INTERPRETATION IC 90.1-2013-14 OF ANSI/ASHRAE/IES STANDARD 90.1-2013 Energy Standard for Buildings Except Low-Rise Residential Buildings

Date Approved: October 21, 2017

<u>Request from:</u> Paul Gordon, Quality Air Heating and Cooling, 3395 Kraft Avenue SE, Grand Rapids, Michigan 49512.

<u>Reference</u>: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2013, Section 6.4.4.2.1, regarding duct sealing.

Background: Ductwork and all plenums with pressure class ratings shall be constructed to Seal Class A, as required to meet the requirements of Section 6.4.4.2.2, and with standard industry practice (see Informative Appendix E). (Information Appendix E- Reference SMACNA Duct Construction Standards-2005).

Note: Please provide background and supporting information here. State exactly what the requirements are and any conflicting information.

Section 6.4.4.2.2 Refers to Duct Leakage Tests on ductwork that is designed to operate at static pressures in excess of 3 inch wc and ductwork located outdoors shall be leak-tested according to industry-accepted test procedures (see Informative Appendix E).

In SMACNA Duct Construction Standard – 2005, Table 1-1 Standard Duct Sealing Requirements indicates the following: Seal Class A – Applicable Static Pressure Construction Class 4 inch wg and up

Seal Class B – Applicable Static Pressure Construction Class 3 inch wg

Seal Class C – Applicable Static Pressure Construction Class 2 inch wg

In addition to above, any variable air volume system duct of 1 inch and $\frac{1}{2}$ inch wg construction class that is upstream of the VAV boxes shall meet Seal Class C

Interpretation: I interpret Section 6.4.4.2.1 to indicate that Seal Class A is the Applicable Static for Pressure Construction Class 3 inch wg and up. Seal Class C is the Applicable Static Pressure Construction for Class 2 inch wg. And in addition, any variable air volume system duct of 1 inch and ½ inch wg construction class that is upstream of the VAV boxes shall meet Seal Class C.

Question: Is this interpretation correct?

Answer: No.

Comments: All pressure classes require Seal Class A.