

# NGBS GREEN CASE STUDY

## The New American Home 2024



**NGBS  
GREEN™**  
NGBS.COM

### About the Project

**Project Type:** Single-Family New Construction

**Home Size:** 7,700 sq. ft.

**Location:** Henderson, NV

**Performance:** 2020 NGBS Green Certification, Emerald Level (Jan 2024)

**NGBS Green+:** [NET ZERO ENERGY & WELLNESS](#)

**Website:** [The New American Home](#)

### Project Team

**Builder/Architect/Interior Designer:**  
[Sun West Custom Homes](#)

**Landscape Architect:**  
[Vangson Consulting LLC](#)

**Verifier:** [Drew Smith](#) & [Josh Kane](#),  
[Two Trails, Inc.](#)

**Sponsored Products:** Various,  
coordinated via [NAHB Leading Suppliers Council](#)



### About TNAH

The New American Home (TNAH) is the official show home of NAHB's International Builders' Show (IBS). For several years, all TNAHs have been certified to the rigorous requirements of the National Green Building Standard (NGBS) and have earned NGBS Green certification from Home Innovation Research Labs. As always, TNAH 2024 features cutting-edge innovations and the latest in building and design trends, products, and techniques.



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### Green Features and Practices

#### Energy & Water Efficiency and Renewable Energy

- ◆ ENERGY STAR rated appliances, tankless water heaters, on-demand hot water recirculating pumps & variable speed pool pump; reduces energy loss through hot water delivery
- ◆ 31 kW solar array, provides home with total electricity generation
- ◆ Large overhangs, light-colored exterior finishes, and high-performance windows reduce solar heat gain and energy usage
- ◆ Well-insulated exterior walls (total R-value of 26.54) and air sealed attic (R-Value of 22.86)
- ◆ Heat pump ventless clothes dryer
- ◆ EPA WaterSense Certified lavatory faucets and toilets; reduces indoor water usage
- ◆ Micro spray, driplines, irrigation controllers, and water efficient landscaping consisting of native plants reduces outdoor water usage



#### Wellness Attributes

- ◆ Walking trails, fitness center, pool, tennis court, and family park
- ◆ Low-VOC paints, finishes, interior adhesives, and sealants
- ◆ Formaldehyde free and FSC-certified cabinets
- ◆ Excellent Indoor Air Quality (IAQ) through MERV 13 air filters, construction HVAC systems protection and post-construction IAQ inspection



# TNAH 2024 Features Two NGBS Green Certified Products (GCP)

## InSinkErator

Installed in the kitchen sink of TNAH 2024, [InSinkErator's Food Waste Disposers](#) provide an environmentally-friendly solution to reducing food waste in the kitchen. They are a convenient, alternative option for diverting food waste from landfills. By installing an InSinkErator Disposal, projects can earn one point under practice [607.2 Food Waste Disposers](#) towards their NGBS Green Certification.



## AeroBarrier

[AeroBarrier air sealing system](#) was installed in TNAH 2024 to seal the entire home, improving the home's overall energy efficiency. AeroBarrier pressurizes the building interior to seal air leaks from the inside, making it an effective automated technology to improve project's air tightness. Projects using this product can earn points for [several NGBS Green practices](#), including: 608.1 Resource-Efficient Materials (3 points), 701.4.3.1 Building Thermal Envelope Air Sealing (mandatory), 703.2.4 Building Envelope Leakage (4 points), 705.6.2.1 Air Leakage Validation (3 points), and 901.10 Interior Adhesives and Sealants (8 points).



## The Verifier Voice

*"It is what is on the inside that matters most."*

*"Achieving an Emerald NGBS Certification on a home is more than a piece of paper. It means the home is working as it was designed from the ground up. Two Trails has been the Sustainable Consultants and NGBS Green Master Verifier for The New American Home projects for 14 years, since the start of the program. This year's home is the most efficient scoring New American Home since the inception of this annual project. Building to a sustainable standard does not need to be a more difficult or extremely costly affair. Finding what makes sense for you and your clients is the best way to deliver a high-performance certified project."*

- Drew Smith, NGBS Green Master Verifier, Two Trails, Inc.

## Overview

TNAH 2024 is a one-story property located in an upscale neighborhood with floor-to-ceiling windows providing a stunning 180-degree view of the scenic mountains and the Las Vegas skyline. This home boasts many luxury features including five bedrooms, five bathrooms and a half-bath, state-of-the-art outdoor kitchen area, pool courtyard, wine storage system, EV charger, steam closet system, indoor-outdoor living features, a gas fireplace, a beautiful casita, numerous ultra-energy-efficiency elements, astonishing fire features, and two showcase garages.

TNAH 2024 earned the Emerald-level NGBS Green Certification, as well as the +NET ZERO ENERGY and +WELLNESS certifications. It also earned the ENERGY STAR and Indoor airPLUS labels.



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