



Updating the code

ICC's development of the 2024 I-Codes continues

by Mark S. Graham

From March 27 to April 6, NRCA's technical services staff participated in the International Code Council's Group B committee action hearings for development of the 2024 I-Codes. More than 750 code change proposals were considered during 104 hours of in-person committee hearings. Following are some highlights of the roofing-related proposals and the next steps in ICC's code development process.

Code development process

ICC split its development cycle for the 2024 I-Codes into two groups with Group A occurring in 2021 and Group B occurring this year. In Group A, ICC's general, fire safety and plumbing committees heard several roofing-related code change proposals.

In Group B, revisions to the I-Codes Chapter 1-Administrative provisions and additional roofing-related code change proposals were considered. Most of International Building Code's Chapter 15-Roof Assemblies and Rooftop Structures and International Residential Code's Chapter 9-Roof Assemblies sections fall under the jurisdiction of ICC's structural committee and residential committee, respectively.

NRCA proposed 28 code changes, and 116 other proposals were



on NRCA's watch list as having some effect on roof system design and installation. Fifteen of NRCA's code change proposals were approved.

IRC

Code Change S22, Part II, adds the new ASTM International standard for synthetic underlayment, ASTM D8257, "Standard Specification for Mechanically Attached Polymeric Roof Underlayment Used in Steep Slope Roofing," to IRC's Table R905.1.1(1)-Underlayment Types.

In addition, Code Change RB260 correlates IRC's Table R905.1.1(1) to the code's text and adds clarifying statements

indicating underlayment is not required for wood shake roof systems over spaced sheathing and structural metal panel roof systems over open frame structures.

Code Change RB268 adds ASTM D3161, "Standard Test Method for Wind Resistance of Steep Slope Roofing Products (Fan-Induced Method)," testing and classifications as an acceptable method for determining wind resistances of slate roof systems.

Code Change RB274 combines IRC's Section R907.12-Thermoset Single-ply Roofing and Section R907.13-Thermoplastic Single-ply Roofing into a new section, Section R907.12-Single-ply Roofing. A new table, Table R905.12-Single-ply Roofing Material Standards, lists the required ASTM

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International product standards applicable to single-ply membrane roof systems. This code change proposal correlates with a similar code change appearing in IBC 2021.

Code Change RB280 adds a new section, Section R908-Roof Coatings. A new table, Table R908.2-Roof Coating Material Standards, lists the required ASTM International product standards applicable to roof coatings. This code change proposal correlates with a similar code change appearing in IBC 2021.

IBC

Code Changes S5 and S6 clarify the code requirements for attic ventilation and wind resistance, respectively.

Code Change S7 adds wind resistance testing and classifications for slate roof systems as in Code Change RB268 for IRC.

Code Change S11 removes IBC's outdated and unenforceable accelerated weathering test requirement for roofing products. More stringent, product-specific accelerated weathering already is provided by the applicable materials standard required in IBC's Section 1507-Requirements for Roof Coverings.

Code Changes S22, Part I, and S23 add ASTM D8257 to IBC's Table 1507.1.1(1)-Underlayment Types and correlate the table to the code's text. These code

changes correlate to IRC's Code Change S22, Part II, and RB260.

Code Change S28 combines Table 1507.4.3(1)-Metal Roof Coverings and Table 1507.4.3(2)-Minimum Corrosion Resistance into a single table providing material standard and corrosion-resistance requirements for metal roof coverings.

Code Change S36 adds a requirement for flashings for building-integrated photovoltaic systems to be installed according to the roof covering manufacturer's instructions.

What's next

ICC will accept public comments on Group B committee action until June 20. Public comments received and the agenda for ICC's public comment hearing will be posted on ICC's website, iccsafe.org, by Aug. 4.

ICC's public comment hearing will be held Sept. 14-21 in Louisville, Ky. NRCA technical services staff will take part in this public comment hearing.

ICC's online governmental consensus vote starts about two weeks after the public comment hearing and is open for two weeks.

