Addendum A

TC 5.2 C&S Agenda (6/24/25)

1. **Underwriters Laboratories**

- **UL181 Standards**

  - **UL181, UL181A, & UL181B**

    - **No current proposal or revision activity known at this time for UL181, UL181A, UL181B, and UL181C.**

- **UL Canada Standard**

  - **S102.2**

    - **There was a virtual meeting regarding CAN/ULC-S102 held at 9:30am Central on Thursday May 29th focused on the following topics -**

Smoke Measurement Calibration: Explore the incorporation of heptane for calibration of the tunnel instead of red oak.

Action item(s) - develop details for S102 compliant labs to run trials and see what results are obtained.

Velocity Measurement Adjustments: Addressing tolerance discrepancies caused by metric conversion in earlier versions of the standard.

Action item(s) - change S102 & S102.2 to correct the anomaly brought on by the metrification rounding errors.

There should not be any issues expected from these topics for air duct and air duct materials testing methods and results.

  - **New editions of the UL Canada standards will remove the "S" and the hyphen as revisions are made and published.**

- **No other UL-US or UL-C standards activity to report.**

2. **NFPA 90A & 90B Standards**

- **2027 Edition**

  - **NFPA 2027 cycle is in process with *"First Draft"* revisions posted**

- **The Technical Committee's First Draft was posted on March 25, 2025**
- **Public comments to this First Draft will be accepted up to June 3, 2025.**
- **The TC will meet in August or September 2025 to review any comments with the Second Draft Report posting date to be March 3, 2026.**
- **NITMAM closing date of March 31, 2026.**
- **NITMAM posting date of May 12, 2026.**

- **Public Inputs previously reported as of interest to ADC members that "moved forward" to first revisions to the standard -**

  - **90A Public Inputs 4 & 5: *Materials composed exclusively of glass, steel, concrete or masonry, without any organic compounds shall not be required to be tested to be acceptable as noncombustible materials.* This public input was moved (*accepted, with modification*) for first draft revision.**

90A First Draft Revision -

4.3.1.2
Materials composed of the following and containing no combustible components, shall not be required to be tested to be acceptable as noncombustible materials.

(1) Glass
(2) Steel
(3) 5xxx and 6xxx series aluminum alloys
(4) Concrete containing no organic ingredients
(5) Masonry containing no organic ingredients

90A First Draft Revision -

6.4.1
Pipe and duct insulation and coverings, duct linings, vapor retarder facings, adhesives, fasteners, tapes, and supplementary materials added to air ducts, plenums, panels, and duct silencers used in duct systems, unless otherwise provided for in 6.4.1.2 6.4.1.3 or 6.4.1.3 6.4.1.4, shall have, in the form in which they are used, a maximum flame spread index of 25 without evidence of continued progressive combustion and a maximum smoke developed index of 50 when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, or with UL 723, *Test for Surface Burning Characteristics of Building Materials*. Pipe and duct insulation and coverings, duct linings and their adhesives, and tapes shall use the specimen preparation and mounting procedures of ASTM E2231, *Standard Practice for Specimen*

Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics **meet both of the following.:**

1. **in In the form in which they are used, a maximum flame spread index of 25 without evidence of continued progressive combustion**
2. **and a A maximum smoke developed index of 50 when tested in accordance with ASTM E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*, or with UL 723, *Test for Surface Burning Characteristics of Building Materials*.**

6.4.1.1
Pipe and duct insulation and coverings, duct linings and their adhesives, and tapes shall use the specimen preparation and mounting procedures of ASTM E2231, *Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics*.

6.4.1.2
Pipe and duct insulation shall be listed and labeled.

6.4.1.3
The flame spread index and smoke developed index requirements of 6.4.1 shall not apply to air duct weatherproof coverings where they are located entirely outside a building, do not penetrate a wall or roof, and do not create an exposure hazard.

6.4.1.4
Smoke detectors, as required by 11.4.4, shall not be required to meet flame spread index or smoke developed index requirements.

90B First Draft Revision -

4.2 Testing,
Materials composed of the following and containing no combustible components, shall not be required to be tested to be acceptable as noncombustible materials.

(1) Glass
(2) Steel
(3) 5xxx and 6xxx series aluminum alloys
(4) Concrete containing no organic ingredients
(5) Masonry containing no organic ingredients

3. **International Code Council**

- **2027 Group A & B Timeline**

- **Group A (IBC-E, IBC-FS, IFC, IFGC, IMC, IPC, IPSDC, IRC-M, IRC-P, ISPSC, IWUIC)**

    - **Posting of CAH #2 results - 12/2**

Review of CAH #2 minutes indicate no new actions from CAH #1 for the items previously discussed during the last TC report.

- **Open for comments to CAH #2 action - 1/20/25 to 3/14/25**
- **Posting of public comments to CAH #2 - 3/5/26.**

Any relevant public comments and committee actions still need to be reviewed.

