

## Terra Hills “Doug Rye Home”

Jonesboro, Arkansas




Radio host Doug Rye, the “King of Caulk and Talk,” is an expert in the field of home energy conservation. The house, located in the Terra Hills neighborhood, conforms to Doug’s recommendations for high efficiency homes, featuring 6” open cell spray foam insulation on the walls. The attic has an encapsulated roof six to

eight inches with open cell spray foam insulation, and the home was tested with a blower door to have .03 air changes per hour. The home includes a Renew Aire ERV fresh air system because it is so tightly insulated. The home was built by Jaynes Homes and Construction.

## Project Details

<b>Building Size:</b>	5,000 sq. ft.
<b>Loop Type:</b>	Vertical loop consisting of eight 3/4” ground loop circuits, each 250 feet deep. The field is located in the front yard in a 2x4 grid.
<b>Installation Date:</b>	April 2016
<b>Installation Details:</b>	2-ton Navigator Series Multi-Positional Vertical Packaged system for the basement, and a 5-ton Navigator Series Multi-Positional Vertical Packaged system for the living area and master bedroom; both units have Geo-Prime tanks.
<b>Operational Costs:</b>	The estimated average monthly heating, cooling and hot water operational cost is \$80. Compared to a 19 SEER air source heat pump the estimated Return on Investment is 15.3%.
<b>Geothermal Contractor:</b>	<b>Air Experts of Arkansas</b> , Jonesboro, AR • (870) 931-4822 www.airexpertsinc.com


 CONSTRUCTION TYPE  
**New Construction**

 SYSTEM TYPE  
**Forced Air System**

 LOOP TYPE  
**Vertical Loop**

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Back of home - covered deck and walk-out basement.



Side view of home.



Left: GeoComfort Navigator Packaged geothermal system installation in attic utility area.



Right: View of open cell spray-foam insulation on trussing.