

**ICC Reference Standards Committee  
Minutes  
Telephone Conference Call  
15 March 2013**

**1.0 – Introductions.** The meeting of 15 March 2013 was called to order at 11:00 AM EST. A quorum was present.

**1.1 – Attendance.**

Jonathan Humble (Chair)  
Greg Cahanin  
Robert Eugene  
Bill LeVan  
Steve Mawn  
Matt Mulvey  
Julie Ruth  
Steve Skalko

David Bowman – ICC Staff  
Ed Wirtschoreck – ICC Staff

**1.2 - Anti-trust notification.**

Chair advised that this committee is subject to the US anti-trust regulations. Various members throughout the meeting announced their abstention to discussing or taking on the assignment to review specific documents when it was a conflict of interest.

**1.3 - ICC Staff Announcements**

ICC staff notified the ICC-REF members that a link to read-only standards had been forwarded for their use in reviewing documents. Members were advised not to distribute copies of standards. ICC-REF members thanked ICC for this convenience.

Also, that ICC staff had not yet completed their compilation of the staff analysis of reference documents. Staff expects to post their results 1 April 2013.

**1.4 - Underwriters Laboratory representative**

Mr. Eugene noted that the “new” UL standards being proposed were placed on a CD and forwarded via USPS to each of the ICC-REF members. ICC-REF members thanked UL for providing this service.

**2.0 – Assignments and Process**

ICC-REF members reviewed the list of potential documents to review (See Attachment-A). Chair noted that the process will require members to report findings of review in relation to ICC Council Policy 28, specifically Section 3.6. Any violations found members were instructed to forward those findings, the section being violated, and a copy of the provision within the document where the violation was found. This material would be compiled and a ballot produced for the ICC-REF members to review and vote. Successful findings would then be compiled into findings and recommendations for the purpose of providing testimony at the code hearings.

### **3.0 – Schedule**

- 29 March 2013 chair expected to receive majority of findings.
- 5 April 2013 all remaining findings to be submitted and a ballot produced and distributed.
- 9 April 2013, from 11:00 AM to 1:00 PM web conference to address any remaining issues or procedural questions.
- 12 April 2013 all ballots due into chair for compilation and preparation for code hearings.

### **4.0 – Action Items**

- Chair to complete the spread sheet and distribute to ICC-REF members.
- S. Mawn and J. Humble to review ASTM list, and to identify new standards begin submitted and standards currently referenced by the I-family of codes. (See Attachment-A)
- ICC staff to address documents which ICC-REF had questions. (See Attachment-A)
- ICC staff to work with chair in populating the ICC-REF web page with minutes, and other materials as necessary.

### **5.0 – Adjournment**

Meeting adjourned at 12:00 Noon EST.

# ATTACHMENT - A

## Reference Documents, other than ASTM

### ICC-REF Assignments

#### AAMA (Mulvey)

- (In I-codes) [AAMA 450-10: Voluntary Performance Rating Method for Muller Fenestration Assemblies](#)
- [AAMA 504-05: Voluntary Laboratory Test Method to Qualify Fenestration Installation Procedures](#)
- (In I-codes) [AAMA 506-11: Voluntary Specifications for Impact and Cycle Testing of Fenestration Products](#)
- [AAMA 712-11: Voluntary Specification for Mechanically Attached Flexible Flashing](#)
- [AAMA 714-12: Voluntary Specification for Liquid Applied Flashing Used to Create a Water-Resistive Seal around Exterior Wall Openings in Buildings](#)
- (In I-codes) [AAMA 1402-09: Standard Specifications for Aluminum Siding, Soffit and Fascia](#)
- [AAMA/NPEA/NSA 2100-12: Specifications for Sunrooms](#)

#### ADA (Mulvey) (Do not confuse with ASNI A117.1)

- [2010 ADA Standards for Accessible Design](#)

#### AISI

- (ICC staff to review why non-AISI document listed here) [ANSI/NGWA-01-07 Water Well Construction](#)
- (In IBC) [AISI S200-12: North American Standard for Cold-Formed Steel Framing — General Provisions](#)
- (In IBC) [AISI S220-11: North American Standard for Cold-Formed Steel Framing — Nonstructural Members](#)