- **Public comment hearings - 4/19 to 4/28/26**

    - **Group B (Admin, IBC-G, IBC-S, IEBC, IgCC (Ch. 1 & App M), IPMC, IRC-B, IZC)**

- **Open for proposals - 10/15/24 to 1/10/25**
- **Posting of proposed changes - 3/13/25**
- **Committee Action Hearing #1 - 4/27 to 5/6/25**
- **Posting of CAH #1 - 6/3/25**
- **Open for comments to CAH #1 - 6/3/25 to 7/8/25**
- **Posting of comments to CAH #1 - 9/10/25**
- **Committee Action Hearing #2 - 10/22 to 10/30/25**
- **Posting of CAH #2 - 11/25/25**
- **Open for comments to CAH #2 - 11/25/25 to 1/5/26**
- **Post public comments - 3/5/26**
- **Public comment hearings - 4/19 to 4/28/26**

- **2024 IECC & IECC-R still need to be completely reviewed.**

    - **Commercial R-12 language is confusing and needs interpretation.**

        - ***R. Koerber submitted a formal interpretation request to ICC with response still pending as of this date.***

Code section reads -
C403.12.1 Duct and plenum insulation and sealing
Supply and return air ducts and plenums shall be insulated with not less than R-6 insulation where located in unconditioned spaces and where located outside the building with not less than R-8 insulation in Climate Zones 1 through 4 and not less than R-12 insulation in Climate Zones 5 through 8. Ducts located underground beneath buildings shall be insulated as required in this section or have an equivalent thermal distribution efficiency. Underground ducts utilizing the thermal distribution efficiency method shall be listed and labeled to indicate the R-value equivalency. Where located within a building envelope assembly, the duct or plenum shall be separated from the building exterior or unconditioned or exempt spaces by not less than R-8 insulation in Climate Zones 1 through 4 and not less than R-12 insulation in Climate Zones 5 through 8.
Questions to ICC -

(1) Is it the intention of this code section that ducts installed within attics and crawl spaces be insulated to R-8 in Climate Zones 0 through 4 and R-12 for Climate Zones 5 through 8?
(2) Are unconditioned attics and crawl spaces considered to be "within a building thermal envelope assembly"?

- **Residential language specific to ducts in conditioned space and ducts deeply buried in insulation needs thorough review and the potential impacts (such as condensation issues) determined, if any.**

- **For the IECC - starting with the 2024 edition, the energy code went into continuous maintenance with re-publication every three years.**

  - **Separate consensus committees oversee the development of the IECC Commercial and the Residential provisions.**

    - **IECC-CE (Commercial Consensus Committee)**
    - **IECC-RE (Residential Consensus Committee)**

  - **The IECC Residential committee also oversees the Energy Efficiency provisions in Chapter 11 of the IRC and its energy related appendices.**

  - **With the publishing of the 2024 IECC, comments were solicited for code change proposals from 10/7/24 until 12/9/24.**

    - **These proposals were collected and published in a Monograph on 1/6/25.**
    - **170 proposals were received for the Commercial provisions and 225 proposals were received for the Residential provisions.**
    - **Proposals that have initial action taken by the relevant consensus committees by 6/30/25 can be included in the 2027 IECC.**
    - **Proposals that do not receive committee action before the deadline will be considered in the 2030 development process.**
    - **Commercial and Residential Committee Action Reports should be published around 7/2/25.**
    - **Public Comment Draft #1 should be posted around 10/31/25 with monograph publication around 1/6/26.**

  - **The IECC code process, committee notices, meeting agendas and committee membership information can be accessed by going to https://www.iccsafe.org/committees/energy-iecc/.**

  - **A thorough review of the proposals to the 2027 IECC and relevant committee actions is yet to be accomplished by the Codes & Standards Interaction Sub-committee.**

4. IAPMO - UMC Revision Cycle

- **2027 Cycle is in the "comment" phase**

- **UMC TC meeting was held on 5/8 & 5/9. R. Koerber attended as a voting member representing the Air Duct Council.**

Proposals of concern that were previously reported -

- **Item #107 [602.1, 602.2] - removes allowance of concealed spaces as ducts and plenums.**

Seven (7) comments for this item were received and acted on by the TC -

Comment 1 - Accepted as submitted (ADC voted to reject)
Comment 2 - Rejected (ADC voted to Accept as submitted)
Comment 3 - Rejected (ADC voted to Accept as submitted)
Comment 4 - Rejected (ADC voted to Accept as submitted)
Comment 5 - Rejected (ADC voted to Accept as submitted)
Comment 6 - Accepted as submitted (ADC voted to reject)
Comment 7 - Accepted as submitted (ADC voted to reject)

Basic premise is that building cavities cannot be used as ducts or plenums unless they are constructed of material meeting requirements within the UMC chapter (i.e. - no gypsum materials or wood cavities allowed).

- **Item #135 [605.1.1, Table 1801.1] - excludes PU foam from current 25/50 FS/SD requirements and allows 450 for the smoke index.**

One (1) comment for this item was received and acted on by the TC.

Comment 1 - Rejected (ADC voted to reject)

Comment asked TC to reconsider approval but the technical committee continued to reject allowance of materials with 450 smoke index in plenums.

- **TC will submit final official votes for the meeting actions by 6/16.**
- **Distribution of Report on Comments (ROC) will be by 8/1.**
- **IAPMO Association Technical Meeting Convention in Palm Springs, CA will be held on 9/16 to confirm UPC and UMC committee actions.**
- **Standards Council meeting to consider appeals will be in November 2025.**

5. ACCA Manual D - Residential Duct System Sizing

- **Standards Task Team held regular meetings for revisions to Manual D. Ralph Koerber & Walter Robison were invited to participate.**
    - **Draft was sent to a review committee for peer review per ANSI requirements.**
        - **Several comments were received during the public review.**
    - **A new draft was prepared and recirculated for ANSI peer review.**
        - **The second review is now complete with no further comments received.**
    - **The draft has now been submitted to ANSI for final approval.**
        - **Publish date by ACCA will be ASAP after ANSI final approval.**

Addendum B

Action Items from Phoenix 2025 Annual Meeting

TC 5.2 Duct Design Action Items			
Number	Description	Assigned to	Status
1			
2			
3.			