



The New American Home

with Bayseal® Open Cell SPF Insulation

Project Name: The New American Home® 2015

Produced by: National Association of Homebuilders
Leading Suppliers Council and *BUILDER* Magazine

Builder: Blue Heron

SPF Subcontractor: Red Rock Insulation (walls);
Mac Roofing (roof)

Insulation: Bayseal® Open Cell SPF (walls),
Bayseal® 2.7 roofing foam/Bayblock™ coating (roof)

The Overview

The National Association of Home Builders Leading Suppliers Council and Builder magazine jointly produce this show home to demonstrate builder best practices and the most innovative new products. The New American Home (TNAH) 2015 is located in Henderson, Nevada just 10 miles from the Las Vegas strip. TNAH is built annually in conjunction with the International Builder Show to demonstrate current design and construction trends responsive to changes in homeowner lifestyles. TNAH 2015 is a 5,891 s.f. contemporary semi-custom home.

The Challenge

A guiding principle of TNAH is that overarching elements such as design and construction techniques, energy efficiency, safety, and market value can be replicated in whole or in part in housing built in any location and in any price range. For 2015, the builder also focused on creating a home easily modified for production communities. The biggest challenge was achieving net zero energy usage in the home.

The Solution

Blue Heron specified spray polyurethane foam insulation to help seal the building envelope in consideration of the home's desert location. SPF applicator Red Rock Insulation applied Bayseal® Open Cell insulation in all exterior walls, on the underside of the roof deck, and around all penetrations and framing. Blue Heron also insisted SPF roofing be used, given the large amount of penetrations in the roof deck to accommodate the photovoltaic array. The Bayseal® roofing system supplied by Coating and Foam Solutions is a seamless, monolithic boundary to help seal any penetrations; Mac Roofing of Las Vegas, NV installed the roof. The home's 15kw photovoltaic system will provide approximately 83% of the annual energy needs. An energy recovery ventilator (ERV) also preconditions incoming HVAC air.

The Benefits

Per an independent green rater, the home is expected to consume 78% less energy than a standard home. At this level of efficiency, the home is designed to provide \$4,616 in annual energy savings. Under blower door testing, the thermal shell achieves 4.81 air changes at 50 Pa. With the inclusion of solar power, the home achieved a HERS Index energy rating of -13. TNAH 2015 earned many performance ratings including: USGBC LEED-H Platinum, U.S. DOE ENERGY STAR certified and Zero Energy Ready Home, National Green Building Standard (NGBS, ICC 700) Emerald, U.S. EPA Indoor airPLUS, and Southern Nevada's Green Building Partnership Water Smart Home designation.





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Savings vary. Find out why in the seller's fact sheet on R-values. Higher R-values mean greater insulating power. Stated savings are estimates only. Actual savings may vary depending on type of home, weather conditions, occupant lifestyle, energy prices and other factors. No specific guaranty or warranty of energy or costs savings is being given and all such guaranties or warranties are expressly disclaimed



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