#### AMA

- (In IBC) [AAMA/WDMA/CSA 101/I.S.2/A440-11: NAFS 2011 — North American fenestration Standard/Specification for windows, doors, and skylights](#)

#### AMD (Ed to review, which one is correct? Are they the same?)

- [AMD 100 – XX \(FINAL DRAFT – October 17, 2012\): Structural Performance Ratings of Side-Hinged Exterior Door Systems and Procedures for Component Substitution](#)
- [ANSI/AMD 100-2013: Structural Performance Ratings of Side-Hinged Exterior Door Systems and Procedures for Component Substitution](#)

#### ANSI

- [ANSI A135.7-2012: Engineered Wood Trim](#)
- [E1.21-2006: Entertainment Technology Temporary Ground-Supported Overhead Structures Used to Cover the Stage Areas and Support Equipment in the Production of Outdoor Entertainment Events](#)
- [ANSI MH16.1: 2012: Specification for the Design, Testing and Utilization of Industrial Steel Storage Racks](#)

- [Commentary to ANSI MH16.1: 2012 Specification for the Design, Testing and Utilization of Industrial Steel Storage Racks](#)
- [ANSI/AMCA 210-07 - ANSI/ASHRAE 51-07: Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating](#)
- [ANSI/SBCA FS 100–2012: Standard Requirements for Wind Pressure Resistance of Foam Plastic Insulating Sheathing Used in Exterior Wall Covering Assemblies](#)
- **(Ruth)** [ANSI/DASMA 105-1992 \(R2004\): Test Method For Thermal Transmittance and Air Infiltration of Garage Doors](#)
- [ANSI/NFSI B101.3-2012: Test Method for Measuring Wet DCOF of Common Hard-Surface Floor Materials \(Including Action and Limit Thresholds for the Suitable Assessment of the Measured Values\)](#)
- [ANSI/NFSI B101.5-2012: Standard Guide for Uniform Labeling Method for Identifying the Wet Static Coefficient of Friction \(Traction\) of Floor Coverings, Floor Coverings with Coatings, and Treated Floor Coverings](#)

## APA

- (In IBC) [ANSI/APA PRG 320-2012: Standard for Performance-Rated Cross-Laminated Timber](#)
- (S249-12, Disapproved) [ANSI/APA PRR 410-2011: Standard for Performance-Rated Engineered Wood Rim Boards](#)

## ASABE

- (IBC) [ANSI/ASAE EP486.2 OCT2012: Shallow Post and Pier Foundation Design](#)
- (IBC, although may have supplement) [ANSI/ASAE EP559.1W/Corr.1AUG2010: Design Requirements and Bending Properties for Mechanically-Laminated Wood Assemblies](#)

## ASHRAE (Humble)

- [ANSI/ASHRAE 127-2012: Method of Testing for Rating Computer and Data Processing Room Unitary Air Conditioners](#)

## ASME (Levan)

- [ASME A112.18.8-2009: In-Line Sanitary Waste Valves for Plumbing Drainage Systems](#)
- [ASME B16.51: Copper and Copper Alloy Press-Connect Pressure Fittings](#)

## ASSE (Mawn)

- [ANSI/ASSE Z359.1-2007 Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components](#)

## ASTM

- <http://www.astm.org/icc>

## AWWA (LeVan)

- [ANSI/AWWA C900-07: Polyvinyl Chloride \(PVC\) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In. \(100 mm Through 300 mm\), for Water Transmission and Distribution](#)

- [ANSI/AWWA C903-05: Polyethylene—Aluminum—Polyethylene & Cross-linked Polyethylene—Aluminum—Cross-linked Polyethylene Composite Pressure Pipes, ½ In. \(12 mm\) Through 2 In. \(50 mm\), for Water Service](#)
- [ANSI/AWWA C905-10: Polyvinyl Chloride \(PVC\) Pressure Pipe and Fabricated Fittings, 14 In. Through 48 In. \(350 mm Through 1,200 mm\)](#)

## CRCC (Eugene)

- [CRRC-1 Standard](#)
- [DRAFT CRRC-1 Standard](#)

## CTI

- [CTI ATC-105S \(11\): Acceptance Test Code for Closed Circuit Cooling Towers](#)
- [CTI ATC-106 \(11\): Acceptance Test for Mechanical Draft Evaporative Vapor Condensers](#)
- [CTI STD-201 \(11\): Standard for Thermal Performance Certification of Evaporative Heat Rejection Equipment](#)

## CSA

Use login information below to access standards.

