



## Consider alternatives

Code interpretations, modifications and alternatives provide some code compliance flexibility

by Mark S. Graham

**B**uilding codes by their nature tend to be relatively restrictive; they limit designs, materials and construction methods to those specifically prescribed in codes and meeting the codes' performance requirements. However, most codes also contain provisions that allow code officials to accept limited, project-specific modifications and alternatives to code requirements.

You should be aware of a code's interpretation, modification and alternative acceptance provisions because these may provide a basis for acceptance of roof system designs and roofing products that do not specifically comply with a code's requirements.

### Alternative acceptance

In Chapter 1-Scope and Administration of the *International Building Code*,<sup>®</sup> 2018 Edition, Section 104-Duties and Powers of Building Official grants a code official the authority to enforce the code, render interpretations and adopt procedures to clarify the code's provisions. Such interpretations and procedures are not intended to waive code requirements.

Section 104.10-Modifications gives a code official authority to



grant code modifications for individual cases where there are impractical difficulties involved in carrying out one or more code provisions. Upon application by the building owner or owner's authorized agent, a modification can be granted provided the code official finds a specific reason that makes the strict letter of the code impractical. Any modifications should comply with the code's intent and purpose and should not lessen health, accessibility, life and fire safety or structural requirements.

Section 104.11-Alternative Materials, Design and Methods of Construction and

Equipment gives a code official the authority to accept an alternative provided he or she finds it satisfactory and compliant with the intent of the code provisions. Similarly, a code official can accept an alternative material or method of construction provided he or she finds it to be not less than the equivalent prescribed in the code in quality, strength, durability, effectiveness, fire resistance and safety.

Code modifications and alternative acceptance typically apply only to the specific project for which they were granted by the code official.

If the alternative design, material or method of construction submitted to a code official is not accepted, the code official should respond in writing, indicating the specific reason(s) the alternative was not accepted.

### Evaluation reports

When evaluating alternatives, such as roofing products that do not specifically comply with the code's requirements, code officials may request supporting information or data in the form of a research report from a recognized source. ICC Evaluation Services and UL Inc. are two recognized sources that issue such research reports, commonly referred to as "evaluation reports."

ICC-ES or UL can perform an evaluation of a product or system at a manufacturer's request to determine whether the product or system complies with a code's intent. The successful outcome of such an evaluation results in the issuance of an evaluation report. An evaluation report typically will indicate the specific code and code edition on which the evaluation was based and any specific use limitations or design and installation parameters necessary.

If a manufacturer has an evaluation report for a specific alternative product or system, it typically will make the report readily accessible to design professionals and contractors interested in using that manufacturer's product or system. Evaluation reports also are accessible on ICC-ES' and UL's websites.

An example where a product evaluation report may be useful is when seeking alternative code acceptance for synthetic steep-slope underlayments. Synthetic underlayments are not included in IBC 2018 largely because a consensus product standard for synthetic underlayment has not yet been published; ASTM International currently is developing one. By submitting a request for alternative material acceptance and using the

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specific synthetic underlayment manufacturer's evaluation report, the building official could permit the use of the synthetic underlayment using IBC 2018's Section 104.11.

### Just ask

IBC 2018's interpretation, modification and alternative acceptance provisions may provide building owners and their representatives, designers and contractors a basis for acceptance of roof system designs and roofing products that do not specifically comply with code requirements.

Reroofing projects that involve buildings constructed to a previous code's or earlier code edition's requirements are likely situations where an interpretation, modification or alternative acceptance of the currently applicable code's requirements may be necessary.

NRCA encourages you to reach out to your authority having jurisdiction and code official when seeking code interpretations, modifications and alternative acceptance. 🌱🌿

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## ASTM International launches first chapter in the United Arab Emirates

On March 11, ASTM International announced it will launch its first international chapter in the United Arab Emirates.

The announcement followed a planning meeting held between key industry, academic and government leaders at the Abu Dhabi Quality and Conformity Council. The Quality and Conformity Council uses ASTM International standards and helped host the ASTM International board of directors meeting in October 2016.

The group appointed a nominating committee to identify chapter officers and reviewed draft bylaws. Potential chapter goals also were discussed, including strengthening the involvement of UAE and other Gulf region technical experts in standards-related activities, sharing information regarding the UAE's societal needs and emerging trends so ASTM International can develop solutions, and providing a direct link between the UAE and ASTM International.

"We are excited to deepen our already strong relationships with industry and governments throughout the Gulf," says Katharine Morgan, president of ASTM International. "I look forward to seeing how this chapter will flourish and bring economic and societal benefits to this dynamic region."

## ICC enters strategic partnership with International Trade Administration

The International Code Council has entered into a formal strategic partnership with the U.S. Department of Commerce International Trade Administration to raise awareness of international standards in construction. With a shared goal of promoting the use of U.S. building codes and standards, the partnership will encourage global adoption of the I-Codes to enhance public safety in construction and infrastructure.

ITA helps U.S. companies succeed globally through international market analysis, trade and export assistance, and the enforcement of trade agreements. ITA gives Strategic Partner designation to entities that have demonstrated a willingness and ability to work with ITA's network to increase export promotion.

ICC represents the U.S. building safety and regulatory community in international dialogues and is expanding its global footprint, positioning the organization to help advance ITA's mission. Through the strategic partnership, ICC will continue to collaborate with ITA regarding several global trade initiatives in the Middle East, India and Southeast Asia.

"With our redefined focus on our global strategy, this new strategic partnership is not only exciting, but it will help us achieve our goals to reach beyond code adoption to help countries successfully implement a cohesive building safety system to achieve a safer built environment," says Dominic Sims, ICC's CEO. "At the same time, we will leverage our expertise and international expansion efforts to help U.S. exporters and standards developers in the construction industry to access opportunities overseas."

## Roofing industry ladder safety video now is available

NRCA and its industry partners have made available "Safe Ladder Practices in Roofing," a new industry-specific ladder safety video that also showcases the National Institute for Occupational Safety and Health's ladder safety app.

Falls and injuries from ladders are preventable. Misjudging the ladder angle, improper ladder setup and improper ladder use all contribute to accidents. The video demonstrates how to safely select, set up, use and remove ladders on job sites, including how the NIOSH ladder safety app can be used as a resource.



To view "Safe Ladder Practices in Roofing" and download the NIOSH ladder safety app, go to [www.professionalroofing.net](http://www.professionalroofing.net).



Available in English and Spanish, the NIOSH ladder safety app has an angle of inclination indicator that can be used on a mobile device, making it easy for a user to set up a ladder at the proper angle. The feature gives visual and audible signals when the ladder angle is set correctly. The app also has additional information about ladder selection, inspection, accessorizing and use.

NRCA is pleased to share the video with the roofing industry as part of the association's partnership with The Center for Construction Research and Training, and the United Union of Roofers, Waterproofers and Allied Workers.