

## US Consumer Product Safety Commission Log of Meeting

Subject: CANENA Working Group 12 on UL 60335-2-89, Flammable Refrigerants in Refrigeration Systems

Date: October 31, 2019

Location: Toronto, ON (and teleconference)

Prepared By: Scott Ayers ([sayers@cpsc.gov](mailto:sayers@cpsc.gov), 301-987-2030), November 1, 2019

CPSC Attendees: Scott Ayers (via teleconference)

Non-CPSC Attendees: Contact Lauren MacGowens of AHRI ( [REDACTED] ) for a list of attendees

### Summary of Meeting:

Contact Lauren MacGowens of AHRI ( [REDACTED] ) for more details of this meeting.

This meeting kicked off CANENA Working Group 12, which will work to update the bi-national standard, UL/CSA 60335-2-89 Edition 1 for refrigeration systems. Charlie Hon of True Manufacturing will be the working group chair, AHRI will serve as the working group secretary (Ladan Bulookbashi or Lauren MacGowens).

This group will consider consensus as 2/3<sup>rd</sup> of those present voting affirmative on an item (an abstention vote will count against consensus). A quorum will be established when at least 50% of voting organizations are present. Each company/organization gets only one vote; large conglomerates will get one vote. Government agencies do not get to vote. SDO program managers cannot vote, but the technical side of an SDO does get one vote. AHRI will not vote.

The working mission statement for the working group is:

- The mission of Working Group 12 will be to develop a bi-national standard that is harmonized, to the greatest extent, with IEC 60335-2-89 Edition 3.

The working scope of the working group is:

- Working Group 12 will merge several additional product categories into the standard (a list of UL and CSA standards that will be merged into this standard will be supplied later).
- Review and include, as many as possible, requirements in IEC Edition 3.
- Review all proposals and comments submitted to UL and CSA, for possible addition to the standard

The technical discussions during the meeting included:

- A brief history of how the 150 g flammable refrigerant was selected
- A presentation from UL on the UL standards that will be withdrawn in favor of UL 60335-2-289
- A discussion of the group timetable. To make the 2024 ICC code cycle, UL 60335-2-89 should be approved by UL and CSA by January 2021. To make this deadline, the working group will need to meet frequently and regularly. Meeting locations discussed

included Arlington, VA and Northbrook, IL as primary locations with Houston, TX, Atlanta, GA, Toronto, ON, and Cleveland, OH as other possibilities. The group set up face-to-face meetings on the following dates:

- 11/18 (10am to 5pm), 11/19 (8am to 4pm), and 11/20 (8am to 2pm) in Arlington (tentative location);
- 12/10 (1pm to 5pm), 12/11 (8am to 5pm), and 12/12 (8am to 3pm) in Arlington;
- 1/21 (10am to 5pm), 1/22 (8am to 4pm), and 1/23 (8am to 2pm) in Arlington;
- 2/18 (10am to 5pm), 2/19 (8am to 4pm), and 2/20 (8am to 2pm) in Arlington (tentative location); and
- 3/23 (10am to 5pm), 3/24 (8am to 4pm), and 3/25 (8am to 2pm) in Arlington (tentative location).
- Teleconferences will set up on an as-needed basis
- AHRTI provided an update on current and recent research on flammable refrigerant distribution
- The group reviewed the proposals submitted to UL on UL 60335-2-89
  - Four proposals were submitted by UL technical staff for requirements that should have been included in Edition 1, but were not
  - One proposal on updating mechanical and electrical requirements
  - Three proposals submitted by AHRI
    - One for mechanical and electrical revisions
    - One for flammable refrigerants revisions
    - One for providing synergy with ASHRAE 15
  - The proposals not submitted by AHRI are fairly straight-forward, but the proposals submitted by AHRI, particularly the flammable refrigerant requirements are substantial and will take time to incorporate.
- The member of the working group has two action items. First to identify the principle voting member (if voting) of their organization and second to attempt to access the AHRI file sharing system

The next meeting will be 11/18 – 11/20, most likely in Arlington, however AHRI will confirm the location later.