- <http://subscribe.csa.ca>
- **Access ID:** CThomas00
- **Password:** ICCPMG#1

## EPA (Humble)

- [EPA 40 CFR745](#)

## FEMA (Mulvey)

- [FEMA P-58 Pre-Release Version, \*Seismic Performance Assessment of Buildings, Volume 1 – Methodology, Volume 2- Implementation Guide, and Performance Assessment Calculation Tool \(PACT\)\*](#)

## FM

- [Approval Standard for Heat and Smoke Vents - Class Number 4430](#)
- [Approval Standard for Storage Cabinets \(Flammable and Combustible Liquids\) - Class Number 6050](#)
- [Approval Standard for Safety Containers and Filling, Supply and Disposal Containers - Class Number 6051 and 6052](#)
- [Approval Standard for Containers for Combustible Waste - Class Number 6921](#)
- [ANSI/FM Approvals 4996: American National Standard for Classification of Pallets and Other Material Handling Products as Equivalent to Wood Pallets](#)

## ICC-ES (Humble)

- [ESR 2292](#)

## IEEE (Eugene)

- [IEEE Std 515.1-2012: IEEE Standard for the Testing, Design, Installation, and Maintenance of Electrical Resistance Trace Heating for Commercial Applications](#)
- [IEEE Std 1635-2012: IEEE/ASHRAE Guide for the Ventilation and Thermal Management of Batteries for Stationary Applications](#)

## IIAR (Eugene)

- [ANSI/IIAR 2-2008, \(Includes Addendum A\): Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigerating Systems](#)
- [IIAR 6: Maintenance and Inspection of Closed-Circuit Ammonia Mechanical Refrigerating Systems](#)
- [IIAR 7-2013 – PR4: Developing Operating Procedures for Closed-Circuit Ammonia Mechanical Refrigerating Systems](#)

## ISO (Humble) (ICC staff to add ISO 50001 to list, see CE74-13)

- [ISO 8336: Fibre-cement flat sheets — Product specification and test methods](#)
  - (Ed to review) [Permissive Language](#)
  - (Ed to review) [Proponent Form](#)
- ISO 50001

## NFPA (Mulvey, Cahanin)

- [http://www.nfpa.org/aboutthecodes/list\\_of\\_codes\\_and\\_standards.asp](http://www.nfpa.org/aboutthecodes/list_of_codes_and_standards.asp)

## NFRC (Humble)

- [NFRC 300-2010: Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems](#)
- [NFRC 301-2010: Standard Test Method for Emittance of Specular Surfaces Using Spectrometric Measurements](#)

## NREL

- [NREL 2010: Numerical Evaluation of Indoor Air Distribution in High Performance Homes](#)
- [NREL/CP-5500-49010: Prediction of Air Mixing from High Sidewall Diffusers in Cooling Mode](#)

## NSF (LeVan)

- [NSF/ANSI 358-1 - 2012: Polyethylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems](#)
- [NSF/ANSI 358-2 - 2012: Polypropylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems](#)

## PCA (Mawn)

- [PCA 100-2012: Prescriptive Design of Exterior Concrete Walls](#)

## **RESNET (Ruth)**

- [BSR/RESNET 301-2013: Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings using the HERS Index](#)
- [Mortgage Industry National Home Energy Rating Systems Standard](#)

## **RMI**

### **(Ed to review, why here? RMI only referenced in IBC. Group B code change?)**

- [Commentary on the Specification for the Design, Testing, and Utilization of Industrial Steel Storage Racks - 2011 Edition](#)
- [Specification for the Design, Testing, and Utilization of Industrial Steel Storage Racks - 2011 Edition](#)

## **SRCC (Eugene)**

- [SRCC Standard 100: Minimum Standards For Solar Thermal Collectors](#)
- [SRCC Standard 300: Minimum Standards For Solar Water Heating Systems](#)
- [SRCC Standard 600: Minimum Standard For Solar Thermal Concentrating Collectors](#)

