



Hail, Hail, the Roof's Still Here

Full Mitigation Best Practice Story

Kay County, Oklahoma



Ponca City, OK - The National Weather Service reports an average of four hail storms each year in Ponca City, Oklahoma with at least one producing stones 1 inch or larger. Before the 1990s, homeowners anticipated roof replacements well before their 25-year warranties expired. That changed when manufacturers began offering an extended life, pliable roof system of impact-resistant shingles. Ponca City homeowners Jerry and Bonnie Runyan took a chance and installed the new system, inspecting their roof for damage after each hail storm to find none. After nine years, the shingles still look new.

Runyan said, "Since spending about \$4,500 to install the impact-resistant shingles, we've had a lot of hail. Our neighbors, without the special shingles, have replaced their roofs after many storms. We've seen no damage with our roof and even lost less than a cup of the grit that covers it."

The Runyans replaced their roof as part of a 10-year State Farm Insurance Company program to verify the effectiveness of Class 4 impact-resistant shingles. The company chose Oklahoma because of its wide weather patterns – hail, ice, dangerous winds, and extreme temperature. Forty homeowners could participate in the study if they had storm-initiated roof damage severe enough to require roof replacement. Each homeowner chose the shingles, chose a contractor, and agreed to periodic inspections.

Results from the study supported State Farm's decision to offer Nationwide premium reductions for homeowners that installed the Class 4 impact-resistant shingles. Statistically, the company reports fewer claims after hail storms and high wind events. Fewer claims have resulted in offset premium reductions by more than dollar for dollar with homeowners also benefiting financially. State Farm agent Bill Leming said, "Because the impact-resistant roofing has so drastically lowered damage from hail storms, Ponca City policy owners could increase their homeowners' deductibles and decrease their repair and replacement timetables."

Leming also reported improved peace of mind for homeowners of impact-resistant roof systems. Before, the Runyans had lost their roof in 1998 while they vacationed in Alabama. Nine years later, when weather reports show hail in Oklahoma while they are away, the Runyans have no concerns about their 30-year roof that responds to 3-inch hail with no ill effects.

Runyan's neighbors have not been so lucky. Half of the homes in their neighborhood experienced roof damages of \$2,500 to \$4,000 after the last two severe hail storms. The damaged roofs required replacement and included several new roofs still under warranty.

"Besides the two severe hail storms, the roof survived a 100-year ice storm where ice coated power lines and tree limbs up to 4-inch diameters," said Runyan. "After each storm I checked for breaks, grit-loss, edge damage or wear and found none. With a conventional roof, any one of these storms would have easily broken the shingles. Our roof looks brand new."

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region VI**

State: **Oklahoma**

County: **Kay County**

City/Community: **Ponca City**

Key Activity/Project Information

Sector: **Private**
Hazard Type: **Severe Storm**
Activity/Project Type: **Retrofitting, Structural**
Activity/Project Start Date: **09/1998**
Activity/Project End Date: **01/1999**
Funding Source: **Property Owner, Residential**
Funding Recipient: **Property Owner - Residential**
Funding Recipient Name: **Property Owner**

Activity/Project Economic Analysis

Cost: **\$4,500.00 (Estimated)**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **No**
Value Tested By Disaster? **Unknown**
Repetitive Loss Property? **Unknown**

Reference URLs

No URLs were submitted

Main Points

No Main Points were entered.