

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

**Meeting #12 - Minutes**

**February 22, 2024**

**Chair: Gary Klein**

**Vice Chair: Philip Parisi**

**Secretariat- Ramiro Mata**

The twelfth meeting of the ICC 815 Sizing Water Distribution, Drainage and Venting Standard Consensus Committee (IS-SWDDV) was held on February 22, 2024, 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](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 EST 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 type="checkbox"/>	Joseph Alexander	<input checked="" type="checkbox"/>	Esber Andiroglu PhD, PE	<input checked="" type="checkbox"/>	Marcus Elmer	<input checked="" type="checkbox"/>	Dan Buuck
<input checked="" type="checkbox"/>	Richard Grace	<input checked="" type="checkbox"/>	Gary Klein	<input checked="" type="checkbox"/>	Dave Parney	<input checked="" type="checkbox"/>	Joshua Trujillo
<input checked="" type="checkbox"/>	Terry Haughn	<input type="checkbox"/>	John Lansing	<input checked="" type="checkbox"/>	Lance MacNevin PE	<b>Consumer</b>	
<input type="checkbox"/>	Ross Wakefield	<input checked="" type="checkbox"/>	Philip Parisi Jr. PE	<input type="checkbox"/>	Kyle Thompson PE	<input type="checkbox"/>	Tim Keane
		<input type="checkbox"/>	Tom Wise			<b>SDO/Test Lab</b>	
						<input checked="" type="checkbox"/>	Kathryn (Katie) Foster

ICC Staff –

Interested Parties and Guests – Frank Schmidt, Dan Cole, Drew Rich, Natascha Milesi-Ferretti, Michael Cudahy, Jim Richardson, Adam Smith, David Nickelson, Michael Gormley, Rich Houle, Tania Ullah

3. Quorum and Membership Review - With 11 committee members in attendance, Mata announced the threshold of 9 for quorum was met.
4. Approval of Meeting #10 Minutes from January 25, 2024 – Moved by MacNevin, seconded by Parney – Approved.
5. Agenda Review and Approval – Moved to approve by Parney, seconded by Foster - Approved
6. Research Update – Rich provided the following update:

- a. Discussed the importance of data in developing an international methodology for water consumption patterns, highlighting variations based on location.
  - b. Reported progress on setting up data collection for Stanford building's water consumption, aiming for full functionality by next week with cold and hot water consumption measurements.
  - c. Sought help in obtaining monthly water billing data over an extended period from sources such as municipalities or companies like Guardian Water and Power, emphasizing its importance in understanding factors influencing water consumption patterns. The discussion delved into potential sources of this data including residential occupancies like multi-family dwellings.
  - d. Expressed the need for individual unit-based data collection, particularly for single-family homes and apartment buildings. They discussed the challenges of comparing consumption data at different levels and shared plans to filter data based on building classifications. Richardson agreed to reach out to Guardian Water and Power to request water use data.
  - e. Mentioned obtaining monthly consumption data from metered buildings in Miami Dade, with plans to expand this approach internationally.
  - f. Discussed the ongoing efforts to create a digital twin through Modelico for comparing real-world data with simulation data. The aim is to understand factors influencing total water consumption, despite the limitations of commercially available consumption data being only daily or monthly.
  - g. Parisi emphasized the importance of considering irrigation systems' impact on water usage, while Gary Klein suggested showcasing how regression analysis can predict total water consumption based on influential factors.
  - h. Rich explained plans for using Geographically Weighted Regression (GWR) analysis by examining individual census tracts' demographics and available information to predict total water consumption's influential factors. However, he noted limitations due to the resolution of census tract data impacting regression capabilities.
  - i. Parisi recommended seeking contacts within water departments or boards to obtain consumption data, highlighting that such data is typically available at a daily or monthly level.
  - j. Smith proposed leveraging his connections at Austin Water in Texas, which has been upgrading its meters and accumulating substantial detailed usage information over several years.
7. Working Group Updates
- a. Measurement – Lansing (Chair).
    - i. Met on January 18, 2024 and discussed objectives for the year
    - ii. Sensor list finalized at the beginning of the month
    - iii. Some sensors purchased. Work with UoM to coordinate the next steps for purchasing other sensors
    - iv. Committee to move forward with reviewing sensor placement standardized
    - v. Letter for building owners added to SharePoint site sent to the WG members for review/comments
    - vi. Will work with Mata to schedule next meeting at the end of March early April
  - b. Supply System –Wise (Chair) – No update

- c. Drain, Waste and Vent – Lansing (Chair)
      - i. Met on January 29, 2024 and created an outline of objectives for the working group.
      - ii. Current objectives are to outline key performance criteria, evaluate current design criteria, and provide recommendations for revised design considerations
      - iii. Will work with Mata to schedule next meeting at the end of March early April
    - d. Rosetta Stone – MacNevin (Chair) – Will work with Mata to set up a meeting.
- 8. Project Planning –
  - a. Mata presented a draft timeline for the standard's development, outlining key milestones from the introductory meeting to completion. The proposed schedule included committee reviews of preliminary findings, research plans for testing and validation, and completion of initial drafts by specific deadlines.
  - b. Andiroglu sought clarification regarding interdependencies between tasks listed in target dates within research-related activities, emphasizing better definition of scope associated with each date. He also suggested expanding the description for target dates to provide clarity on what each milestone entails.
  - c. Gary Klein encourages sharing detailed findings from initial monitoring sites and advises focusing on advising the research plan due to new territory.
  - d. Parisi emphasized the need to show progress and suggests starting with a framework before refining it with more data. Gary Klein supports this approach, encouraging working groups to make progress and fill in gaps while acknowledging that the draft schedule may slip.
  - e. Klein proposed circulating the project plan among committee members, urging them to mark up the document with their input or suggested changes regarding dates or content.
- 9. New Action Items
  - a. Upload NIBS report Clean Water, Sanitation, and the Built Environment to committee folder – Mata
  - b. Develop Working Group Work Plans – Working Group Chairs
  - c. Utility Data Requests
    - i. Send ICC 815 background to Smith for use with City of Austin data request – Mata
    - ii. Request water use data from Guardian Water - Richardson
    - iii. Send a copy of Cast Iron Presentation to Mata – Parney
- 10. Next Meeting – March 21, 2024, at 1pm-5pm Central (2pm-6pm Eastern)
- 11. Meeting adjourned at 5:12pm EST.