



Pecan House on Trammel

Multiple Category Entry



Pecan House on Trammel

Participant information

James Andrews Custom Homes
Matt Mitchell
5547 Ridgedale Ave
Dallas, TX 75206

Phone: 214-282-3723
Email Address: mmjach@gmail.com
Website: www.jamesandrewscustomhomes.com

Category

Single Family Homes (under 3,000 sq ft.)

High Performance: No

Project information

Pecan House on Trammel
6538 Trammel Dr.
Dallas, TX 75214

Date Completed: October 2018

Total cost of project (exclusive of land): \$420,000.00

Dimensions of building (all floors of multi-story building): 40' X 60'

Asking price/purchase price (Affordable Housing only): n/a

Total sq. ft. of conditioned space: 2900 sq.ft.

Built By (if different than applicant)

James Andrews Custom Homes, LLC
Matt Mitchell
5547 Ridgedale Avenue
Dallas, TX 75206
Panels Manufactured By

Company Name (members only): Noark - R-Control



Pecan House on Trammel



Designed By (if different than applicant - SIPA will only recognize members)
PDHD Design Studios
Carl Gordon
931 N. Edgefield Ave
Dallas, TX 75208

Total sq. ft. of conditioned space: 2900 sq.ft.

Describe the end use of the building: Single Family Residential Unattached - Spec home

How did SIP construction help you get this job? This is my first spec home, everything I have done previously has been custom. Given the difficult and tricky nature of reaching the 2015 IECC code in an ethical manner while building with sticks, going with SIPs was a no brainer. If it cost me a hair more to do it with SIPs, that is nothing compared to building a vastly superior house correctly the first time. But I really think it cost me about the same as stick built. The decreased liabilities and call backs are an added benefit as well.

SIP wall thickness and core material: 6 1/2" EPS

SIP roof thickness and core material: 8 1/4" EPS

Describe the benefits of using SIPs on this project. Did SIPs help save time, labor, construction costs, or energy? It saved a little bit of time. It helped with labor shortages as the framers had not used this material before but it was so easy to assemble it was difficult to put together incorrectly with fewer people. This quickly gave them confidence in the project as a whole. The framers were amazed at how strong and tight the envelope was. As I told them (some of them had 30+ years experience), this is the best house ya'll have ever built and I have the science to back that up.

Describe any innovative design elements or structural engineering involved: I definitely took advantage of the SIP roof to vault the ceilings. I was able to utilize a 6' long linear electric fireplace as a show piece in the family room. It came out great. People have been impressed with how straight and clean the lines are on this project. SIP really lends itself to contemporary designs so it really helped us beautifully achieve those goals.

Please list any certifications the project received, such as ENERGY STAR, LEED, National Green Building Standard, WELL, Passive House, Green Globes or local green building programs. Only list certifications that are completed: Dallas Green.

HERS Index (required only for High Performance Category and recommended for residential projects): 47

Blower door test results (ACH50) (required only for High Performance Category and recommended for residential projects): 1.1

Energy use intensity in kBtu/ft² (required only for High Performance Category and recommended for commercial projects): 49.2 MBtu

Describe the HVAC system used on the project: A single forced air system by American Standard. 18 SEER. Variable speed condenser. 4 zones. Only requires 2.2 tons of air conditioning as per the manual J.

Pecan House on Trammel



Describe any other energy-saving materials used in the building envelope other than SIPs. List U-values of windows used and the U or R-value of any insulation materials. (judged only for High Performance Category) Windows are a Milguard Vinyl casements. U-value is .27 and the SHGC is .23.

Please list any energy-efficient products or design features, such as lighting, hot water heating, appliances, passive solar (judged only for High Performance Category): Electric Heat pump water heater (10 HPSF) with a convective loop delivery system. Like a recirculating system but uses convection to move the heated water naturally while the system is closed. No need for a recirculating pump that draws energy and eventually has to be replaced. The appliances are energy star rated. There is a ERV for fresh air replacement. 65 CFM at 45 watts.

The bath fans have humidistats that turn on automatically when the humidity gets above 60% in the bathrooms and laundry room. They automatically shut off when the humidity gets back down to a safe level.

The electric fireplace is capable of showing flames without generating heat, if desired. Handy for Texas when it is warm out but still want the ambiance of a fire in the fireplace.

