

RESIDENTIAL PROPANE APPLICATIONS: CLOTHES DRYERS

FACT SHEET

Equipped with powerful innovations like moisture sensors, pilotless ignition, and timed drying cycles, propane clothes dryers are a smart investment for cost-conscious homeowners.

Propane clothes dryers offer homeowners an efficient, convenient, and quick laundry solution. Compared with electric dryers, a propane clothes dryer will dry clothes faster and more efficiently. Propane dryers also offer the latest innovations such as steam cycles to de-wrinkle and freshen garments, drum lights to better see into the unit, and LCD control screens for ease of use. With propane, “laundry day” goes by a lot faster.

It’s important to know that gas dryers can be set to run on propane or natural gas — just let the installer know which gas source you’re using. New home installations and existing home replacements can both use flexible corrugated stainless steel tubing

[CSST] gas lines. CSST lines are easily routed to the dryer location to expedite the installation.

PERFORMANCE

Propane dryers are available in different capacities, with burners generally ranging from 18,000 Btu/h up to 30,000 Btu/h. Electric dryers have heating output levels at the low end of this range. This translates to faster drying times for propane clothes dryers.

Propane clothes dryers produce hot air with more moisture than electric heaters, which can help relax wrinkles in the clothes. Propane clothes dryers also feature



APPLICATIONS FOR USE

- New Construction: suitable for all house styles and climate zones.
- Replacement/Retrofits: Can easily replace electric dryers to improve performance and efficiency.

AT A GLANCE

- Average cost to operate is roughly \$40-\$80/year.
- Propane saves about 20 percent annually compared with electric clothes dryers.
- Available capacities range from 18,000 Btu/h up to 30,000 Btu/h, which translates into faster drying times.
- Produces hot air with more moisture than electric dryers, which can help relax wrinkles. Moisture sensors prevent over-drying of the clothes, which saves additional energy.
- Over its lifespan, a propane clothes dryer saves over 2,000 pounds of CO₂ emissions compared to an electric model.



1. Energy Star now labels high efficiency dryers, including propane models. Key features include moisture sensors and low heat settings.



moisture sensors, pilotless ignition, and timed drying cycles to ensure that the unit operates efficiently and safely. The moisture sensors prevent over-drying of the clothes — thereby saving additional energy and keeping the cycle time to a minimum.

Both electric and propane clothes dryers use a single vent to exhaust to outdoors, which simplifies electric-to-propane replacements.¹

ENERGY EFFICIENCY

Propane clothes dryers can save over 20 percent in energy costs compared with electric dryers.² The efficiency and cost benefits are created by the propane dryer’s higher heating capacity, shorter cycle times, and features like pilotless ignition. In the same way that a propane tankless water heater is more efficient than using electricity to heat water, using propane heat to dry clothes is also more efficient. In fact, the propane clothes dryer, the clothes washer, and a propane tankless water

heater supplying the clothes washer form a “laundry room technology trio” to optimize convenience, efficiency, and performance. Going with propane means avoiding the cost of installing a 220V circuit for an electric dryer too. The lower-cost 110V circuit for a propane dryer can also supply the clothes washer with power.

ENERGY CONSUMPTION & COSTS

It’s easy to determine the amount of energy a propane clothes dryer will use. TABLE 1 below provides an estimate for annual consumption levels, based on the number of bedrooms in a home.

In terms of energy costs, propane clothes dryers will generally cost roughly \$40-\$80/year to operate. This range will

vary based on local propane rates, how often the dryer is used, and how well it is maintained.

ENVIRONMENTAL

Propane clothes dryers result in an annual savings of 0.1 to 0.3 metric tons CO₂ emissions as compared with electric clothes dryers.³ Over the course of the dryer’s useful life, this means the propane clothes dryer saves over 2,000 pounds of CO₂ emissions.

TABLE 1 TYPICAL PROPANE CONSUMPTION FOR CLOTHES DRYERS

GALLONS/YEAR			
# of Bedrooms	2	3	4
Clothes Dryer Fuel Consumption	20	30	40



1. Installations should always adhere to manufacturer instructions and local code requirements.
 2. Propane Education & Research Council, Propane Energy Pod Online User Tool, buildwithpropane.com/Research-and-Training/The-Propane-Energy-Pod. Last accessed August 2015.
 3. PERC R&D Factsheet: Whole-House Analysis of Energy Efficiency Upgrades for Existing Homes, February 2014. buildwithpropane.com

FOR MORE INFORMATION

To learn more about clothes dryers and the Propane Education & Research Council, visit buildwithpropane.com.

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The Propane Education & Research Council was authorized by the U.S. Congress with the passage of Public Law 104-284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promote the safe, efficient use of odorized propane gas as a preferred energy source.