



The Role of Energy Ratings

What part do energy ratings play in **Building America's CARB** program? Last month, Richard Faesy of Energy Rated Homes of Vermont pointed out in an email to *CARB News* that rarely are energy ratings mentioned in connection with the various CARB projects around the country. Faesy noted that "the energy rating is an excellent way to synthesize the overall energy efficiency of your projects into a single recognizable term." Energy ratings are based on a protocol used by energy raters around the country to assess a house's relative energy performance. Rating systems, typically on a scale of 1 to 100, are compared to the Model Energy Code (MEC), where a house that meets the MEC earns a rating of 80. CARB's mandate, developed in collaboration with the **National Renewable Energy Laboratory (NREL)**, is for all CARB projects to be ENERGY STAR homes. ENERGY STAR, administered by the Environmental Protection Agency (EPA) and the **U.S. Department of Energy (DOE)**, requires a home to score at least an 86. CARB's rating goal of 86 or better is pursued within the context of working with large production home builders. "We put together the most cost-effective, logical energy package for production builders and the region/market they build in," says SWA's Dianne Griffiths, "focusing on those items that will produce a home to the ENERGY STAR standard." Recent CARB/builder initiatives have included collaboration with such energy raters as Energy Rated Homes Midwest in Indianapolis, Indiana, and Coastal Insulation Co. of Pensacola, Florida.



CARB/Cambridge Ribbon Cutting



Next month, the **CARB/Cambridge Homes** development of Carillon Lakes will have its official ribbon cutting, for what is perhaps the largest collection of CARB homes to date. The December 12 event will mark the completion of a range of CARB/Cambridge models for a development that will eventually include 1,200 homes, made up of single-family units (shown left), four-plexes, and six-plexes, with 12 different models in all. The single-family and six-plex units are adaptations of existing Cambridge models, while the four-plex model was newly designed. All of the units in this CARB/Cambridge development will be ENERGY STAR rated, with such energy-conservation features as low-e windows, insulated basements and crawlspaces, ductwork located in conditioned spaces, down-sized HVAC equipment, and setback thermostats.



NewSteel Floor Technology

A limitation of steel joists in homes has been the inability to pass duct runs, plumbing, and other systems through them. **CARB** is now



working with **Steel Floors, Inc.**, a Colorado-based company, to test the performance of a more accommodating steel joist. With research assistance from SWA, the company developed a new steel joist (photo) with large web cut-outs of 10-1/4 by 23 inches that can accommodate both supply and branch ducts, and can keep the ducts in the insulated space (a key to good mechanical design). CARB will be collaborating with a California distributor of Steel Floors and a production builder (to be selected) on demonstration projects featuring the performance characteristics of these new steel-frame components. Stay tuned.

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