



# STAFFORD HOMES & LAND

## STAFFORD HOMES VS INDUSTRY | PERFORMANCE COMPARISON

### Stafford Homes are built beyond what code requires...period.

Starting with the home plan, we start thinking about quality, performance, sustainability, and comfort. Our standard homes are quite like what other builders offer; but our upgraded features go way beyond they have to offer. Our homes leak less air while bringing in more healthy air than others. They function efficiently, operating year after year to save the homeowner money by consuming less natural gas and electricity. The EPS (Energy Performance Score) for each home calculates out to a very low monthly expense. Our 3rd party energy audits verify and prove that we surpass the standard.

Please connect with our local Sales Broker and ask about a taking a private tour to show each feature and how it benefits the environment. You will learn how it performs better, and how it is more comfortable and healthy for your family.

We build smarter homes that you will **love** living in.



## STAFFORD HOMES UPGRADED FEATURES:

### *Energy Performance Score (EPS) between 69 and 48*

Much like a miles per gallon (MPG) rating for a car, our homes have a score for how they perform. How they consume electricity, use natural gas, and even how they leave a carbon footprint emitting emissions into the air. The lower the score, the better the home performs and the lower the monthly utility costs will be. The savings are incredible. The homes are more comfortable, the lifestyle is responsible, and the results are truly measurable.

[Find out more here.](#)

### *Energy Performance Ratings - Verified by 3rd party*

We employ third-party companies like Moffett Energy and Energy Star® to inspect our homes with an exacting check list. This will prove that we are building to a level well beyond the industry based 'code-built' requirements. Each home goes through rigorous inspections throughout the construction process. All of our homes are Energy Star® rated and verified.

[Find out more here.](#)

### *Merv Air Filtering and Handling*

Particles in the air can cause the air in your home to be very unhealthy. See the chart linked below about how the Merv rating works. Our homes come standard with Merv 13 filters or higher which is a higher grade filter just below hospital laboratory air filtration. Merv ratings range from 1-16 and are 35% to 50% more efficient at filtering particulates, pollen, dust, and mold before they are introduced into the home. Merv 13 is one of the highest filtration filters and is rated clean for Hospital Air.

[Find out more here.](#)

### *Superior Insulation Measures added for Home Comfort*

Most of our homes have additional insulation in the attic and walls. The window framing headers and any part of the home that touches the exterior with wood have what are called "thermal bridges." We insulate and create breaks in the thermal bridges of a home, which can be heavy lumber, concrete and any other piece of the structure than energy can transmit through in or out. The upgraded features of insulation in our homes helps us make sure our homes are more comfortable, more quiet, healthier, and more energy efficient than a code built home.

[Find out more here.](#)

- Attic Insulation- R-60, which keeps heat from escaping through the roof and covers duct runs to rooms.

## CODE-BUILT HOME:

2200sf code built rated  
average 88 EPS



No verification required on  
how the home is built

Merv 2 is considered a standard  
residential filter, but there is no test

Bare minimum required by code

R-49 batts and blown in minimum code

R-21 insulation is minimum code

R-30 floors

- Wall Insulation- R-23 - BIBS (blown in blankets) making less room for leakage and our homes are so quiet.
- Floor Insulation- R-30

***Balanced Ventilation System***

When sealing a home for less leakage it is necessary to balance air intake and exhaust that is flushed from the home. Our homes have fan systems integrated into them that exhaust stale, moisture laden indoor unhealthy air. We use a combination of exhaust and ventilation strategies including quiet fans that move the stale air across the home and pushes it out, while pulling in new fresh air for a more healthy living condition.

***Furnace and Ductwork Inside Conditioned Space***

Placing the duct work within the thermal envelope eliminates heat and cooling loss to attics and crawl spaces. It also prevents many of the indoor air problems associated with running ducts in the crawl space and garage. This is done in typical code-built homes, resulting in a healthier home that is much more energy efficient. Furnaces installed in garages bring fumes and toxins into the home.

***Sealed Heat and Cooling Ductwork***

Mastic sealed and tested ductwork is a measure to keep ducts from leaking heating and cooling into any spaces around them. It is a painstaking measure that separates our company from others. When ductwork is not sealed it can lose up to 30% of the heating and cooling created for the home. By doing this, we reduce the loss to less than 6% and will help keep contaminants coming in.

