DECIPHERING SAFETY SYMBOL COMPLEXITIES

By Erin Earley

For those that follow the "On Your Mark" column, you know that ANSI Z535 and ISO 3864 – the voluntary, consensus standards in the U.S. and internationally – provide critical guidance for developing today's most effective on-product labels and warnings. That's why, in our last article, we focused in on understanding the latest safety label formatting options available to you, per the most recent updates to these best practice standards. Now, we're going to cover specifics on symbol use – one of the fundamental elements of your labels – and options for handling complexities you may be facing.

WHAT IS A SAFETY SYMBOL?

Also known as pictograms, pictorials, or glyphs, safety symbols can help to communicate a particular safety message – which is a key part of accident prevention and keeping people safe from harm – without the use of words. ANSI Z535.3 Criteria for Safety Symbols defines a safety symbol as a configuration that includes an image, with or without a surround shape, that communicates a message – usually a hazard or precaution to avoid a hazard – without words.

SYMBOL BASICS

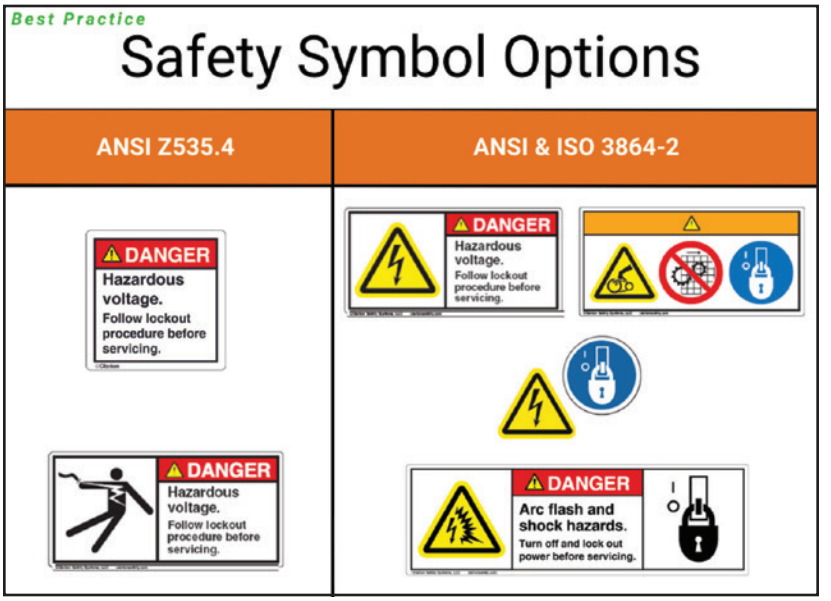
"Depending on how you choose to implement the ANSI and/or ISO standards, you have the option to use labels without symbols, with only symbols and no text, or a combination of symbols and text," says Angela Lambert, head of standards compliance at Clarion Safety Systems. "However, the use of symbols is essential to the ISO standards and is encouraged by ANSI. That's because symbols can make labels more noticeable, communicate across language barriers, and can also help to convey and reinforce hazard-related information to a product's user."

ANSI VERSUS ISO

Using symbols in your safety labels. It sounds simple enough. Yet, how to apply the best practices from the latest ANSI and ISO standards for symbols to your products in today's global marketplace can be challenging.

Consider these differences in the current ANSI and ISO standards:

- According to ISO 3864-2, product safety labels must use at least one ISO-formatted safety symbol, where the symbol is placed in the colored surround shape. In ANSI, except for the safety alert symbol in the label's signal word panel, symbols are optional – not a requirement.
- Per ISO 3864-2, "wordless" formats that use only symbols and no text may be used. ANSI does not currently include this wordless format option, but allows its use by way of its section 3.1.1 which allows the use of ISO formats.



Various Symbol Use Options for Safety Labels According to ANSI Z535.4 and ISO 3864-2

- ANSI Z535.3 states that there are four types of safety symbols: hazard alerting, mandatory action, prohibition, and information (this last type, however, is typically used in general safety or fire safety signs). ISO 3864-2 details five total categories of symbols, yet three of these effect product safety labels: warning, mandatory action, and prohibition. While the three main categories of symbols generally align, how they're implemented per ANSI and ISO contrasts; see the next point on surround shapes.
- ANSI Z535.3 states that a safety symbol may or may not use a surround shape – a geometric configuration around the image that conveys additional safety information. This contrasts with ISO. ISO safety symbols, the category of symbols used on your product safety labels, use a colored surround shape (a triangle, circle, or square) to define their overall safety function and to make these symbols more easily noticed and recognized.

SYMBOL COMPLEXITIES

And, there's more in terms of challenges. "Many manufacturers are at a point where they recognize the benefits of a symbol only or wordless approach for labels used on their products or product lines, and would like to move in that direction. But, because of factors like the sheer number of symbols involved in the warning, or the complexity of the message at hand, they're struggling," Lambert says. Here, Lambert stresses, there's not one easy solution; it's about working through the right options for your product and for your audience. "That may mean that it's not possible to go completely the symbol-only route to communicate the intended hazard and safety information; it may be finding a middle ground in the symbol and text use, as well as leaning on product manuals and safety training, as you continue down that path towards symbol-only formats."

Another point of confusion is around when and when not to use ISO 7010 safety symbols. "ISO 7010 is a technical standard for graphical symbols. It's an ISO collection document – essentially a library – of the symbols standardized by ISO for product safety labels (in addition to signage like exit path markings, water safety signs, and escape plans)," says Lambert.

"Product manufacturers may find themselves in a situation where an ISO 7010 symbol isn't available. And that's okay. When choosing symbols, look for the most appropriate fit or meaning for the application of use or message you're trying to convey. Yes, you should start with reviewing ISO 7010 in order to use a standardized, registered symbol – but another option is to select one based on the principles of the standard. That way, you'll still have visual consistency, allowing the symbols to build upon each other for one language of visual safety communication."

SYMBOL USE IN PRACTICE

While there are challenges to face in how you use symbols, it's not a bleak situation by any means. Looking back in the history of safety, a century ago, there was little in the way of safety regulations – and no safety sign, label, or symbol standards. Today, when it comes to labeling, we're fortunate to have the ANSI and ISO standards in this area, to continue to assess and document new and improved methods for visually communicating safety information. While the standards might not provide a black and white answer on the decisions you need to make in using safety labels and symbols, they provide a guideline – both for your unique situation and to keep all of us on the path towards consistency and improved comprehension.

"As someone who's been involved in the ANSI and ISO standards for over a decade, it's rewarding and encouraging to see trends moving towards more widespread symbol use and to standardization. Ultimately, these are steps in the right direction for improved safety and better protecting people from harm," Lambert says.

Erin Earley, head of communications at Clarion Safety Systems, shares her company's passion for safer products and workplaces. She's written extensively about best practices for product safety labels and facility safety signs. Clarion is a member of the ANSI Z535 Committee for Safety Signs and Colors, the U.S. TAG to ISO/TC 145, and the U.S. TAG to ISO 45001. Erin can be reached at eearley@clarionsafety.com.

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