

Study Session

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2009 IECC Chapters 2 and 3 Definitions and Climate Zones

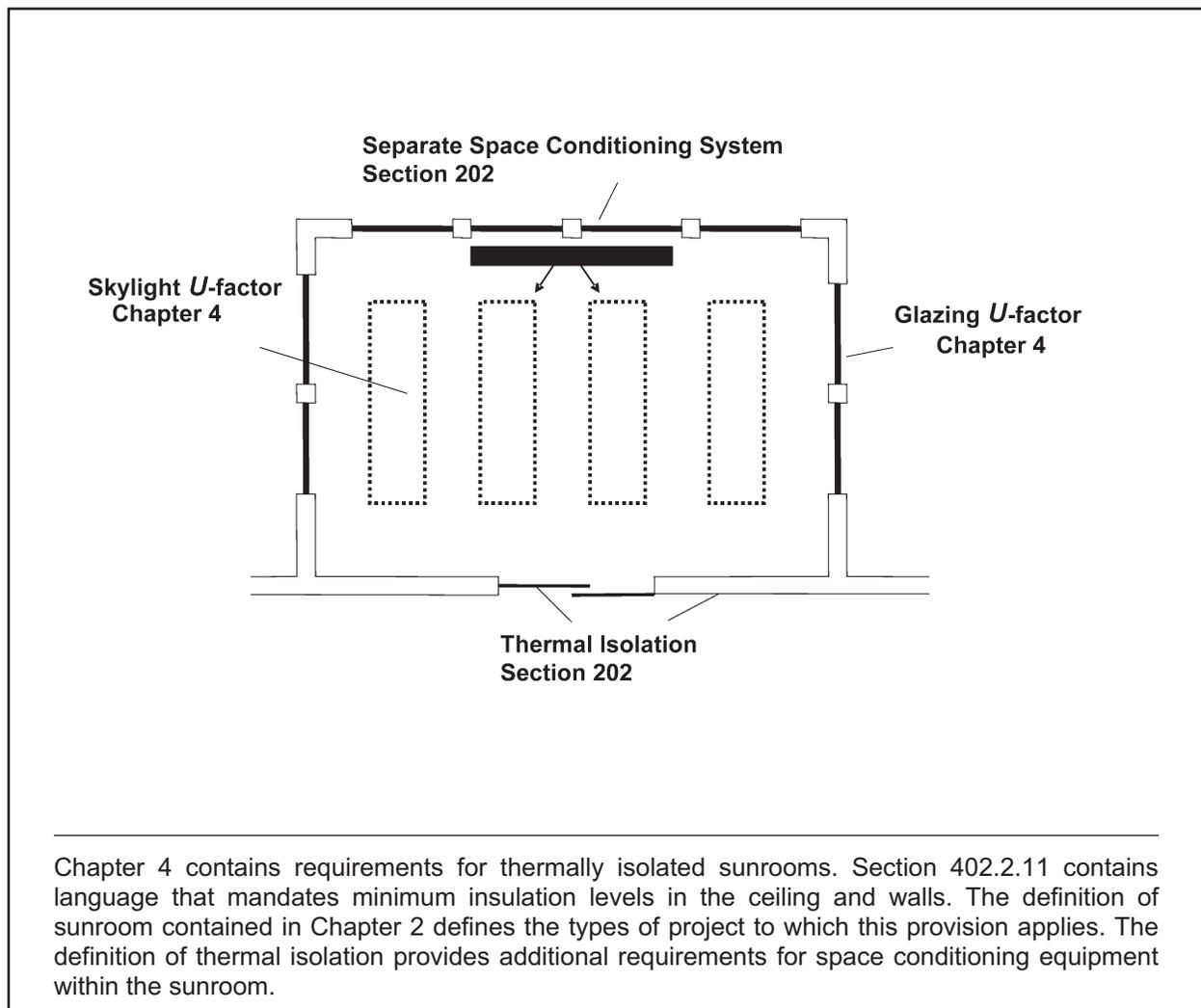
OBJECTIVE: To obtain an understanding of the definitions that are included in IECC Chapter 2 and of how the climate zones are structured within IECC Chapter 3.

REFERENCE: Chapters 2 and 3, 2009 *International Energy Conservation Code*

- KEY POINTS:**
- How should the definitions in Chapter 2 be used in the context of the IECC?
 - What is the building thermal envelope?
 - Under the provisions of the IECC, what type of building is considered a commercial building, and what kind of building is considered a residential building?
 - When is a space considered to be conditioned? If a space includes space conditioning equipment for freeze protection only, is the space considered conditioned?
 - What is a duct system? How can the definition of a duct system be used as a guide to determine where ducts should be sealed?
 - What is a sunroom? How does the term *thermal isolation* relate to a sunroom in the residential provisions of the IECC?
 - How can IECC Figure 301.1 be used to determine the proposed climate zone?
 - How do you determine the climate zone for a proposed project from IECC Table 301.1?
 - How are warm humid climates defined?
 - What are the interior design temperatures that cannot be exceeded when determining the heating and cooling load calculations?
 - Which energy-efficient products are required to be listed and labeled? What are the options for a fenestration product that does not have a label?
 - How does labeling apply to blown-in insulation products?

Code Text: *Unless stated otherwise, the following words and terms in the International Energy Conservation Code shall have the meanings indicated in Chapter 2.*

Discussion and Commentary: The provisions contained within the IECC often contain terms that are included in Section 202 of the code. This is done to eliminate the need to repeat the definition within the code text, thereby increasing readability and reducing the length of the code. In some cases, the code text may modify the definition or add qualifiers to its meaning. In other cases, the definition may contain the actual requirement for the situation or for a material, such as the maximum perm rating for vapor retarders. Chapter 2 should be referenced whenever there is a question concerning the meaning of a term used in the code text.



Code Text: *BUILDING THERMAL ENVELOPE. The basement walls, exterior walls, floor, roof, and any other building element that enclose conditioned space. This boundary also includes the boundary between conditioned space and any exempt or unconditioned space.*

Discussion and Commentary: The term *building thermal envelope* is used in both Sections 402.1.1 and 502.1 to direct the code user to the portions of the building where the insulation and glazing requirements would apply. The building envelope includes the building assemblies that separate the space that is being heated or cooled from the outdoors or unconditioned space.

