

The Virgin Islands Consortium

No Structural Damage Observed In Homes Built With Updated Roof Design, FEMA Says

Disaster Recovery / **Published On March 28, 2018 03:13 PM /**

Staff **March 28, 2018**



After Hurricanes Luis and Marilyn in 1995 damaged or destroyed more than 21,000 Virgin Islands homes, FEMA granted about \$30 million through its Hazard Mitigation Grant Program to assist the islands' recovery. A portion of that grant funded the Home Protection Roofing Program, a vital element of the islands' post-disaster mitigation plan.

More than 20 years later, in the wake of Irma and Maria, a FEMA Mitigation Assessment Team visited the islands. One goal was to examine a sample of those roofs on St. Thomas to see how well they fared in the two latest hurricanes.

The result: no structural damage was observed in homes with the new roof design, FEMA said. Additionally, the team visited approximately 75 homes containing integral gutters, a mitigation effort to avoid what happened in 1995, when gutters broke loose and became destructive scythes. None of the new integral gutters broke loose. The integral gutters weren't even damaged, the team reported.

"This program was a success," said Jonathan Westcott, a civil engineer and member of the Virgin Islands Mitigation Assessment Team.

One team member, architect Tom Smith, said, "We're really pleased with the performance we're seeing out of these buildings." Smith was one of the original architects who developed the roof-modification design specifications.

Some members of the inspection team said they consider the greatest post-Marilyn accomplishment to be advancements in the U.S. Virgin Islands' building code. Prior to Marilyn, the code requirement for wind resistance was weak, but following FEMA's post-storm recommendation, the U.S. Virgin Islands adopted the 1994 Uniform Building Code, which requires significantly more wind resistance.

As a result, although Hurricanes Irma and Maria were more severe than Marilyn, buildings that were repaired or constructed under the 1994 code showed far less roof damage from Irma and Maria than structures built before 1994.