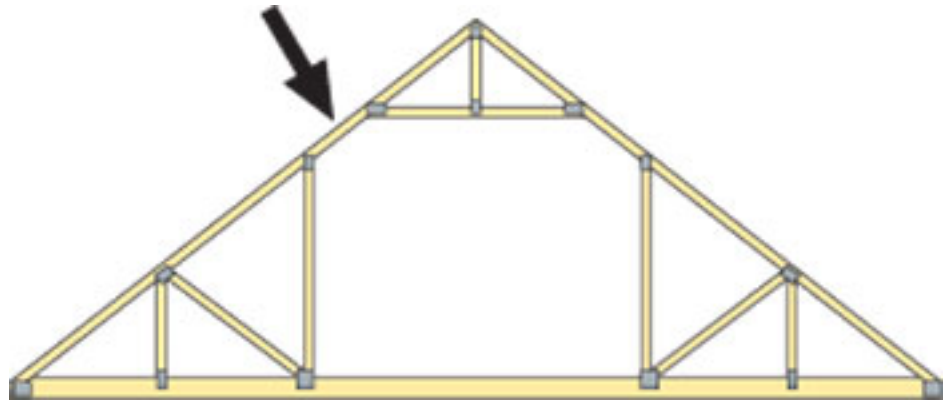
## Technical Q & A

### Insulation Requirements by Ryan J. Dexter

*When it comes to the codes, if you aren't sure how to interpret something, it's always best to ask. In this issue, the question heats things up!*

Now that more jurisdictions are adopting the International Building and Residential Codes, SBC Magazine has been receiving more and more code-specific questions from our readership.

The following question was raised by one of our reader's customers regarding attic trusses and their insulation code requirements.



#### QUESTION:

What is the classification for the sloped ceiling area on the top chord (between the collar tie and the knee wall) on attic trusses? Is it considered a ceiling or a wall? Does the International Residential Code (IRC) specifically define different insulation requirements for a ceiling versus an attic? (See Figure)

#### ANSWER:

Insulation requirements are related to the separation between heated and unheated areas. It is easy to maintain the required depth of insulation with straight walls and flat floors. It gets a bit tricky to determine what to do when there is a slanted ceiling. Is the area a wall or a ceiling?

If there is adequate space, insulating to the higher ceiling requirements reduces heat loss. One must also observe ventilation requirements. The space between the room-in-attic walls and the

roof has to be ventilated like an attic, as well as the space above the room-in-attic ceiling. The IRC is not clear. Minimum insulation R-values are only set for ceilings, walls, floors, basement walls, slab perimeters and crawl space walls. The IRC does not address attic trusses nor does it make any distinction between conventional framing and component construction.

We suggest that the component manufacturer plan for insulating the area pointed out above as a ceiling area rather than a wall area as we believe that this is the logical interpretation that a typical building official will make. There are also high R-value/low thickness products that can reduce the space requirement and yet meet the ceiling values. Ultimately, the final decision regarding the amount and type of insulation should be addressed by the Building Designer (e.g., the Owner, Architect, Engineer or Contractor of the Building) in concert with the local building code official.

Due to the increased demand for detailed code information from readers, SBC Magazine will soon introduce a new monthly column called Code Connection. Look for the first installment in the November issue, as we explore the code requirements for component manufacturing third party inspections.

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To pose a question for this column, email us at [techincalqa@sbcmag.info](mailto:techincalqa@sbcmag.info). To view other questions visit the [WTCA website](#).

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