**COMMENT #1**

**Clause No/Subclause No/Annex:** 7

**Intent of Comment:** Not an Objection

**Type of Comment:** Technical

**Comment**

**Proposed Change**

**COMMENT #2**

**Clause No/Subclause No/Annex:** 13 to 17

**Paragraph/Figure/Table/Note:** 4.3.3 and 4.4 and 4.5

**Intent of Comment:** Not an Objection

**Type of Comment:** Editorial

**Comment**

Guarded testing is an important part of our business practice and I want to make sure we are

allowed a clear and manageable method to accomplish it that doesn't raise our cost of doing

business or reduce the accuracy of infiltration measurements that we have been consistently

providing for 10+ years using guarded testing.

Section 4.3.3 seems to allow guarded testing (simultaneous multi-zone) if the Air Barrier

Association of America Standard Method for Building Enclosure Airtightness Compliance

Testing is followed.

The ABAA standard method has it's own methodology for setting up and conducting the test and

section 4.3.3 says the test shall be conducted according to this standard method.

The ABAA standard method includes the three allowable test methods: multipoint regression

(based on ASTM E779),repeated single point (based on ASTM E1827) and repeated two-point

pressure testing (based on ASTM E1827).

Section 4.4 details how to run single point and multi point testing. I think this section doesn't

apply if 4.3.3 is being used, otherwise they are potentially in conflict.

Section 4.5 gives guidance on how to adjust results for single point testing. I think this shoudl

also not apply if 4.3.3 is being followed.

I'm not sure I understand the rational for externalizing this methodology for guarded testing from

the more explicit RESNET standard, but if that is in fact happening, then I think Sections 4.4 and

4.5 should be not applicable when Section 4.3.3 is followed.

Guarded testing is an important part of our business practice and I want to make sure we are

allowed a clear and manageable method to accomplish it that doesn't raise our cost of doing

business or reduce the accuracy of infiltration limits that we have been consistantly providing for

10 years using guarde testing.

**Proposed Change**

4.4. Procedure to Conduct Airtightness Test. The leakage of the enclosure shall be measured

using either the One-Point Airtightness Test in Section 4.4.1 or the Multi-Point Airtightness Test

in Section 4.4.2. Alternatively, if test apparatus and prepration follow Section 4.3.3, the

procedure of the Air Barrier Association of America Standard Method for Building Enclosure

Airtightness Compliance Testing shall be followed

4.5. Procedure to Apply Results of Enclosure Air Leakage Test.

4.5.1. If the results of the building or Dwelling Unit enclosure air leakage test are to be used for

conducting an energy rating or assessing compliance with a building or Dwelling Unit enclosure

leakage limit27, then the corrected airflow determined using a one-point test shall be adjusted

using Equation 5a or 5b. Adjusted CFM50 = 1.1 x Corrected CFM50 (5a) Adjusted CMS50 =

1.1 x Corrected CMS50 (5b) The ELA determined in Section 43.4.1.6 for a one-point air leakage

test shall be adjusted using Equation 6. Adjusted ELA = 1.1 x ELA (6) Other applications of

building or Dwelling Unit enclosure air leakage testing and the results of multi-point testing do

not require the corrections in this section.

Testing conducted with the Air Barrier Association of America Standard Method for Building

Enclosure Airtightness Compliance Testing shall also not require this correction.

4.5.2. If the results of the building or Dwelling Unit enclosure leakage test are to be converted to

Air Changes Per Hour at 50 Pa (0.2 in. H2O) (ACH50), Specific Leakage Area (SLA), or

Normalized Leakage Area (NLA), or compartmentalization leakage ratio at 50 Pa (CFM50/ft2 ),

then Equations 7 through 910 shall be used. Where adjusted or corrected CFM50, CMS50 or

ELA values have been calculated in previous sections they shall be used in Equations 7 through

10. ACH50 = Adjusted CFM50 x 60 / Infiltration Volume in cubic feet (7a) ACH50 = Adjusted

CMS50 x 3600 / Infiltration Volume in cubic meters (7b) SLA = 0.00694 x ELA in in2 /

Conditioned Floor Area in square feet (8a) SLA = 10.764 x ELA in m2 / Conditioned Floor Area

in square meters (8b)NLA = SLA x (S)0.4, where S is the number of stories above grade (9)

CFM50/ft2 = CFM50 / Compartmentalization Boundary area in square feet (10)

Testing conducted with the Air Barrier Association of America Standard Method for Building

Enclosure Airtightness Compliance Testing shall also not require this correction.