## **TRVB (Mulvey)**

- [TRVB 105: Fireplaces for Solid Fuel](#)
  - [Supporting Document](#)

## **UL (Skalko)**

- **515**
- **87A**
- **1821**
- **60335-2-40**
- **127**
- **300A**
- **2196**

## **WDMA (Two different editions of same standard?)**

- [I.S. 11-09: Industry Standard for Voluntary Analytical Method for Design Pressure \(DP\) Ratings of Fenestration Products](#)
- [I.S. 11-13: Industry Standard Analytical Method for Design Pressure \(DP\) Ratings of Fenestration Products](#)

# **ASTM**

## **ICC-REF Assignments**

(Skalko) [ASTM A269-10 Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service](#)

(Skalko) [ASTM A479/A479M-11 Standard Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels](#)

(In IBC and IRC) [ASTM B695-04\(2009\) Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel](#)

(LeVan) (In IRC and IPC) [ASTM B828-02\(2010\) Standard Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings](#)

(LeVan) (In IBC for 2010 edition) [ASTM C56-12 Standard Specification for Structural Clay Nonloadbearing Tile](#)

(In IBC) [ASTM C90-11b Standard Specification for Loadbearing Concrete Masonry Units](#)

(Skalko) (In IBC) [ASTM C126-12a Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units](#)

(Skalko) [ASTM C141/C141M-09 Standard Specification for Hydrated Hydraulic Lime for Structural Purposes](#)

(Skalko) (In IBC) [ASTM C212-10 Standard Specification for Structural Clay Facing Tile](#)

(In IBC, 2008a edition) [ASTM C503/C503M-10 Standard Specification for Marble Dimension Stone](#)



(In IBC, 2008a edition) [ASTM C568/C568M-10 Standard Specification for Limestone Dimension Stone](#)

(In IBC) [ASTM C615/C615M-11 Standard Specification for Granite Dimension Stone](#)

(In IBC, 2008a edition) [ASTM C616/C616M-10 Standard Specification for Quartz-Based Dimension Stone](#)

(In IBC, 2008 edition) [ASTM C629/C629M-10 Standard Specification for Slate Dimension Stone](#)

(In IBC) [ASTM C744-11 Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units](#)

(In IBC) [ASTM C946-10 Standard Practice for Construction of Dry-Stacked, Surface-Bonded Walls](#)

(In IBC, 2009 edition) [ASTM C1088-12 Standard Specification for Thin Veneer Brick Units Made From Clay or Shale](#)

(In IPC, IPSDC, and IRC) [ASTM C1177/C1177M-08 Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing](#)

[ASTM C1224-11 Standard Specification for Reflective Insulation for Building Applications](#)

(In IBC, IRC) [ASTM C1278/C1278M-07a Standard Specification for Fiber-Reinforced Gypsum Panel](#)

[ASTM C1313/C1313M-12 Standard Specification for Sheet Radiant Barriers for Building Construction Applications](#)

(Humble) [ASTM C1363-11 Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus](#)

(In IBC) [ASTM C1364-10b Standard Specification for Architectural Cast Stone](#)

(In IBC) [ASTM C1386-07 Standard Specification for Precast Autoclaved Aerated Concrete \(AAC\) Wall Construction Units](#)

(In IBC) [ASTM C1405-12 Standard Specification for Glazed Brick \(Single Fired, Brick Units\)](#)

[ASTM C1634-11 Standard Specification for Concrete Facing Brick](#)

[ASTM C1668-12 Standard Specification for Externally Applied Reflective Insulation Systems on Rigid Duct in Heating, Ventilation, and Air Conditioning \(HVAC\) Systems](#)

[ASTM C1707-11 Standard Specification for Pozzolanic Hydraulic Lime for Structural Purposes](#)

[ASTM C1743-12 Standard Practice for Installation and Use of Radiant Barrier Systems \(RBS\) in Residential Building Construction](#)

(In IBC, 2007 edition) [ASTM D1557-12 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort \(56,000 ft-lbf/ft<sup>3</sup> \(2,700 kN-m/m<sup>3</sup>\)\)](#)

