

SAMSUNG

Everything's bigger in Texas—including innovation.

Learn how a Samsung heat pump reduced CO₂ emissions and increased cost savings for DFW-area homeowners.



Case Study: Hylex™ | Project: DFW Residence | Product: 5-Ton Hylex™ | Location: Fort Worth, Texas



Background

The owners of a 2,500 sq. ft. new construction home with builder-grade windows located on a windy lot, sought to upgrade their existing 16 SEER central air conditioner to a more efficient system to prioritize decarbonization efforts.

Challenge

While they sought to reduce CO₂ emissions and lower their monthly utility bills, most of the options for upgrading to a more efficient, variable-speed solution required a full system replacement at a premium price.

Solution

Since their current system was still in good working condition, the homeowners opted for a partial system replacement and upgraded their outdoor unit to a Hylex™ electric variable-speed heat pump. The system was configured for dual-fuel functionality and relied on electric cooling and heating with the existing gas furnace serving as backup heat for emergencies.

The partial replacement also meant lower upfront costs and less disruption inside the home as their existing indoor coil, thermostat, and zone damper solution remained in place.

Once installed, the Hylex™ provided several significant benefits:*

- Energy Consumption Reduction: Over 26% decrease in total energy use, from 23,256 kWh to 17,124 kWh after Hylex™ installation.
- CO₂ Emissions Decrease: 12% reduction in carbon emissions.
- Utility Cost Savings: Year-over-year savings of approximately \$150, or 8%.
- Overall Efficiency: Despite variable savings based on utility rates, the Hylex™'s efficiency offsets the lower cost of gas as a fuel source.

Not only are costs and emissions down – so is noise! Sound reduction makes a big impact as it allows homeowners to enjoy their outdoor spaces without the considerable noise of other air conditioning units. This peace is rivaled only by the peace of mind afforded by an HVAC system with an emergency backup heat source fit to withstand the unpredictable weather in the South.

In Texas, where everything's bigger, Hylex™ leads the way in innovative home comfort solutions.

To learn more about Samsung Hylex™, visit [SamsungHVAC.com](https://www.samsunghvac.com).

* All calculations were made using the EPA's Greenhouse Gas Equivalencies Calculator.