



Informal Interpretation Report Number 7419



Date October 30, 2014

Edition 2010

Section 503.2.2

Question:

While the chapter states 13, this question is related to the FBC - Energy Conversation Volume. Is it the intent of section 503.2.2 to limit the cooling capacity of the cooling equipment to less than the calculated sensible load?

Answer

Assuming that the Code in question is the 2010 Energy Efficiency Code, Chapter 5, Section 503.2.2, the answer to the question is, "no."

Commentary:

The 2004 Energy Code defined the equipment selection point to be between 100% and 120% of the sensible load. As the requester points out, this usually meant that the total selected cooling capacity did indeed exceed the total load requirements. In 2007 this verbiage was changed to something more similar to the 2010 verbiage which requires that the equipment capacity "not exceed" the heat load calculation, but no tolerance is given. There is also no elaboration on whether this limit refers to sensible, latent or total loads, so it's the designer's option to either, "not exceed" the sensible load or "not exceed" the total (sensible + latent) load. Section 503.2.2, Exception No. 3 provides some relief. The designer may choose to "not exceed" but still meet the sensible load. Assuming the use of unitary equipment or water-source heat pumps and barring a fantastically improbable selection coincidence where the proposed equipment meets the loads exactly, under Exception No. 3, the selected equipment sensible capacity will exceed the sensible load. For the described application it is certain that the selected equipment total

capacity will also exceed the total heat load.

Notice:

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