



The code's next edition

The 2024 I-Codes are nearing completion

by Mark S. Graham

From Sept. 14-18, 2022, NRCA's technical services staff participated in the International Code Council's Group B public comment hearing in Louisville, Ky., for development of the 2024 I-Codes. The hearing included 254 code change proposals, several of which were roofing-related. Following is a brief overview of the process, highlights from the roofing-related proposals considered and tentative timetable for publication of the 2024 I-Codes.

Code development process

ICC's code development process for the 2024 I-Codes was split into two groups. Group A occurred in 2021, and Group B occurred in 2022. From March 27 to April 6, 2022, ICC held its Group B committee action hearings, which was the first round of consideration for more than 750 Group B code change proposals. NRCA submitted 28 code change proposals, 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 by the Group B committees.

The Group B public comment hearing was an opportunity for code change proponents, opponents and the public to submit comments on



specific code change proposals acted upon at the committee action hearings. Code change proposals not receiving any public comments were placed on a consent agenda for ICC's governmental voting members' (code officials') approval.

Code change proposals with public comments—those not on the consent agenda—were considered individually and voted on by ICC's governmental voting members.

Public comments

No public comments were submitted on 14 of NRCA's 15 code change proposals approved at the Group B committee

action hearings. As a result, these 14 code change proposals were approved by ICC's governmental voting members.

NRCA submitted public comments on three proposals and had 28 other proposals on its watch list as having some effect on roof system design and installation.

NRCA submitted a public comment at the request of the Metal Building Manufacturers Association on our Code Change S28-22, which combines the International Building Code's Table 1507.4.3(1)-Metal Roof Coverings and Table 1507.4.3(2)-Minimum Corrosion Resistance into a single table and further revises this section to apply to all metal roof system coverings. The public comment was approved by ICC's governmental members.

NRCA's public comments on Code Changes S44-22 and S45-22 attempted to clarify and limit the scope of new requirements for

ponding instability analysis based on the current code and any resulting necessary modifications to roof structures for roof recovers where the existing roof slope is less than 1/4-in-12. Despite support from several code officials, NRCA's public comments on these code change proposals were not accepted. Code Changes S44-22 and S45-22 were approved by ICC's governmental voting members as modified by ICC's Structural Committee.

NRCA supported a public comment submitted by Owens Corning, Toledo, Ohio, regarding its Code Change S24-22, Part II, which adds clarifying language to the International Residential Code's application and attachment requirements, Table R905.1.1(2)-Underlayment Application and Table R905.1.1(3)-Underlayment Attachment. This code change proposal initially was disapproved at the Group B committee action hearings but was approved by ICC's governmental members with revisions from Owens Corning's public comment and industry support.

S24-22, Part II complements NRCA's code changes to S22-22, Part II and RB260-22, which adds the new ASTM International standard for synthetic underlayment, ASTM D8257, "Standard Specification for Mechanically Attached Polymeric Roof Underlayment Used in Steep Slope Roofing," and clarifies underlayment is not required for wood shake roof systems over spaced sheathing and structural metal panel roof systems over open frame structures.

NRCA also supported a public comment submitted by SPRI to its Code Change S43-22, which added roofing-specific requirements to Chapter 15-Roof Assemblies and Rooftop Structures for rooftop-mounted lightning protection systems. This code change proposal was disapproved at the Group B committee action hearings but was approved by ICC's governmental voting members with revisions

from SPRI's public comment and industry support. Approval of S43-22 complements Code Change G176-21, which was approved during ICC's Group A and added a new section, Section 2703-Lightning Protection Systems, to IBC 2024's Chapter 27-Electrical.

Next steps

From Oct. 10-24, 2022, ICC held an online governmental consensus vote, referred to as OGCV, to get additional ICC governmental voting member input on the votes at the Group B public comments.

The OGCV affirmed the votes on all items except for one nonroofing-related item, Code Change RB160-22, which was disapproved.

At this point, development of the 2024 I-Codes is complete with exception of the International Energy Conservation

Code® and IRC's Chapter 11 [RE]-Energy Efficiency, which are being developed using ICC's standards process. Development of the IECC and IRC's Chapter 11 [RE]-Energy Efficiency is ongoing and should be complete by midyear.

ICC indicated the 2024 I-Codes will be published in October 2023 with initial adoptions anticipated as early as early 2024.

Professional Roofing will keep you apprised of all roofing-related changes once the 2024 I-Codes are published. 📍🌐🌟



To read more about IECC's development and the Group B hearings, go to professionalroofing.net.

MARK S. GRAHAM is NRCA's vice president of technical services.

 [@MarkGrahamNRCA](https://twitter.com/MarkGrahamNRCA)



SPRI develops new lightning protection systems code language

SPRI has announced it developed new language clarifying how lightning protection systems are secured to commercial roof assemblies, roof coverings, metal edge systems and gutters that will be included in the 2024 edition of the International Building Code.®

The language will be added as new subsections in Section 1511, Roof-top Structures, and stipulates lightning protection system installations must be completed in accordance with the roof system or edge metal manufacturer's instructions or specifications from a qualified design professional. Lightning protection system components must be properly flashed where they are secured to or penetrate a roof.

The new language goes beyond existing installation standards outlined in NFPA 780, "Standard for the Installation of Lightning Protection Systems," and UL 96A, "Installation Requirements for Lightning Protection Systems."

SPRI worked closely with the Lightning Protection Institute, National Electrical Manufacturers Association, National Fire Protection Association, National Fireproofing Contractors Association, NRCA, Underwriters Laboratories and other stakeholders to build consensus to get the new language approved and adopted for the code.

"This is a significant update to the building code," says Amanda Hickman, president of The Hickman Group, Plantation, Fla., and SPRI's code consultant. "The current code does not address the impact lightning protection system attachments have on the roof. Any attachments to the [roof] assembly or edge metal system can alter the wind load and performance of these tested components. It is, therefore, important the original equipment manufacturer or a qualified design professional provide direction on the attachment methods to be used."

The 2024 edition of the IBC will be published toward the end of 2023. Once published, the new language for securing lightning protection systems on commercial buildings can be adopted by states and jurisdictions in the U.S. and around the world.

Why are construction companies more vulnerable to cyberattacks?

A study conducted by [safetydetectives.com](https://www.safetydetectives.com) reports construction companies are the third most common type of industry to be targeted by hackers, according to [equipmentworld.com](https://www.equipmentworld.com).

"Construction companies are one of the top targets for cybercriminals, and the U.S. is the number one target on the planet," says Nick Espinosa, chief security fanatic at cybersecurity firm Security Fanatics, South Barrington, Ill. "In the last few years, the construction industry has woken up to the fact that its members need cybersecurity advice. There's a recognition now in a way that there hasn't been."



Equipmentworld.com shares the following reasons why construction companies often are more vulnerable to cyberattacks.

- Construction companies often have inadequate firewalls or defenses.
- The construction industry uses multiple digital systems, software and communications devices across numerous job sites and offices, and company leaders may not know about all the devices or have them integrated under one security umbrella. If cybercriminals gain access to one of the systems, they may gain access to everything.
- Construction company executives often believe their data is not valuable, but if all the data disappears, executives likely would be willing to pay a lot to get it back.
- Supervisors and other managers often take laptops home with them at night or on the road for trade shows and remote jobs. Security risks increase with motel and trade show Wi-Fi or even when kids play on a laptop.
- When companies use old computers, operating systems and virus protection, they will be identified quickly by cybercriminals who will take advantage of the vulnerabilities.