

Healthy Homes Grantees in Region IV, Southeast, Caribbean

Name of Grantee: Advanced Energy
Name of Project: Healthy Homes: Healthy Lives – Phase II: the Indoor Air Quality and Health Impacts of a High Performance Homes Intervention
Amount Awarded: \$ 829,880
Year of Grant: 2004 HHTS (2004 grant awarded April 1, 2006)
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Project Partners: Advanced Energy, UNC School of Medicine, Center for Environmental Medicine, Asthma and Lung Biology, National Institutes of Health National Institute of Health and Environmental Sciences, Habitat for Humanity Habitat for Humanity of Wake County

Summary of Project Activities:

The study expands on and enhances Phase I of the project, which began in 2002. The focus of the study is on an investigational construction protocol, which is expected to improve indoor air quality in affordable high-performance houses thus reducing housing-related hazards. The construction protocol is designed to reduce relative humidity, better control home temperatures and reduce indoor air pollutants. Habitat for Humanity homes will be targeted. Families/housing units that receive retrofit interventions will be compared to control families/housing units that were not treated with the interventions. Retrofit interventions include mechanically controlled humidity, upgraded HVAC filtration system, and upgraded ventilation to dilute indoor air with outdoor air and high-performance exhaust ventilation in kitchen and bathrooms. Environmental assessments include airborne fungal spores, VOC, allergens in settle dust, particulates, radon, moisture, mold growth and energy efficiency. Health assessments include quality of life and asthma surveys.

Partner Organizations:

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Product Outcomes/Outputs:

Outcomes of the Alameda County Healthy Homes Project will include:

- Provide interventions for 50 housing units and study the effects
- Reduce indoor humidity at or below 50 RH – the level at which dust mites begin to thrive
- Prevent or retard establishment of house dust mites over time
- Reduce levels of indoor allergens and indoor air pollutants
- Deliver interventions that are affordable and do not require excessive energy usage for heating and cooling
- Increase occupant quality of life and decrease childhood asthma symptoms/severity
- Develop report of findings and share results