

**ICC 815 Sizing Water Distribution, Drainage and
Venting Standard Consensus Committee (IS-SWDDV)**

Meeting #8 - Minutes

October 30, 2023

Chair: Gary Klein

Vice Chair: Philip Parisi

Secretariat- Ramiro Mata

The eighth meeting of the ICC 815 Sizing Water Distribution, Drainage and Venting Standard Consensus Committee (IS-SWDDV) was held on October 30, 2023, in virtual format. The meeting was conducted in accordance with ICC’s Consensus Procedures. https://www.iccsafe.org/wp-content/uploads/ICC-Consensus-Procedures-ANSI-approved-8_2_21-BOD-apprvd-8_27_21.pdf

1. Welcome - Chairman, Gary Klein, convened the meeting and welcomed attendees at 2:03pm EDT along with Staff Secretariat, Ramiro Mata. Mata reminded attendees about the ICC Code of Ethics and the Anti-Trust Policy, both of which can be found on the ICC 815 (IS-SWDDV) webpage. Mata also announced that the meeting will be recorded for internal reference only and that recording by anyone other than ICC staff is prohibited.
2. Roll Call – Klein called the meeting to order with a roll call of ICC 815 (IS-SWDDV) committee members – Symbol indicates present, indicates absent.

Committee Members

Regulator		User		Manufacturer		Builder	
<input checked="" type="checkbox"/>	Joseph Alexander	<input checked="" type="checkbox"/>	Esber Andiroglu PhD, PE	<input type="checkbox"/>	Marcus Elmer	<input checked="" type="checkbox"/>	Dan Buuck
<input checked="" type="checkbox"/>	Richard Grace	<input checked="" type="checkbox"/>	Gary Klein	<input type="checkbox"/>	Dave Parney	<input type="checkbox"/>	Joshua Trujillo
<input checked="" type="checkbox"/>	Terry Haughn	<input checked="" type="checkbox"/>	John Lansing	<input checked="" type="checkbox"/>	Lance MacNevin PE	Consumer	
<input checked="" type="checkbox"/>	Ross Wakefield	<input type="checkbox"/>	Juneseok Lee PhD, PE	<input checked="" type="checkbox"/>	Kyle Thompson PE	<input type="checkbox"/>	Tim Keane
		<input checked="" type="checkbox"/>	Philip Parisi Jr. PE			SDO/Test Lab	
		<input checked="" type="checkbox"/>	Tom Wise			<input checked="" type="checkbox"/>	Kathryn (Katie) Foster

ICC Staff – Tom Roberts

Interested Parties and Guests – Dan Cole, Drew Rich, Rich Houle, Natascha Milesi-Ferretti, Michael Cudahy, Jim Richardson, Adam Smith, Jeremy Williams, Lavanya Muttayan, Dr. Muhammad Bashir Lakhani

3. Quorum and Membership Review - With 13 committee members in attendance, Mata indicated the threshold of 10 for quorum has been met.
4. New Interested Party Members and First Time Attendees
 - a. Dr. Muhammad Bashir Lakhani – Techno-Consult International
 - b. Jim Richardson – City of Columbus, Ohio

- c. Lavanya Muttayan – Taylor Engineering
5. Agenda Review and Approval – Motion by MacNevin to approve, seconded by Foster. Motion approved.
6. Approval of Meeting #7 Minutes from September 21, 2023 – Motion by Thompson to approve, seconded by Buuck. Motion approved.
7. Research Update – Rich provided an update on Phase Two of their research, which includes:
 - a. Developing a document that uniformly translates technical terms,
 - b. Identifying and acquiring existing data sets,
 - c. Working on water space standardized measurement approach with AI and machine learning,
 - d. Monitoring buildings on campus for sustainability goals,
 - e. Acquiring outside funding for growth of effort through collaboration with other institutions or industry partners.
 - f. The University of Miami has acquired nine ultrasonic flow meters and is looking for residential billing data from single family homes to multifamily high-rise buildings.
 - g. Was granted access to fifty-unit apartment building for monitoring.
 - h. The university will install instruments on the Stanford building during holidays in December and complete the installation by mid-January when students are out of the building.
8. Project Planning – Klein opened discussions on the initial standard outline.
 - a. A suggestion was made to include a Preface to provide the committee’s thought process to develop the standard
 - b. The committee elected to add recirculating systems, climate variations affecting cold water temperatures and location of water piping affecting temperature of water supply to the Notes section of item 5, Water Supply System,
 - c. Under item 6, Waste and Vent, the committee elected to add typical minimum daily peak (Scandinavian Standard), typical minimum flow conditions in drain and waste pipe, urine diversion systems, and upstream and downstream induced pressure variations imparted by the sewer system on the building.
 - d. Under the Appendices section, the committee elected to add best practices, guidance, code type language, and Rosetta Stone.
 - e. The committee discussed creating a work plan for next year at the December meeting. Each group will come up with its own plan of activities, which they will present in January 2024.
9. Created the following Working Groups
 - a. Supply System – Klein, Williams, Wise, Richardson, Rich, Muttayan, Smith, Haugh, Wakefield, Roberts
 - b. Waste and Vent – Richardson, Rich, Klein Lansing, Buuck, Roberts
 - c. Rosetta Stone – Rich, Grace, MacNevin, Thompson, Klein, Roberts
10. Review of Action Items:
 - a. Plastic Pipe Introduction and Terminology – MacNevin
 - i. Overview of plastic piping materials used in North America during hot and cold-water distribution systems. He talked about different types such as CPVC, PEX, PEXT-RT, PPR, PP-RCT, as well as polybutylene not used anymore in North America but still used elsewhere around the world.

- ii. Plumbing Codes and Approved Materials - Discussed the plumbing codes in North America, which dictate what kind of products can be used for different applications including a table in the code that lists approved water distribution and piping materials, along with their respective standards from organizations such as ASTM and CSA. The codes also specify what type of fittings can be used for each type of pipe.
 - iii. Tubing vs Piping - Explained the difference between tubing and piping in North American plumbing systems. Tubing is typically used for residential plumbing while larger pipes are used in commercial plumbing, fire protection, and industrial applications.
 - iv. The sizing schemes for tubing use nominal tubing size (NTS) or copper tube size (CTS), while piping uses nominal pipe size (NPS) or iron pipe size (IPS).
 - v. Standard dimension ratios are important to consider when selecting plastic pipes.
- b. Cast Iron Presentation – Postponed to next meeting
 - c. Copper Presentation – Postponed to next meeting
11. New Action Items
- a. Working Groups to develop project plan (to include steps to be taken and due dates) by the December meeting – WG Chairs
 - b. Create Doodle poll and setup meetings for each working group - Mata
12. Next Meeting – November 27, 2023, at 1pm-5pm Central (2pm-6pm Eastern)
13. Meeting adjourned at 5:20pm EDT.