Any additional comments on the project: Pecan House on Trammel is an elegant living and entertaining house that gets your more bang for your buck. It is named after the stately pecan tree in the backyard. I brought that concept indoors with a pecan wood mantel over the fireplace, a pecan wood barn door in the master suite for the closet, and engineered pecan wood floors downstairs. The excellent flow of the layout while bright and light gives this a warm and happy feel. It feels like a warm hug...like home. People feel and comment on this upon entering the home.

This house is well built for an active family with it large back yard (room for a pool with plenty of room to spare) that connects to Dallas' extensive hike and bike trail system. A stroll to the local park and only a 3/4 mile from the mass transit train station.

Exterior front view

Pecan House on Trammel



Interior kitchen view

Pecan House on Trammel



Interior bedroom

Pecan House on Trammel



Interior bath

Pecan House on Trammel



Interior great room view

Pecan House on Trammel



Interior great room

Pecan House on Trammel



Exterior rear view

Pecan House on Trammel



HERS rating

Pecan House on Trammel



Home Energy Rating Certificate

Final Report

Rating Date: 2018-12-14
Registry ID: 421120150
Ekotrope ID: ILKee7lv

**HERS® Index Score:****47**

Your home's HERS score is a relative performance score. The lower the number, the more energy efficient the home. To learn more, visit www.hersindex.com

Annual Savings**\$2,192**

*Relative to an average U.S. home

Home:

6538 Trammel Drive, Dallas, TX 75214

Builder:

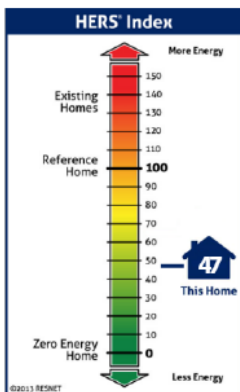
James Andrews Custom Homes

Your Home's Estimated Energy Use:

	Use [MBtu]	Annual Cost
Heating	5.9	\$191
Cooling	7.8	\$252
Hot Water	7.4	\$240
Lights/Appliances	28.0	\$902
Service Charges		\$120
Generation (e.g. Solar)	0.0	-\$0
Total:	49.2	\$1,705

This home meets or exceeds the criteria of the following:

2018 International Energy Conservation Code
2015 International Energy Conservation Code
2012 International Energy Conservation Code
2009 International Energy Conservation Code
2006 International Energy Conservation Code

**Home Feature Summary:**

Home Type:	Single family detached
Conditioned Floor Area:	2,866 sq. ft.
Number of Bedrooms:	4
Primary Heating System:	Air Source Heat Pump • Electric • 10 HSPF
Primary Cooling System:	Air Source Heat Pump • Electric • 18 SEER
Primary Water Heating:	Water Heater • Electric • 0.98 Energy Factor
House Tightness:	570 CFM50 (1.18 ACH50)
Ventilation:	67.0 CFM • 45.0 Watts
Duct Leakage to Outside:	65 CFM25
Above Grade Walls:	R-24
Ceiling:	Vaulted Roof, R-35
Window Type:	U-Value: 0.27, SHGC: 0.23
Foundation Walls:	N/A

Rating Completed by:

Energy Rater: Roger Taylor
RESNET ID: 4576699

Rating Company: Fox Energy Specialists
3301 West Fwy, Fort Worth, TX 76107
817-546-0160

Rating Provider: Fox Energy Specialists
3301 West Fwy, Fort Worth, TX 76107
817-546-0160



