



FORGE CRAFT ARCHITECTURE + DESIGN

Theresa Passive House | Austin, TX | FORGECRAFTARCHITECTURE.com



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“The project’s airtight envelope and filtration system ensure air quality is excellent...even when outdoor pollution is high.”

Trey Farmer, Architect, Forge Craft Architecture + Design



PROJECT DATA

- **Layout:** 3 bdrm, 2 bath, 1 fl, 2,100 ft²
- **Climate:** IECC 2A, hot-humid
- **Completed:** February 2020
- **Category:** Custom for Buyer

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 44; with PV 3
- **Annual Energy Costs:** without PV \$800; with PV \$100
- **Annual Energy Cost Savings:** (vs typical new homes) without PV \$1,150; with PV \$1,850
- **Annual Energy Savings:** without PV 8,800 kWh; with PV 17,200 kWh
- **Savings in the First 30 Years:** without PV \$46,750; with PV \$74,100

CONTACT

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KEY FEATURES

- **Walls:** 2x6 24" o.c., R-26 total: R-21 mineral wool in cavity; R-6 insulated OSB sheathing; 5/8" furring strips; fiber cement siding. Advanced framing.
- **Roof:** Gable rafter roof: coated OSB, high-temperature underlayment, standing-seam metal roof.
- **Attic:** Unvented, vaulted ceilings, mineral wool insulation, 11 1/4" R-38.
- **Foundation:** Vented crawlspace: pier and beam, closed-cell spray foam under sub-floor.
- **Windows:** Triple-pane, argon-filled, aluminum-clad wood framed; fixed and casement. U=0.16, SHGC=0.25, low-e3. Interior motorized blinds; deep overhangs for shading.
- **Air Sealing:** 0.58 ACH 50. Sheathing seams and all penetrations taped; whole house aerosolized acrylic sealant; air sealing tested with smoke machine.
- **Ventilation:** ERV at HVAC, MERV 13 filter. Dehumidifier with IAQ controls.
- **HVAC:** Central air-source heat pump for heating, 9.3 HSPF, 20.5 SEER, MERV 16 filter.
- **Hot Water:** Heat pump water heater, 80-gallon, 3.70 UEF. Wi-Fi for leak detection and remote controlled settings. Meets Northern Climate Spec. Fast hot water delivery.
- **Lighting:** 100% LED. 3 skylights. Lighting controls integrated with home automation system.
- **Appliances:** Dishwasher, clothes washer, refrigerator, freezer. All most efficient available.
- **Solar:** 6.3-kW PV panels, 13.5-kWh battery.
- **Water Conservation:** WaterSense fixtures. Central manifold, PEX piping. Smart irrigation.
- **Energy Management System:** PV internet monitor; Wi-Fi-connected HPWH; IAQ monitors control dehumidifier. Curb circuit-level energy monitoring system.
- **Other:** Passive House Plus ZERO-certified.

