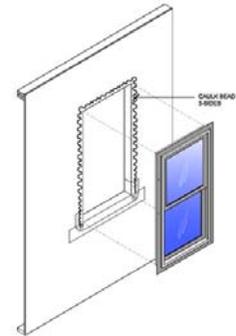


Mold and Moisture Control Protocol

Following Steven Winter Associates' (SWA) presentation on mold prevention to representatives of all 15 **Mercedes Homes** divisions, the company became convinced that it needed to implement corporate-wide standard approaches to moisture intrusion prevention, detection, and mold remediation. At Mercedes' request, SWA has been working with the homebuilder to develop a "Protocol for Moisture Intrusion and Mold Remediation." All Mercedes divisions are "working hard to deliver quality built homes, free of defects and moisture problems," says SWA's Bill Zoeller, who is heading up the project for **Building America's** CARB team. The company's commitment to quality construction and to healthy indoor environments is also being met by the creation of a "Mold Response Team" to address incidents of moisture and mold and to remediate those problems. Each division has designated a quality assurance person as the first point of contact should a moisture problem arise. A standardized information collection and response team will then follow-up with any needed remediation. The information gained from the event will be used to further refine and improve the product, and the response process. This quality control and feedback loop has already been used to improve window installation and flashing techniques (detail above), based on the SWA recommendation to standardize practices regionally, and create a specific field "check-off" by a supervisor who views, and approves, each installation. SWA continues to be a resource for mold prevention and remediation support for Mercedes Mold Response Teams.



Rigid-Plastic Ducts in an Attic?

Why not? Rigid-plastic ducts can be leak-free because of tightly-adhered joints and they can be smaller because they have lower friction losses due to rounded bends and smooth inner surfaces. With a Small Business Innovation Research grant from the **U.S. Department of Energy**, SWA is researching the concept and has recently installed a first generation system with CARB builder partner, **Outlook Construction**, in Cartersville, Georgia. Performance testing is scheduled for January. The HVAC contractor, Meadows Heating and Air, Inc., and local inspectors are enthusiastic about the project. The system was composed of prefabricated parts manufactured by ATS Duct Systems of California with an air handling system donated by Bryant. Ongoing research will focus on advanced plastic materials and configurations.



reHabitat Guide Documents Lessons



As part of its community-scale retrofit research efforts, CARB is developing a set of rehab guidelines for **Habitat for Humanity** affiliates located in cold climate zones. The publication, titled *The reHabitat Guide*, is being developed for Habitat construction managers to help them incorporate energy-efficient strategies in affordable housing retrofit projects in cold climate zones. The lessons learned through **Building America** and CARB's work with HfHGN in Newburgh, New

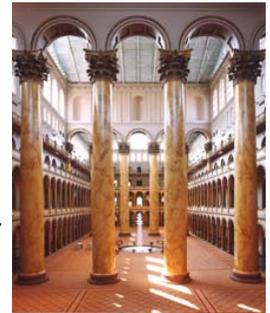


York, Baltimore, and Philadelphia are the basis for the retrofit strategies. Innovative building retrofit energy strategies and technologies will be selected for the guide to increase a house's overall product value and quality while significantly reducing the use of energy and resources. The guide will help construction managers to identify areas for increased performance (such as improved insulation, photo left) and conservation (such as developing an efficient water management plan). *The reHabitat Guide* is slated for publication in early 2004.

Building America at the Building Museum



The **National Building Museum** in Washington, D.C. was the site of a special presentation on energy-efficient and sustainable retrofit design strategies that have been learned through the **Building America** program and CARB. Steven Winter, president of SWA, gave a one-hour presentation to an audience of architects, contractors, designers, and others involved in the architecture and homebuilding industry. Winter's presentation surveyed the state of the homebuilding industry and identified various opportunities for increased comfort, healthier home environments, and affordability associated with whole-house and green retrofit techniques. Winter drew upon examples of technologies and design strategies proven through research and evaluation programs sponsored by Building America and other federal agencies to describe and emphasize retrofit practices that work. Among the topics covered were replacement of systems, alterations and additions, and property improvements. The presentation closed with a look to the future, emphasizing that the trends in retrofit design are leading to more efficient, lower cost, and healthy houses.



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