

Impact-Resistant Shingles Penetrate Residential Market

Bill Seibert

Who upset Mother Nature? For months, she's been storming mad and hotter than ever. All summer, she has delivered some punishing weather across the country, starting with those hailstorms in the Dallas, TX, area that signaled just how powerful and relentless forces of nature can be.

In Dallas and throughout the Midwest, many MRCA members are working hard to help homeowners get their damaged roofs back to pre-storm conditions. But many homeowners are tired of replacing roofs every time there is a hailstorm. For them, returning to pre-storm conditions just isn't good enough anymore.

Thanks to improved technology, there is good news for property owners: Impact-resistant shingles are resulting in fewer and fewer homes needing reroofing after a small hail event. As a result, impact-resistant roofing seems to be gaining a major share in the residential roofing market.

After enduring a storm containing golf ball-size hail (at least 1¾ inches in diameter), the majority of laminated asphalt shingles are damaged to the point of needing repair. These repairs are typically covered by insurance, but the property owner still incurs some expense in the form of a deductible.

Class 4 impact-resistant roofing products, those that resist hail as large as 2 inches in diameter, protect the property owners from small storms and repeated reroofing—and all the related time and expenses.

Testing Procedures

The most widely recognized testing procedure to determine impact resistance of roofing products is the UL 2218 standard, which is used by most roofing product manufacturers and insurance companies. The UL 2218 test involves dropping steel balls of four different sizes onto a sample of a roofing product. If the product does not crack upon impact, the product earns an impact resistant rating.

There are four different impact resistance ratings:

- Class 1 signifies resistance to a 1¼-inch steel ball
- Class 2 signifies resistance to a 1½-inch steel ball
- Class 3 signifies resistance to a 1¾-inch steel ball
- Class 4 signifies resistance to a 2-inch steel ball.

Tips

Know the product's limitations. First, it is imperative that roofing contractors and their customers understand that impact-resistant roofing products do not guard against all sizes of hail. This product is proven resistant to certain size hail—2 inches or less—and should never be considered “hail proof.”

All roofs are vulnerable to damage by tennis ball-size hail, which measures about 2½ inches in diameter, and certainly by softball-size hail. Be sure to tell customers that Class 4 impact-resistant shingles are designed to withstand up hail up to 2 inches in diameter. Contractors must clearly explain to homeowners that while Class 4 impact-resistant shingles are a great product, they have limitations and cannot prevent damage in all situations.



Photo credit: Owen Corning's TruDefinition® Duration STORM™ Impact-Resistant Shingles

Properly train your crews. Second, crews must be trained in how to properly install these types of products and to follow manufacturers' strict installation guidelines. For example, if a Class 4 impact-resistant product is installed with a non-Class 4 ridge cap, the homeowner does not have a truly Class 4 impact-resistant roof system in place. Further, if a manufacturer requires the use of its own underlayment and a contractor uses another underlayment, the homeowner again may not have a true Class 4 impact-resistant roof system in place.

Educate yourself and your customer. Realize that if you choose to ignore a manufacturer's installation methods, you set yourself up for potential litigation. As professional roofing contractors, it is our job to know and understand the products available to us. Contractors need to continually educate themselves and their customers. Impact-resistant roofing manufacturers are constantly working to improve their products, but it is up to us as contractors to install them correctly and to explain the product's realistic performance—good or bad—to our customers.

Read up. There have been many articles written about impact-resistant products and the different methods used to test them. If you are installing impact-resistant products, I would suggest you search the Web for “impact-resistant roofing” and educate yourself with some of the research that has already been done for you. I recommend reading *Simulated Hail Damage and Impact Resistance Test Procedures* and *Hail: Sizing It Up* by Vickie Crenshaw and Jim D. Koontz, and *Let it Hail, Let it Hail, Let it Hail* by Terry Binion.

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