

**INTERPRETATION IC 90.1-2010-40 OF
ANSI/ASHRAE/IES STANDARD 90.1-2010
Energy Standard for Buildings Except Low-Rise Residential Buildings**

Date Approved: February 6, 2023

Request from: Aaron McEwin, Jordan & Skala Engineers, Inc., 17855 North Dallas Parkway, Dallas, TX 75287.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2010, Section 3, regarding the definition of a *conditioned space – cooled space*.

Background: We are working on a LEED project, using the 90.1-2010 standard. We have a space that is cooled with a system that is 4 Btu/h-SF. This is below the 5 Btu/h-SF threshold for sensible cooling and falls below the threshold for a “Conditioned-Cooled Space”. The space is also heated within the threshold of a semi-heated classification.

Questions:

1. Can a semi-heated space have a cooling system?
2. If a space has a cooling system in it, but the sensible cooling is below the 5 Btu/h-SF in 90.1-2010 (or below 3.4 Btu/hr-SF in 90.1-2019), what type of space is this considered?
3. Would a space that is only cooled with a system that is less than the cooling sensible threshold stated in “Cooled Space” be considered an “Unconditioned space”?

Interpretation No. 1: The semi-heated space can have a cooling system as it does state any prohibition of a cooling system.

Question No. 1: Is this interpretation correct?

Answer No. 1: Yes.

Comments No. 1: If a semi-heated space is served by a system that has a sensible cooling output capacity less than the threshold to be defined as a conditioned space, 5.0 Btu/h·ft², there is nothing that prohibits a cooling system from being provided for that space.

Interpretation No. 2: A space that has a cooling system in it, but the sensible cooling is below the 5 Btu/h-SF in 90.1-2010 would fall into either a semi-heated or an unconditioned space classification since it is below the threshold.

Question No. 2: Is this interpretation correct?

Answer No. 2: No.

Comments No. 2: Even though the space is served by a system that has a sensible cooling output capacity less than 5.0 Btu/h·ft², the space can still be a heated space or indirectly conditioned space in addition to unconditioned space or semi-heated space.

Interpretation No. 3: Based on the definition of a conditioned, cooled space, a space with less than 5 Btu/h-SF (90.1-2010) of cooling, the space would be considered “unconditioned space”.

Question No. 3: Is this interpretation correct?

Answer No. 3: No.

Comments No. 3: The space could be a heated space, indirectly conditioned space, semi-heated space, or an unconditioned space.