



Henderson, Nevada

THE NEW AMERICAN HOME 2020



PROJECT DETAILS

Completed:

January 2020

Location:

Ascaya Community, Henderson, Nevada

Climate:

Climate Zone 5

Footprint:

6,428 square feet

Layout:

4 bedroom, 5.5 bathroom, 1 level

PROJECT TEAM

Builder:

Sun West Custom Homes

HVAC Contractor:

Desert Valley Heating & Cooling

Energy Rater:

Two Trails Inc.



HVAC + IAQ

SEER: 17.4

HSPF: 10.5

Zoned Comfort Solutions®:

- (1) M-Series Hyper-Heating INVERTER® (H2i®) Multi-Zone Heat Pump
- (2) M-Series Multi-Zone Heat Pumps
- (1) M-Series Single-Zone Heat Pump
- (2) P-Series Hyper-Heating INVERTER® (H2i®) Multi-Zone Heat Pumps
- (2) EZ FIT™ Recessed Ceiling Cassettes
- (3) SVZ Multi-Position Ducted Air Handlers
- (2) PEAD Horizontal Ducted Indoor Units
- (1) MSY Wall-Mounted Indoor Unit
- (1) PVA Multi-Position Ducted Air Handler

Ventilation:

Panasonic Mechanical Ventilation
Fantech Heat Recovery Ventilators

Other Equipment:

19.8 kW Photovoltaic System

HOME PERFORMANCE

HERS index: 49 without PV, -16 with PV

Projected Energy Savings: \$3,995 annually

Certifications:

- ▶ NGBS [Emerald Status](#)
- ▶ EPA [ENERGY STAR®](#) for Homes
- ▶ EPA [Indoor airPLUS](#)
- ▶ DOE [Zero Energy Ready Home](#)

PROJECT INSIGHTS

Each year, [The New American Home \(TNAH\)](#), sponsored by the [National Association of Home Builders](#), debuts at the annual International Builders' Show and showcases the latest innovations and efficiency advancements in homebuilding. Systems and materials are specified with the intent of achieving green building certifications. TNAH 2020 is a 6,428-square-foot high-performance luxury home overlooking the Las Vegas strip from the nearby [Ascaya](#) community in Henderson, Nevada.

A hybrid ducted and ductless [Zoned Comfort Solutions®](#) system from Mitsubishi Electric efficiently conditions 10 comfort zones within the home. Zoning allows units to be turned off or set to energy-saving levels in rooms infrequently used. This operation ensures the utmost in homeowner comfort and energy savings.

In addition to energy efficiency, Mitsubishi Electric units offer whisper-quiet sound levels, simplified maintenance and tasteful design appeal. The ductless [EZ FIT™ Recessed Ceiling Cassette](#), for example, is designed to fit between standard 16" ceiling joists and sits flush to the ceilings. Complementing the ductless units, [PEAD Horizontal-Ducted Indoor Units](#) use short-run ductwork to discreetly provide comfort throughout the home.

"The New American Home is a symbol of efficiency and innovation, so the mechanical system needed to be both highly efficient and state-of-the-art. With the Mitsubishi Electric system, the home has a cooling efficiency of 17.4 SEER and a heating efficiency of 10.5 HSPF. With numbers like that, we're confident the future homeowners will enjoy low utility costs year-round."

— DREW SMITH
Chief Operating Officer
Two Trails Inc.

"We achieved NGBS Emerald Status for energy efficiency. It wasn't easy because we had more glass and open areas than past homes, but working with Mitsubishi Electric helped us hit that standard. We were able to locate the HVAC units closer to the livable space, which gives you higher efficiency."

— CARL MARTINEZ
President of Construction
Sun West Custom Homes