

MEETING LOG

SUBJECT: ANSI Z535 Committee on Safety Signs and Labels

FY 25 OP PLAN ENTRY: Warning Signs and Labels

DATE OF MEETING: 4/23/2025

LOCATION OF MEETING: Virtual and In-Person at the NEMA Conference Center (Arlington, VA)

CPSC STAFF FILING MEETING LOG: Tim Smith (ESHF)

FILING DATE: 4/25/2025

CPSC ATTENDEE(S): Tim Smith (ESHF) (Virtual)

NON-CPSC ATTENDEE(S): Contact ANSI for the full attendee list

Summary of Meeting:

This meeting of the ANSI Z535 Committee on Safety Signs and Labels, led by the chair of the Committee, Steve Hall, was intended to discuss the direction of the Committee and future changes to the Z535 series of standards. NEMA published revised versions of all seven Z535 standards within the last three years, with the next revisions scheduled for publication starting around the end of 2027. Proposed changes to the standards are due at the end of June 2025; there are no change proposals at this time.

One member of the Committee gave a presentation on the history and purpose of the Z535 series of standards. This was followed by two presentations related to research on safety messages in instructions and procedures. The first, presented by the Committee chair, briefly summarized earlier research that informed the development of the Z535.6 standard (Product Safety Information in Product Manuals, Instructions and Other Collateral Materials) that found safety information that was integrated into the instructions for use, rather than formatted similarly to product labels (e.g., signal word panel, borders), to be more likely to be read and to increase compliance. The second, presented by a guest speaker, discussed newer research on the same topic that had similar findings. For example, the research found that people were more likely to comply with safety information that had the same appearance as other procedural steps rather than having a more typical warning-like appearance (e.g., a preceding safety alert symbol); yet, the same people preferred safety information that had the more typical warning-like appearance. Using eye tracking, the research also showed that people tended to fixate longer on procedural information without the typical warning-like characteristics than those with these characteristics; however, the research found that increased fixation time itself did not appear to affect compliance, suggesting that attention was not the determining factor. The presenter emphasized that these findings do not necessarily apply to product labeling and similarly concluded that product labeling recommendations do not translate directly to the design of safety information in procedures. CPSC staff commented that for some highly familiar consumer products that are seemingly intuitive to use, consumers may choose not to read provided instructions, and there have been concerns about consumers treating warning labels on those products similarly for the same reasons. The Committee discussed the possibility that consumers are accurately recognizing the information as safety-related, which allows them to



choose whether or not to ignore the information. The Committee also discussed the possibility of using the first step in a procedure to describe the meaning and importance of certain safety elements to encourage consumers to take the time to read them when they see them later in the procedure. Staff raised doubts about the effectiveness of this approach, noting that if consumers are trying to carry out a procedure, and the first step is not actionable, those consumers are likely to just move on to the next step. The Committee also discussed the challenges of balancing what is effective with what is needed for product liability purposes.

The Committee discussed possible future directions for the current Z535 series standards, including the following topics:

- Wordless warnings. One member raised the possibility of allowing for the use of a hazard severity panel, consisting solely of a safety alert symbol and an appropriately colored background (i.e., safety red for DANGER, safety orange for WARNING, and safety yellow for CAUTION), rather than a signal word panel. The international standard for the design of product safety labels, ISO 3864-2, allows for this "wordless" option.
- Identify safety symbols that have passed testing. One member raised the possibility of identifying safety symbols that have already passed comprehension testing, as a resource for users of the standards. The Committee noted that this topic had been discussed previously and that there are continued concerns about advocating for specific symbols or the implied endorsement of those symbols, and the possible liability associated with that possibility.
- Adoption of ISO 7010. One member raised the possibility of adopting the international standard, ISO 7010, which establishes a system of graphical symbols for use in safety signs, either through the creation of a new Z535 standard or by reference within the informative annex of the Z535.3 standard. The Committee noted that this topic, too, had been discussed previously. The Committee discussed how most safety symbols in ISO 7010 have either not been tested for comprehension or have not passed comprehension testing, and there was substantial concern about adopting the standard in any way.

CPSC staff had to depart the meeting early and was not present for the discussions that followed.

Next Steps:

The ANSI Z535 Committee is seeking change proposals for the various Z535 series standards and individual subcommittees will consider these proposals.