

CHS Students Build 'DAWG HAUS' for FEMA/RIEMA Outreach Program

Carpentry students built a structure that demonstrates improved building techniques used to prevent damage from storm events.

By [Lauren Costa](#) | 2/19/13



Three seniors in [Scott Leavitt's carpentry class](#) at the Regional Career and Technical Center at [Coventry High School](#) were given the opportunity to showcase their skills while demonstrating stronger building techniques for communities at risk of storm damage.

Mark Kucal, Eddie Bailey and Thomas Maulodin were selected by Leavitt to construct a scale model FEMA "DAWG HAUS" (Disaster Avoidance with Good Home Attenuating Unionization System) out of scrap supplies from their classroom to demonstrate safer and stronger building techniques. Leavitt explained that he chose the three students because of their future involvement in the [SkillsUSA](#) competition in March where they will utilize the skills they have learned to compete against students from neighboring communities in a series of carpentry tasks.

"I thought that this type of project would be a good experience to get them ready for what they'll face at SkillsUSA," he said.

The DAWG HAUS design is based on FEMA's publication *Home Builders' Guide to Coastal Construction* and demonstrates the strengthening of walls, ceilings and rafters with metal strips, straps and ties. This kind of construction transfers the load path caused by high winds from a building's roof to its foundation, preventing damage to the roof which could open the house to the destructive forces of wind and rain.

FEMA Hazard Mitigation Community Education Outreach Specialists Frances Hahn and Loretta Holliday, along with State Hazard Mitigation Officer Armand Randolph stopped by Leavitt's classroom to check out the project that took the three students one class period to complete. Mark, Eddie and Thomas had waited to shingle one side of the structure's roof to demonstrate the technique used to ensure as much disaster resistance as possible.

Hahn and Holliday visit communities at risk of or already affected by disasters to educate and inform residents about their options for rebuilding and future construction.

Hahn explained that many of the construction methods demonstrated by FEMA and projects like the DAWG HAUS model may exceed many building code requirements, therefore possibly costing more initially, however the extra cost is balanced by the investment's potential to save lives and property.

According to a study by the National Institute of Building Sciences, it is suggested that every \$1 spent on mitigation in building saves society an average of \$4 by preventing future damage. For example, \$2,500 spent on better construction could prevent \$10,000 in future disaster damage.

During their visit, the FEMA representatives presented the three students as well as Leavitt and Career Center Director Lori Ferguson with certificates acknowledging them for their participating in the community outreach program.

The DAWG HAUS model completed by Leavitt's students will be donated to a community in Rhode Island impacted by Hurricane Sandy for demonstration purposes.