Code change proposals approved during ICC's public comment hearing and by ICC's online governmental consensus vote, along with code changes approved during ICC's Group A code development hearings, will be published as the 2024 I-Codes, likely in late 2023. 🌟🌟🌟

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To read about ICC's Group A hearings, see "The first step," June 2021 issue.



Digital transformation may increase opportunities for women in construction

A recent joint survey by the National Association of Women in Construction and Safe Site Check In shows 71% of construction companies view digital transformation—integrating digital technologies to help reshape business processes—as a top priority, with new technologies opening doors for women in the workforce, according to forconstructionpros.com.

The survey reveals digital transformation can help enhance productivity, make construction jobs easier and address labor shortages.

“Digital transformation is gaining significant momentum in the construction industry,” says Crissy Ingram, executive director of the National Association of Women in Construction. “Along with making work easier without compromising the quality of the finished product, it also opens up more opportunities for women. The survey shows the importance of digital technology and, ideally, its potential to address some of the issues driven by the construction labor shortage.”

The organizations surveyed participants regarding digital transformation, the industry’s labor shortage and the effects of supply chain disruptions. Participants represented all areas of the construction industry in private and public sectors, including 600 National Association of Women in Construction members throughout the U.S. working in construction at companies with annual revenues ranging from \$500,000 to more than \$1 billion.

Following are key findings from the survey:

- Seventy-seven percent of respondents believe digital transformation will make their jobs easier; 17% believe it will have no effect; 5% believe it will make their jobs more difficult; and 1% believe it will eliminate their jobs.
- Ninety-five percent of respondents report new technologies designed for the construction industry have allowed them to be more productive.
- Seventy percent of respondents are excited about learning new technology at work; 24% feel indifferent; and 6% expressed frustration.

Additionally, when asked which of the newest construction technologies are most helpful, 72% of respondents said smartphone apps for managing projects and the workforce followed by GPS layout (13%), drones and robots (9%), and augmented reality and wearables (3%).

Creating a security-aware company culture is important

Cybercriminals regularly use social engineering techniques to deceive and manipulate employees, leading to financial losses, disrupted productivity and a tarnished company reputation, according to *Harvard Business Review*.

Attackers take advantage of people’s willingness to trust certain requests and mindlessly click on links or open virus-laden attachments.

Leaders often rely on IT departments to secure information, but to reduce the human-based liability, all employees must be committed to maintaining a security-aware culture. This involves leaders influencing their team members to adopt certain mindsets and behaviors.

Following are six strategies to help strengthen your company’s defenses against cybercriminals and create a security-aware culture.

- **Ask employees to voluntarily sign a security policy.** Demonstrating commitment makes people more likely to follow through and adhere to codes of conduct. Within the policy, it is useful to clearly state which types of information are sensitive and which are not.
- **Lead by example.** In situations of uncertainty, people look around them for cues regarding how to think and act. Senior leaders should lead by example and promote best-practice behavior.
- **Elicit reciprocity.** Social norms dictate if someone gives us something, we believe we should return the favor. Taking moves to secure an employee’s own data or identity can be meaningful first steps to elicit reciprocity.
- **Leverage scarcity.** People find objects and opportunities more attractive if they are rare or difficult to obtain. Senior leaders can use this when promoting the organization’s rare, exemplary security accreditations that could be compromised by a security breach. Leaders also should implement a classification system separating sensitive information from harmless information.
- **Be like those you lead.** Security professionals emphasize the importance of an empathetic mindset to achieve compliance. People are most influenced by others with whom they identify and like, and leaders build trust with workers when they act with humility and empathy.
- **Leverage the value of authority.** Organizations typically require employees to take annual digital security training. However, it is possible employees will not connect the contents to their daily behavior. When senior leaders personally instruct employees to comply with corporate information security, they will be more likely to get the desired outcome—provided the leader is viewed as a trusted source who understands security issues and stays informed.