(In IBC) [ASTM D1557-07 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort \(56,000 ft-lbf/ft<sup>3</sup> \(2,700 kN-m/m<sup>3</sup>\)\)](#)

[ASTM D1998-06 Standard Specification for Polyethylene Upright Storage Tanks](#)

(In IMC, IPC) [ASTM D3261-12 Standard Specification for Butt Heat Fusion Polyethylene \(PE\) Plastic Fittings for Polyethylene \(PE\) Plastic Pipe and Tubing](#)

(In IgCC) [ASTM D3960-05 Standard Practice for Determining Volatile Organic Compound \(VOC\) Content of Paints and Related Coatings](#)

[ASTM D5926-11 Standard Specification for Poly \(Vinyl Chloride\) \(PVC\) Gaskets for Drain, Waste, and Vent \(DWV\), Sewer, Sanitary, and Storm Plumbing Systems](#)

[ASTM D7425/D7425M-11 Standard Specification for Spray Polyurethane Foam Used for Roofing Applications](#)

[ASTM D7655/D7655M-12 Standard Classification for Size of Aggregate Used as Ballast for Membrane Roof Systems](#)

[ASTM D7672-12 Standard Specification for Evaluating Structural Capacities of Rim Board Products and Assemblies](#)

[ASTM D7793-12 Standard Specification for Insulated Vinyl Siding](#)

(In IBC) [ASTM E84-12c Standard Test Method for Surface Burning Characteristics of Building Materials](#)

(In IBC, IRC) [ASTM E108-11 Standard Test Methods for Fire Tests of Roof Coverings](#)

(In IBC) [ASTM E136-11 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C](#)

(In IECC, IRC) [ASTM E283-04 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen](#)

[ASTM E488/E488M-10 Standard Test Methods for Strength of Anchors in Concrete Elements](#)

[ASTM E1745-11 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs](#)

(Humble) [ASTM E1827-11 Standard Test Methods for Determining Airtightness of Buildings Using an Orifice Blower Door](#)

(In IECC, IgCC – Humble) [ASTM E1980-11 Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces](#)

[ASTM E2392/E2392M-10e1 Standard Guide for Design of Earthen Wall Building Systems](#)

(In IgCC) [ASTM E2397-11 Standard Practice for Determination of Dead Loads and Live Loads Associated with Vegetative \(Green\) Roof Systems](#)

(In IBC, IFC) [ASTM E2404-12 Standard Practice for Specimen Preparation and Mounting of Wall or Ceiling Coverings to Assess Surface Burning Characteristics](#)

[ASTM E2556/E2556M-10 Standard Specification for Vapor Permeable Flexible Sheet Water-Resistive Barriers Intended for Mechanical Attachment](#)

[ASTM E2579-12 Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning Characteristics](#)

[ASTM F1085-10 Standard Specification for Mattress and Box Springs for Use in Berths in Marine Vessels](#)

[ASTM F1577-05 Standard Test Methods for Detention Locks for Swinging Doors](#)

[ASTM F1760-01\(2011\) Standard Specification for Coextruded Poly\(Vinyl Chloride\) \(PVC\) Non-Pressure Plastic Pipe Having Reprocessed-Recycled Content](#)

[ASTM F1901-10 Standard Specification for Polyethylene \(PE\) Pipe and Fittings for Roof Drain Systems](#)

[ASTM F1970-12 Standard Specification for Special Engineered Fittings, Appurtenances or Valves for use in Poly \(Vinyl Chloride\) \(PVC\) or Chlorinated Poly \(Vinyl Chloride\) \(CPVC\) Systems](#)

(?) [ASTM F2158-08 Standard Specification for Residential Central-Vacuum Tube and Fittings](#)

[ASTM F2806-10e1 Standard Specification for Acrylonitrile-Butadiene-Styrene \(ABS\) Plastic Pipe \(Metric SDR-PR\)](#)

[ASTM F2855-12 Standard Specification for Chlorinated Poly\(Vinyl Chloride\)/Aluminum/Chlorinated Poly\(Vinyl Chloride\) \(CPVC-AL-CPVC\) Composite Pressure Tubing](#)

[ASTM F2969-12 Standard Specification for Acrylonitrile-Butadiene-Styrene \(ABS\) IPS Dimensioned Pressure Pipe](#)