

NGBS GREEN CASE STUDY

The New American Home 2021



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GREEN™**
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About the Project

Project Type: Single-Family New Construction

Home Size: 4,390 sq ft

Location: Winter Park, FL

Performance: NGBS Green Certification, Emerald Level (Jan. 2021)

Additional Badges Earned:

NGBS Green+ NET ZERO ENERGY & WELLNESS

Website: [The New American Home](#)

Project Team:

Architect/Builder: [Phil Kean Designs](#)

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

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

About The New American Home

The New American Home (TNAH) is the official show home of NAHB's International Builders' Show (IBS). Given its timing during the COVID-19 pandemic, this particular show home debuted virtually with online tours, information, and events during the 2021 IBS in February. For several years, all TNAHs have been built to the rigorous requirements of the National Green Building Standard (NGBS) and have pursued NGBS Green certification by Home Innovation Research Labs. As always, TNAH 2021 features cutting-edge innovations and the latest in building and design trends, products, and techniques.



Overview

The New American Home (TNAH) 2021 is among the first single-family homes to achieve NGBS Green Certification under the 2020 version of the standard. It was also among the first to earn the NGBS Green+ NET ZERO ENERGY and WELLNESS badges.

TNAH 2021 is a three-story property that features three bedrooms, four baths with one half-bath, a showcase three-car garage, innovative exercise room, and expansive outdoor kitchen.

The home includes many energy efficient features and is designed to be net zero energy, with rooftop solar array installed. Located in Winter Park's downtown corridor, the home is well situated for walkability and access to public transit.

NGBS Green Features/Practices

Health & Wellness:

- Walkable community near resources, retail, and restaurants reduces auto dependence and carbon emissions
- Located within one-half mile of mass transit station with pedestrian access
- Low-VOC and other low-emission finishes
- Whole-building ventilation using energy recovery ventilator (ERV) systems



NGBS Green Features/Practices

Energy Efficiency & Renewable Energy:

- 100% LED lighting
- Programmable communicating thermostats is installed to control or monitor energy consumption; smart refrigerator and HVAC systems
- Electrical vehicle charging station installed onsite
- With 13 kilowatt photovoltaic solar array, home is designed to be 116% higher-performing than the 2018 energy code
- Tight building envelope (constructed using [AeroBarrier](#)) boosts air leakage at 2.29 ACH; minimizes incoming contaminant and supports energy efficiency
- Insulated hot water pipes and hot water demand recirculation system reduce energy loss through hot water delivery
- Windows with low-e coating and argon gas fill limits solar heat gain and optimizes air tightness



Why is an NGBS Green Certified home a better place to call home?

"An NGBS Green Certified home is a better place to call home because it's a healthier, energy efficient, and sustainable home. NGBS Green Certified homes are designed and built with a thoughtful purpose keeping the environment in mind, which integrates perfectly with our design objective and why we strive to achieve the highest certification on all of our homes."

- Phil Kean, Architect/Builder

The Verifier Voice

"Two Trails has been the Sustainable Consultants and NGBS Green Master Verifier for The New American Home projects for many years now. We believe projects like this annual International Builder Show showcase home offers all trades within the building process a look at the many different cutting-edge products and green building techniques available today. It is our hope that you look at this project and can find one or more products or techniques that you can implement into you next project. We believe that building green does not need to be more difficult or extremely costly. 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.



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