***96% High Efficiency Gas Furnace***

Our homes have a minimum efficiency of 96% AFUE (Annual Fuel Utilization Efficiency). When shopping new homes, it is best to make sure the ductwork is not only insulated, but sealed and tested for leakage. This key factor is crucial in keeping the heating and cooling inside the rooms and ductwork, and not in a crawl space or attic.

[Find out more here.](#)

***Protected Ductwork Vents and Furnace Equipment***

During construction, much debris falls into ductwork and is left in the home well after move in. In our homes we protect the ductwork from the debris and we use outside heat sources to construct the home rather than a permanent furnace. The construction debris from saw



Code grade fans used with no balancing

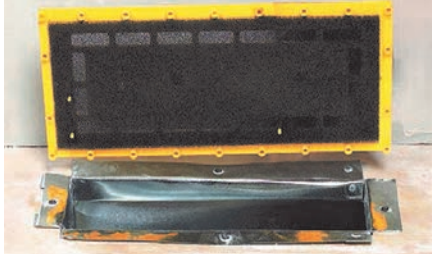
Not required, rarely done

Not required

92% AFUE Gas Furnace is code

Not protected

dust, drywall dust, paint particles, carpet fibers and other air pollutants all contribute to the wear and tear of the furnace. In the final phase of construction, we even clean the vents before finishing the home.



### *High-Efficiency Water Heaters*

Many of our homes come with a high-efficiency 65 gallon gas water heater. Some of our homes come with a condensing tank-less water heater (on-demand water heaters), boasting one of the highest ratings in the industry. This is achieved by a combination of more efficient burners and the lack of stand-by losses that occur in tank-type water heaters.

Most of our homes are now equipped with **high-efficiency heat-pump water heaters**, typically rated at 2.5-3.5 EF. This matters. Water heaters are responsible for up to 17% of a home's used energy. Naturally, we wanted to start with higher impact features to save our home buyers money over the decades to come. **Rheem EcoNet Enabled water heaters** are used in some communities, giving the home owner the ability to use an app on their smart phone with the Rheem EcoNet Home Comfort WiFi Module with the installed Rheem Platinum Electric Water Heaters.

[Find out more here.](#)

### *Kiln Dried Lumber Coupled with Certified Moisture Testing*

We choose to install **Kiln Dried Lumber** that contains much less moisture. We test the moisture in the lumber after the home is framed we assure the home contains no more than 12-14% moisture before covering with drywall. This reduces the shrinking behind the walls and floors that occurs and saves on damage to the home. Our homes are also third party tested, and we obtain a moisture certificate before covering our walls. Our crawl spaces are dried to less than 16%. Reports show mold cannot grow at 16% and below.

50 Gallon Tank gas water heater at .59 % efficient is code



^ Rheem Platinum Electric Water Heater

Kiln-dried lumber is not required.  
Code is 19% moisture content

[staffordhomesandland.com](http://staffordhomesandland.com)

^ Foam sealing at header and wiring passages

### ***Building House Wrap***

DuPont™ Tyvek® DrainWrap™ is a moisture barrier designed to provide enhanced drainage in areas subject to extreme, wind driven rain. It combines the superior air and water resistance, vapor permeability and strength of Tyvek®, with a vertically grooved surface to help channel water safely to the outside.

[Find out more here.](#)

### ***Window and Door Flashing***

We take steps and measures during construction at vulnerable points of the home where water damage can occur. Windows and doors must be flashed and installed properly for a true exterior barrier to occur against the weather.

Our windows are installed the correct way by a certified and insured professional window installer.



### ***Home Air Sealing Measures- 2.0- 3.0 ACH or less***

Sealing a home to prevent air leakage in or out of the building envelope is one of the most important measures to make a home more comfortable.

Air Changes Per Hour (ACH) is a measurement used to signify a properly sealed home with fewer air leaks. Our homes are designed and sealed to meet ACH of 3.0 or less. We seal areas of a home that are more prone to leaking, which can be in the roof, windows, walls and or any penetration in the exterior envelope (A/C lines, drains, vents). Sealing is assured in caulking top and bottom plates of framing, between framing lumber at exterior wall connections and spray foam inside of the joist systems and at any gap or hole in the shell.

[Find out more here](#)

### ***Windows With an Efficiency Rating of 0.3 or Lower***

Stafford-built homes benefit from 15% less heat loss than 'code-built'. Windows are rated by U Values; the lower the U-rating the better the window performs. U-Factor is generally a number between 0.2 and 1.20, indicating the heat loss or gain through a window. A lower number results in a window with a higher level of comfort, value, and saves on energy usage.

