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**FOR IMMEDIATE RELEASE:****Local Remodeling and Architectural Firms Team Up for Platinum Redesign**

There is no higher sustainable honor for a remodeled home than to be certified as LEED Platinum status. Ann Arborites Patricia Harroun, of Cardea Construction Company, and Michael Klement AIA, of Architectural Resource, are pleased to announce that, thanks to their artisanship and teamwork, one of their Ann Arbor homes, on 3160 Dwight Street, is in the process of certification for that prestigious green honor.

The home is one of only ten homes that will be on display as part of the upcoming 2015 NARI Tour of Remodeled Homes April 25 from 10 a.m. to 6 p.m. and April 26 from noon to 6 p.m. NARI, the National Association of the Remodeling Industry, is the only independent national association dedicated solely to the remodeling industry.

LEED, or Leadership in Energy & Environmental Design, is a voluntary, market-driven green building certification program that was developed by the U.S. Green Building Council ([USGBC](http://www.usgbc.org)) to recognize best-in-class building strategies and practices. Building projects satisfy prerequisites and earn points to achieve different levels of LEED certification. To achieve LEED Platinum status, the highest level attainable, a home must earn a certain point total in eight essential resource categories as determined through rigorous evaluations by three separate third-party entities: the local Green Rater, Greenlife Building; the State LEED Provider, GreenHome Institute; and the national Green Building Certification Institute.

Upon certification, the Dwight Street home will become one of 46 homes in all of Michigan, including both new construction homes and remodels, to have achieved Platinum status since the ranking system was developed in 2008. LEED Platinum homes offer owners healthier, resource-conserving, more durable, more sustainable, super energy-efficient dwellings.

Harroun and Klement describe the project as “modest in scope—broad in ambition.”

“It’s a modest, wood frame home in a neighborhood of modest homes,” Harroun says. “It was a factory-made kit that was designed and built as simply as could be in 1950 during a time of low energy costs, then delivered and set on the basement. It had drywall exterior sheeting and a basic

floor plan with two bedrooms and one bath. The kitchen and dining seemed an afterthought, in a widened-hall area between the side door and the living room.”

“Our clients have an emotional attachment to their home, and love their neighbors and neighborhood,” Klement adds. “Yet their home wasn’t going to age as gracefully as they intend to, nor provide manageable energy costs. They also have a strong desire to embrace sustainability.”

A deep Green whole house renovation and the modest addition of a third bedroom and an expanded kitchen accomplished all of their goals including imaginative up-cycling of products, an advanced insulation strategy, and a Not So Big®-inspired design. For example, interior home spaces are made for multiple uses. A home office becomes a guest bedroom or living room expansion when needed. An area near the family entry can be a sitting area or space for boots and shoes. The living room can also be a piano room or, for special gatherings, a large dining area. The new bedroom can double as an art studio. Where the rafters were too small, new framing was added in the attic and point loaded to the basement to achieve load capacity for a new roof design.

Up-cycling of products refers to new, re-visioned usage of older discarded products. At 3160 Dwight Street, cherry cabinets that the owners found that were removed from another kitchen undergoing remodeling itself became the centerpiece feature around which their new kitchen was designed. A sampling of other up-cycled products includes

- A marmoleum landing at the side door, built from material re-purposed by Harroun;
- Existing interior doors and the owners’ hardware reused wherever possible; and
- A bath mirror fashioned from a former bureau mirror.

As one major element of the team’s advanced energy management strategy, the building thermal envelope was completely retooled. New structural wall sheathing replaced the exterior drywall around the entire house. All new windows and exterior doors were installed. The exterior was wrapped with two layers of polystyrene, with every second layer seam offset from the first layer and all seams taped with special polystyrene tape, then weather barrier and siding. The top plates of all interior and exterior walls were specially treated to stop conditioned air from rising into the attic. The wall-to-floor seams and window- and door-framing seams were remodel-energy-package sealed.

Other components of the team’s advanced energy management strategy included

- A new, 96% efficient HVAC furnace combining air-to-air energy recovery exchanger with low natural gas heat;
- AC systems with all supply and return air ductwork redesigned, replaced, with sealed seams, and relocated to current conditioned space practices and codes;
- Insulated water lines in the plumbing system run no more than 20 lineal feet from the water heater; and
- Resource-conserving fixtures including low-flow plumbing fixtures and insulated recessed lighting fixtures with energy-conserving LED bulbs.

According to Harroun and Klement, “This renovation is an example of how a modest home in a modest neighborhood with owners of modest means can achieve the ambitious goal of LEED Platinum on a modest budget.”

Harroun and Klement have known one another and admired each other's work and passion for sustainability for many years. They are excited that their first major collaboration has made such an impact on their clients' lives, with the added benefit of aspiring to LEED Platinum certification.

Cardea Construction Company has been creating additions, renovating kitchens and basements, doing whole house make-overs, and more since 1985, providing unique upgrades or enlargements to homes in the Ann Arbor area with a woman-contractor-perspective. The company is an award-winning full-service “green” remodeler that specializes in energy efficiency and personalized service. For more information contact President Patricia Harroun, c/o Cardea Construction Company, 210 Little Lake Dr, Suite 12, Ann Arbor, MI 48103; (734) 665-0234, [patricia@cardeaconstruction.com](mailto:patricia@cardeaconstruction.com), [www.cardeaconstruction.com/](http://www.cardeaconstruction.com/) .

Architectural Resource, LLC, is a full-service, architectural design firm specializing exclusively in fine residential design of new homes, cottages, additions, remodels, and renovations with an emphasis on smart, sustainable, energy-efficient design. Architectural Resource's work has been recognized with over 150 design awards since its founding in 1991. For more information, contact Michael R. Klement, Principal, c/o Architectural Resource, LLC, 2301 Platt Road, Suite 30, Ann Arbor, MI 48104; (734) 769-9784, [mklement@architecturalresource.com](mailto:mklement@architecturalresource.com), [www.architecturalresource.com](http://www.architecturalresource.com).