



MEETING LOG

SUBJECT: ANSI/CSA FURNACE TECHNICAL SUBCOMMITTEE (TSC) WORKING GROUP (WG) MEETING

ON July 24, 2025, RE. RFC #23

FY 25 OP PLAN ENTRY: Gas Appliances - CO Sensors

DATE OF MEETING: 7/24/2025

LOCATION OF MEETING: Virtual

CPSC STAFF FILING MEETING LOG: Ronald A. Jordan

FILING DATE: 7/24/2025

CPSC ATTENDEE(S):

Ronald Jordan, ESMC

NON-CPSC ATTENDEE(S): Contact babak.owlam@csagroup.org for the full attendee list.

Summary of Meeting:

The furnace working group (WG) met to discuss Request for Change (RFC) #23 to ANSI Z21.47- ed. 9, Standard for Gas-fired central furnaces. RFC #23 is a proposed performance and safety provision that would require a carbon monoxide (CO) detection device (i.e., sensor) to be mounted on the ambient side of a gas furnace. As with each WG meeting, the WG chairman reiterated the rationale for the standard under development for carbon monoxide detection systems as being:

"Means shall be provided to shut down the furnace burner operation in the event of carbon monoxide level exceeding the upper threshold of 70 ppm for at least 10 minutes time weighted average, as measured by the carbon monoxide detection device (detection device) in the circulating air. The furnace burners shall remain shut down until the carbon monoxide level reduces below the reset threshold of 30 ppm for at least 10 minutes time weighted average, as measured by the detection device in the circulating air. During burner shutdown while there is a call for heat the air-circulating fan shall maintain airflow. If the detection device is inoperable [see action 8 for rationale] or is disabled [see action 8], the furnace burner operation shall remain shut down. If the detection device reaches the end of its specified service life, the furnace burner operation shall shutdown. Diagnostic information shall be available at the appliance." This provision does not apply to furnaces for outdoor installation only."

The WG discussed classification of CO detection devices and is actively seeking input from UL. The WG is considering specifying that CO detection devices meet Class B requirements. The WG also discussed which standard, UL 60730-2-101, Outline of Investigation for Automatic Electrical Controls - Part 2-101: Particular Requirements for Electrical Sensors and Sensing Elements or IEC 60730-2-23, Automatic electrical controls -



Part 2-23: Particular requirements for electrical sensors and sensing elements, should be used to certify the CO detection devices. Staff shared the following two CEN standards as possible standards to certify to or reference, if an appropriate US standard is not identified:

- BS EN 13611_2015, Safety and control devices for gas burners and gas burning appliances
- EN 16340, Safety and control devices for burners and appliances burning gaseous or liquid fuels— CPSDs

The meeting adjourned at 11:42 am est.

Next meeting: July 31, 2025