

**INTERPRETATION IC 90.1-2010-37 OF
ANSI/ASHRAE/IES STANDARD 90.1-2010
Energy Standard for Buildings Except Low-Rise Residential Buildings**

Date Approved: October 21, 2017

Request from: Karl Kaufman, The Weidt Group, 2815 Beaver Avenue, Suite 106, Des Moines, IA 50310.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2010, Section G3.1.1 and Tables G3.1.1A and G3.1.1B, regarding Baseline HVAC System selection.

Background: A team is seeking to rate their project using Appendix G of 90.1-2010. The project is an existing 420,000 ft² – 1 story school that will be renovated with updates to the mechanical and electrical equipment and no architectural changes. The project was originally constructed over many years with 7 additions to the original building. Each addition is separated by a fire wall resulting in no one section of the project being greater than 55,000 ft².

ASHRAE 90.1-2010 provides the following definitions:

building: a structure wholly or partially enclosed within exterior *walls*, or within exterior and *party walls*, and a *roof*, affording shelter to persons, animals, or property.

party wall: a fire *wall* on an interior lot line used or adapted for joint *service* between two buildings.

Interpretation: Based on the project being split into 8 sections by a firewall and the 90.1 definitions of *building* and *party wall*, the project is 8 individual buildings and would result in using System 5 or 6 (based on fuel source) as a baseline HVAC system for each building.

Question: Is this interpretation correct?

Answer: No.

Comments: In the Background, a case is described where additions to an existing building have been separated by a fire wall. However, it is important to note that a fire wall is not always a party wall. A party wall is a specific type of wall that separates two buildings along an interior lot line of a zoning lot.

In the case described above there is no mention of the school occupying multiple zoning lots and therefore the fire walls cannot be presumed to be party walls. Therefore, the entire school must be treated as one building, and modeled with the Baseline System 7 or 8, based on the heating source. Additional baseline system types may be required following the applicable exceptions in Section G3.1.1.