

## Universal Joint Design-Build For Immediate Release: The Texas Cantilever



**Abstract:** The Texas Cantilever in Austin is a home for a University of Texas School of Architecture alumnus designed and built by another alumnus. It is a cost-efficient, formally singular and green construction.

In addition to a compact 2400 sf of conditioned interior space there is 800 sf of covered outdoor space on the ground floor, a 200 sf master bedroom porch as well as 800 sf between the two second floor roof decks - resulting in outstanding feeling of being either in the sky or in nature while inside the home.

The siting and planning resulted in a gentle addition to the neighborhood with street-level “view friendly” massing. The project also incorporated digital technologies which were leveraged to both efficiently fabricate and erect the primary structural steel as well as to design and document the 3-dimensional “Iron Turtle”.



**Location:** Brentwood Neighborhood Austin, Texas

**Designer:** Universal Joint

**Builder:** Universal Joint General Contracting, LLC

**Program:** Single Family Residence.

**Square Feet:** 2400 interior, 100 covered exterior. 800 roof decks.

**Photography:** Atelier Wong

**Consultants:**

Civil Engineers: Prossner and Associates

Surveyors: Holt Carson

Structural Consultants: LOC

Testing: MLA Labs

**Sub-Contractors:**

Modal Contracting [metal framing]

K & M Ironworks [structural steel]

Accent Plumbing [plumbing]

Austin Air Conditioning [mechanical]

Russell Jones [electrical]

Diversified Thermal [polyisocyanurate insulation]

Lighthouse Solar [solar power fit out]



**Structural System:** Structural Steel (primary structure), Dietrich Trade-Ready (metal framing).

**Vapor Barrier, Insulation and Roofing:** Tyvek ThermaWrap, Closed Cell Polyisocyanurate Spray, Firestone (TPO) Thermo Plastic Polyolefin.

**Mechanical System:** “Split” System with ERV.

**Major Exterior Materials:** Bone White Kynar Pro-Snap 100 (metal siding), ¼" smooth Hardi-Panel in lap shingle formation (siding), IPE wood (siding and soffits).

**Major Interior Materials:** Vertical Grain Bamboo Flooring, Low-VOC Paints.

**Fixtures:** Kohler (kitchen faucets), Delta (bathroom faucets), TOTO (toilets), Whirlpool (bathtub jacuzzi).

**Appliances and Equipment:** IKEA Nutid (refrigerator), IKEA Datid (oven), Bosch (dishwasher), IKEA Eldig (cook top and ventilation system), Delta (garbage disposal), X (washer and dryer), RenewAire (energy recovery ventilator), Rinnai (hot water heaters), Elk M1 Gold Networked Home Automation and Security.