Roger Taylor, Certified Energy Rater
Date: 1/8/19 at 9:41 AM

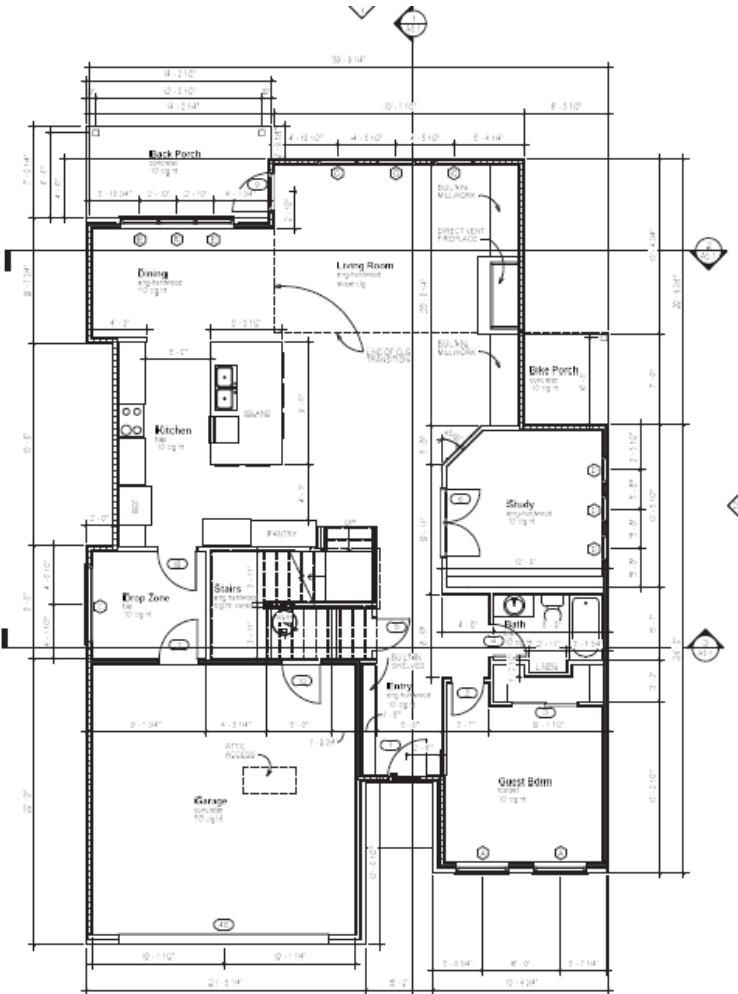
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Ekotrope RATER - Version: 2.2.5.2082

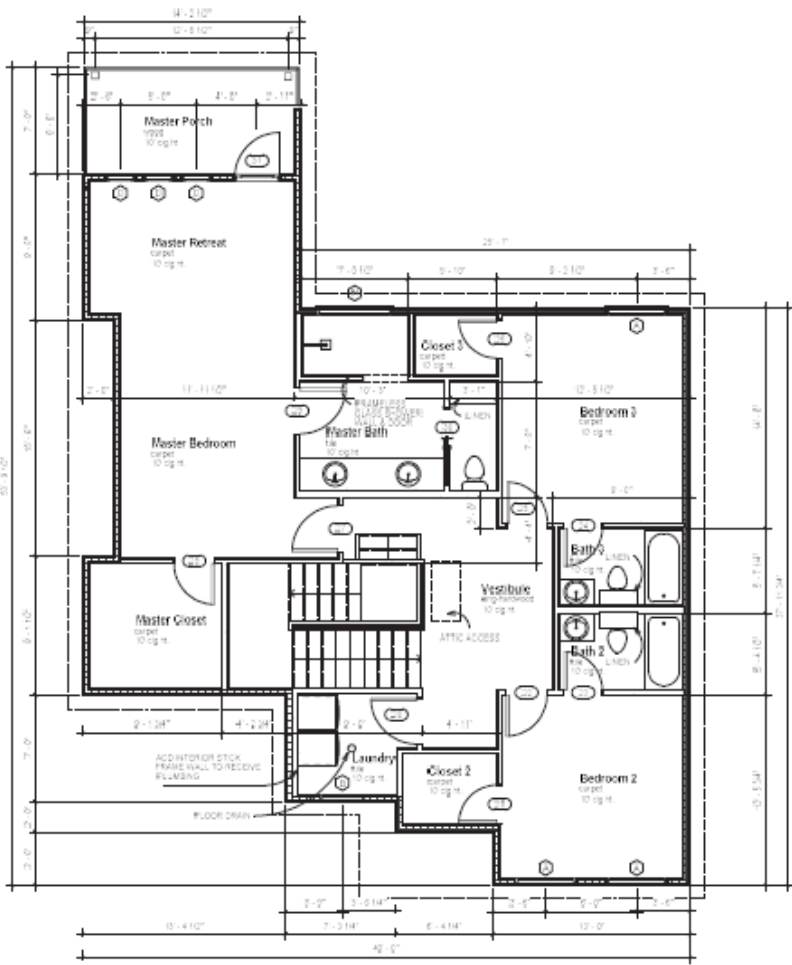
The Home Energy Rating Standard Disclosure for this house is available from the rating provider.
This report does not constitute any warranty or guarantee.

Floor Plans

Pecan House on Trammel



1 FIRST FLOOR PLAN
Scale: 1/4" = 1'-0"



1 SECOND FLOOR PLAN
Scale: 1/4" = 1'-0"