**RESPONSE:**

**Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (Accept, Accept in Principle, Accept as Modified, Reject)

**Reason:**

**COMMENT #3**

**Clause No/Subclause No/Annex:** 8

**Paragraph/Figure/Table/Note:** Section 3 - Definitions

**Intent of Comment:** Not an Objection

**Type of Comment:** Technical

**Comment**

**Proposed Change**

New definition of "compartmentalization boundary" proposed:

- The surface that bounds the Infiltration Volume *of the dwelling unit*.

**RESPONSE:**

**Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (Accept, Accept in Principle, Accept as Modified, Reject)

**Reason:**

**COMMENT #4**

**Clause No/Subclause No/Annex:** 25

**Paragraph/Figure/Table/Note:** 6.

**Intent of Comment:** Objection

**Type of Comment:** Technical

**Comment**

The house setup for the blower door and duct testing are carefully detailed in those sections of

this standard. How the house is setup has a major impact on ventilation device performance -

open or closed windows and doors and the operation of other mechanical systems greatly change

the measured flow performance of both dwelling unit and local exhaust fan products. Without

that information, the detailed testing procedures are suspect at best.

**Proposed Change**

Insert under the opening paragraph:

Set up for mechanical ventilation testing by following section 4.2 Procedure to Prepare the

Building or Dwelling Unit for Testing.

**RESPONSE:**

**Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (Accept, Accept in Principle, Accept as Modified, Reject)

**Reason:**

**COMMENT #5**

**Clause No/Subclause No/Annex:** 20

**Paragraph/Figure/Table/Note:** Procedures to Conduct Air Tightness Test

**Intent of Comment:** Not an Objection

**Type of Comment:** Technical

**Comment**

**Proposed Change**

**COMMENT #6**

**Clause No/Subclause No/Annex:** 20

**Paragraph/Figure/Table/Note:** Procedures to Conduct Air Tightness Test

**Intent of Comment:** Not an Objection

**Type of Comment:** Technical

**Comment**

**Proposed Change**

**COMMENT #7**

**Clause No/Subclause No/Annex:** 0

**Paragraph/Figure/Table/Note:** Title

**Intent of Comment:** Objection

**Type of Comment:** Editorial

**Comment**

Change the title to better reflect a list inside of a list and improve clarity.

**Proposed Change**

Standard for Testing Airtightness of Building, Dwelling Unit, and Sleeping Unit Enclosures,;

Airtightness of Heating and Cooling Air Distribution Systems,; and Airflow of Mechanical

Ventilation Systems

**RESPONSE:**

**Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (Accept, Accept in Principle, Accept as Modified, Reject)

**Reason:**

**COMMENT #8**

**Clause No/Subclause No/Annex:** 2

**Paragraph/Figure/Table/Note:** 2.1

**Intent of Comment:** Objection

**Type of Comment:** Editorial

**Comment**

Change the phrasing of the first sentence to better reflect a list inside of a list and

improve clarity.

**Proposed Change**

This standard defines procedures for measuring the airtightness of building, Dwelling

Unit, and Sleeping Unit Enclosures,; the airtightness of heating and cooling air

distribution systems,; and the airflow of mechanical ventilation systems.

**RESPONSE:**

**Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (Accept, Accept in Principle, Accept as Modified, Reject)

**Reason:**

**COMMENT #9**

**Clause No/Subclause No/Annex:** 6

**Paragraph/Figure/Table/Note:** 4.1.1

**Intent of Comment:** Objection

**Type of Comment:** Editorial

**Comment**

Replace "unit" with "Dwelling Unit."

**Proposed Change**

A fan that is capable of moving air into or out of the building or Dwelling U~~u~~nit to achieve one

or more target pressure differences between the building or Dwelling Unit and the exterior.

**RESPONSE:**

**Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (Accept, Accept in Principle, Accept as Modified, Reject)

**Reason:**

**COMMENT #10**

**Clause No/Subclause No/Annex:** 8

**Paragraph/Figure/Table/Note:** 4.2.9

**Intent of Comment:** Objection

**Type of Comment:** Editorial

**Comment**

Only mention attic fans once in the list of fans that shall be turned off.

**Proposed Change**

Any fan or appliance capable of inducing airflow across the building or

Dwelling Unit enclosure shall be turned off including, but not limited to, clothes dryers,

attic and crawlspace fans, kitchen and bathroom exhaust fans, air handlers, and ventilation fans

used in a Dwelling-Unit Mechanical Ventilation system~~, and crawlspace and~~

~~attic ventilation fans~~.

**RESPONSE:**

**Action: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** (Accept, Accept in Principle, Accept as Modified, Reject)

**Reason:**