FLASH

by Mark S. Graham

The Federal Alliance for Safe Homes (FLASH) Inc. provides recommendations intended to promote disaster safety and mitigate property loss. In many instances, FLASH's recommendations enhance conventional building techniques and building codes' minimum requirements that are intended to offer homeowners options for improved levels of safety and protection. Therefore, I encourage you to be familiar with FLASH and its recommendations.

About FLASH

FLASH is a nonprofit organization consisting of public, private and nonprofit entities that work to develop and deliver technically accurate, consistently reliable, useful techniques and information to homeowners to foster voluntary behavior changes in disaster mitigation.

FLASH provides specific recommendations for enhancing homes' landscaping, foundations, walls, windows, doors and roof assemblies.

Organizations involved in FLASH include the International Code Council; various regional, state and local government authorities; and recognized homeowner-focused companies, including Georgia-Pacific Corp., Atlanta; The Home Depot Inc., Atlanta; and State Farm Insurance Cos., Bloomington, Ill. NRCA is a national participating partner.

Roofing recommendations

Based on FLASH's analysis of severe windstorms, hip-shaped roofs are preferred over gable-shaped roofs because their aerodynamic properties are better at resisting high winds. If gable-shaped roofs are used, FLASH recommends special attention be paid to bracing gable end walls.

For example, for homes with high cathedral ceilings, FLASH recommends balloon framing end walls using full-height studs, concrete or solid masonry. Also, FLASH recommends hurricane straps be used to secure and reinforce all side wall-to-roof framing (rafter) connections.

Hip-shaped roofs are preferred over gable-shaped roofs

Regarding roof decks, FLASH recommends a minimum of ⅝-inch-thick plywood or oriented strand board sheathing be used to maximize resistances to wind and windborne debris. Use of 10-penny common nails or 8-penny ring-shank nails is recommended for attaching sheathing nailed in a 6-inch on-center pattern in the field of sheathing panels and 4-inch on-center pattern at sheathing panel edges.

Also, for roof decks that are at least one year old, FLASH recommends applying a ¼-inch bead of APA—The Engineered Wood Association AFG-01 certified wood adhesive along joints between wood framing members and roof sheathing. This adhesive has been shown to significantly increase the wind-uplift resistances of roof decks.

FLASH also recommends joints in sheathing panels be sealed with strips of self-adhering flashing tape or polymer-modified bitumen strips for additional watertightness and reduction of air leakage.

In addition, upgrading underlayment to a minimum of one layer of No. 30 underlayment for asphalt shingle roof systems and No. 90 underlayment for tile, slate and metal roof systems is recommended.

FLASH suggests choosing the proper primary roof covering (asphalt shingles, metal, slate, synthetic material, tile, wood) and specific product for the weather conditions that will most affect a home's roof. A product's compliance with the wind- and impact-resistance ratings appropriate for a home's location is critical when constructing disaster-resistant roof systems.

Also, FLASH strongly recommends homeowners use qualified, professional roofing contractors and offers specific guidelines for selecting contractors. These guidelines are consistent with NRCA's recommendations.

Closing thoughts

FLASH provides recommendations to offer interested homeowners options for improved levels of safety and protection for their homes. I encourage you to be familiar with FLASH recommendations and consider offering them to homeowners in disaster-prone regions.

Additional information about FLASH and its disaster safety and property loss-mitigation recommendations is available at www.flash.org.

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