

eBuilt™ Retailer Frequently Asked Questions

What is an eBuilt™ Home?

An eBuilt™ home is built to the US Department of Energy's Zero Energy Ready Home™ manufactured home standards. High-performing and energy efficient, it is built to add a ground-based renewable solar energy system if homeowners choose to do so after purchase.

How much can eBuilt™ homes save on power bills?

eBuilt™ homes are incredibly energy efficient, even meeting and exceeding ENERGY STAR® standards.¹ Compared to traditional manufactured homes, eBuilt™ homes can reduce annual utility bills on average by 40-50%.²

If combined with a renewable energy source like solar panels, the home can theoretically offset up to 100% of its annual energy use, meaning it generates the power it consumes. This is referred to as a "net zero" home.

If homeowners install solar panels, does that mean they won't have a power bill again?

Even when solar panels are added, this does not necessarily mean the homeowner will not have a power bill in the future. Considerations like climate, the location of the solar panels and local utility fees will impact a homeowner's power bill, even with solar panels installed.

How do homeowners install solar panels after purchase?

The US Department of Energy provides a helpful homeowner's guide to going solar that you can refer them to: www.energy.gov/eere/solar/homeowners-guide-going-solar.

Clayton recommends a ground-based installation for solar panels. This provides several benefits:

- Ground installation allows the homeowner to place solar panels in the most ideal location on their property without negatively influencing the direction in which the home faces.

- Improper roof installation from a third-party solar vendor could potentially damage the roof, which would not be covered by the home warranty.

What makes eBuilt™ homes so energy efficient?

eBuilt™ homes are built with energy-efficient features such as argon gas low-E windows, insulated exterior doors, extra insulation, and ENERGY STAR® appliances, including a SmartComfort® by Carrier® heat pump HVAC or gas furnace and a Rheem® hybrid heat pump water heater.

How do air source heat pumps work?

Traditional furnaces and hot water heaters require a constant heat source to create warm or cold air and hot water. Air source heat pumps, on the other hand, extract heat from the air and use a compressor and refrigerant to generate heat. This conversion process is highly energy efficient, using half as much energy on average as other electric home-heating and cooling sources.³

How does a heat pump keep homes cool during summer and warm during the winter?

Heat pumps provide both heating and cooling by moving heat into the home during cold weather, then reversing the process to move heat and humidity outside the home during warmer weather.

For homes with an electric heat pump, will I need to install a separate air conditioner?

No, a heat pump has an air conditioning system that works the same as any traditional air conditioning unit.

I am in a warmer climate. What if the heat pump doesn't get my customers' homes cool enough?

The air conditioning component on a heat pump works the same as any other air conditioning unit. The idea that a heat pump won't cool as well as traditional air conditioning is a misconception. The advantage to a heat pump is that while it cools, it also regulates the humidity in a home, making the home more comfortable and reducing the need to blast cold air.

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Do heat pumps work well in cold weather climates?

A heat pump will keep homes comfortably warm in the winter. The SmartComfort® by Carrier® heat pump serves as the primary source of heating and uses a built-in supplemental heating source, called auxiliary heat, if needed. Today's modern heat pumps can efficiently extract warmth from air temperatures as low as 10 degrees, although most installers will set the auxiliary heat to come on well before the temperature gets that low.

How is the size of the heat pump chosen for eBuilt™ homes?

With heat pumps, gone is the traditional rule of thumb that sizes an HVAC based on the square footage of the home. Right-sizing of the heat pump is guided by Wrightsoft® HVAC software and aligns with Air Conditioning Contractors of America® (ACCA) guidance.

Each heat pump is specifically sized based on the home's square footage, tight thermal envelope and climate. If a local HVAC contractor or retailer disagrees with the heat pump size, we ask they provide us with a Manual J and S design package to help resolve the problem.

If there is a customer complaint after the heat pump is installed, Clayton Engineering will provide a tailored HVAC tech evaluation form to collect specific performance measurements from the equipment for problem resolution.

What does “dehumidifier ready” mean? Do homeowners need to run a dehumidifier with a heat pump?

Heat pumps dehumidify the air as it cools, so they do not require a dehumidifier. In some climate areas with increased humidity,⁴ homes may include a designated dehumidifier area with a built-in drain for easy installation if homeowners choose to add one after purchasing the home.

What are the recovery times on Rheem®

hybrid hot water heaters?

Recovery times on water heaters are measured by First Hour Rating (FHR), meaning how much hot water it can produce in an hour. The Rheem® hybrid water heater installed in an eBuilt™ home has an FHR of 60 gallons for a 40-gallon water heater, and 67 gallons for a 50-gallon water heater (versus a traditional electric water heater which has FHRs of 53 and 55 gallons for 40- and 50-gallon water heaters, respectively).

Gas water heaters have virtually the same recovery time as a Rheem® hybrid water heater. It should also be noted, these recovery times are based on the out-of-the-box, recommended Energy Saver mode.

Are heat pump water heaters noisy?

Rheem® hybrid heat pump water heaters have a sound rating of 49 decibels, which is similar to a refrigerator.⁵

Can homebuyers order an all-gas home?

A homebuyer can order gas appliances (where available) for their stove, furnace and dryer. To qualify as eBuilt™, a home with gas utilities must have an electric Rheem® hybrid heat pump water heater.

How will homeowners learn to operate the new equipment that comes with their eBuilt™ home?

We have created home maintenance videos for homeowners, accessible by scanning the QR codes on the eBuilt™ homeowner video library flyer located in their home warranty pack.

Sources



¹ ENERGY STAR is a registered trademark owned by the U.S. Environmental Protection Agency.

² <https://www.energy.gov/sites/prod/files/2014/10/f18/ZERH%20Logo%20Use%20Guidelines.pdf>

³ <https://www.energy.gov/energysaver/heat-pump-systems>

⁴ <https://www.manufacturedhousing.org/thermal-map/>

⁵ <https://ehs.yale.edu/sites/default/files/files/decibel-level-chart.pdf>

