Thornhill Custom Homes, LLC
Preston Haven | Dallas, TX | ThornhillCustomHomes.com

"When we learned it was a Zero Energy Ready Home, we felt like it was right for us." Home owner

**PROJECT DATA**

- **Layout**: 6 bdrm, 5.25 bath, 2 fl, 6,471 ft²
- **Climate**: IECC 3A, hot-humid
- **Completed**: August 2016
- **Category**: custom spec

**MODELED PERFORMANCE DATA**

- **HERS Index**: without PV 44, with PV NA
- **Projected Annual Energy Costs**: without PV $2,750, with PV $NA
- **Projected Annual Energy Cost Savings**: (vs typical new homes) without PV $1,350, with PV $NA
- **Annual Energy Savings**: without PV 12,500 kWh, 100 MCF, with PV NA

**KEY FEATURES**

- **Walls**: 2x6 studs 24” OC, advanced framed, ¾” OSB sheathing; 1” R-6.5 rigid polyiso with taped seams plus R-21 blown fiberglass for R-28 total wall insulation. Second layer of 30-lb felt and metal lath under stucco and stone. Plastic battens under wood siding.
- **Roof**: 60-mil TPO Cool Roof Certified white roofing membrane over ½” pitch “flat roof” w/parapet walls.
- **Attic**: R-30 open-cell spray foam on underside of roof deck/roof trusses plus 1” R-6.5 polyiso closed-cell foam over decking for R-38 total roof.
- **Foundation**: Crawlspace 1” R-7.2 closed-cell rigid foam on interior; 20-mil vapor barrier taped at walls, piers, seams. Rim joists insulated with 5.5” open-cell spray foam.
- **Windows**: Double-pane, wood and fiberglass, low-e3, argon-filled, U=0.26, SHGC=0.23.
- **Air Sealing**: 1.1 ACH 50.
- **Ventilation**: Filtered fresh air intake with controller.
- **HVC**: Two 96% AFUE furnaces; two AC units 16.2 and 17 SEER w/two-stage condensors.
- **Hot Water**: Tankless gas water heater, .94 EF.
- **Lighting**: 90% LED; motion sensors on exterior lighting.
- **Appliances**: ENERGY STAR dishwasher. ENERGY STAR ceiling fans and exhaust fans.
- **Solar**: Solar ready.
- **Water Conservation**: Low-flow toilets and shower heads. Low-water landscaping.
- **Energy Management System**: Programmable thermostat.
- **Other**: Wired for electric car charging stations. Low-VOC paint. Universal design. Custom open-web trusses to allow for straight hard metal HVAC trunks.

**CONTACT**

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For more information on the DOE Zero Energy Ready Home program, go to http://energy.gov/eere/buildings/zero-energy-ready-home or scan the QR code.