Oregon is Climate Zone 5 Window code is 0.35

[Find out more here](#)

No inspection or requirement for lumber waste or heat loss and gain. Headers are not required to be insulated.

Windows often installed by a framer or a siding contractor, not window installation company who is insured and only installs windows. Bare minimum use leaves more carpets.

6.0 is minimum is low bar for leakage



^ Foam sealing around window framing

### ***100% LED High Efficiency Lighting***

For mid-2018 our homes are outfitted with 100% LED lighting, LED lights are up to 80% more efficient than traditional lighting such as fluorescent and incandescent lights. 95% of the energy in LEDs is converted into light and only 5% is wasted as heat. Less energy use reduces the demand from power plants and decreases greenhouse gas emissions.

[Find out more here.](#)

### ***Sealed Gas Fireplaces w/ Electronic Ignition***

There is no continuous burning pilot light so our homes produce less carbon monoxide with electronic ignition, promoting a healthy indoor air quality.



^ Sealed gas fireplace insert

### ***Low Volatile Organic Compound (VOC) Latex Indoor and Outdoor paint***

Why? Low VOC paints reduce the amount of harmful chemicals in a home during and after construction. Our homes use **Sherwin Williams®** indoor and outdoor paints; certified by a third-party organization to meet strict requirements for product and company responsibility.

[Find out more here.](#)

### ***Low VOC Adhesives and Caulking***

The use of these types of products maintain indoor air quality by reducing off gas of VOC- Volatile organic compounds in the home.

### ***Open Web floor truss system - In our LEED Certified Homes***

We use the open web floor truss system in many of our plans to allow ductwork to be tucked away. We use the open web floor truss system in many of our plans to allow ductwork to be tucked away inside the homes conditioned space. This reduces the energy that escapes when ductwork is ran through attics and floors and results in a more comfortable and energy efficient home.

100% of the home must use efficient lighting

Not required

Not required

No regulation

Ductwork ran in attic and floors wastes energy and allows for heat and cooling loss



### ***Generous use of Laminate Wood Flooring Throughout Main Living Areas***

Hard surface flooring cuts down on areas within the home where dust can collect and settle. We use more solid surfaces in the spirit of making our homes a healthier place to be. Stafford homes are finished with beautiful engineered plank flooring, often sourced from re-purposed wood products. The veneers have the appearance of solid boards while helping protect timber resources.

< *Engineered flooring and Green Label Plus® Certified Carpet*

### ***Green Label Plus® Certified Carpet***

Our installed carpeting passes rigorous testing to obtain the Green Label Plus® designation. The Green Label Plus® designation signifies the carpet has passed Air Quality Carpet Testing (IAQ) and has low emission criteria to maintain. See the link for more info:

[Find out more here.](#)

### ***Water Conservation Measures and Low Flow fixtures***

Plumbing fixtures and appliances in the home have been chosen to perform better while consuming less water. They use aerators to mix air with the flowing water. The perceived flow is comparable to code built fixtures, but can save up to 500 combined gallons of water per year, which reduces energy bills and helps the environment. We are **EPA Water-Sense** driven!

### ***Solar and Net Zero Plumbed and Wired***

Starting in 2018 we build every home 'Solar-Ready'. Our homes are equipped to accept solar panels. Because the homes are so well insulated, it takes a smaller solar system to provide the electrical needs. With the proper system it may be possible to redirect unused power back to local electric utilities, adding to savings potential. Please note: We do not install the solar system, leaving that to the homeowner who can then benefit from the available tax credits and incentives.

Certification is not required

1.6 gal is above code



### *Energy Star Circle rated Dishwasher and High Performance Appliances*

Our dishwashers are rated and use 25% less energy which saves about 1000 gallons of water each year when compared to a conventional type.

### *HardiePlank® Lap Siding + HardieTrim® Boards*

This durable, pre-primed fiber cement product reduces forest impact by using recycled materials, while offering long endurance regardless of climate. We order the lap siding in proper lengths to match the home, reducing waste even further. Our corner boards and exterior trims are **Hardie**, with its 30-year warranty assurance.

[Find out more here.](#)

### *Intermediate and Advanced Framing Techniques*

When designing the home, we make sure our homes create less wasted lumber, while making sure our exterior walls have less transmission of energy in or out through the lumber. Most of our headers are insulated and moving most junctions where lumber can transmit energy and replacing with insulation helps keep the home more efficient and aids in the prevention of air leakage.

Not rated or inspected

Most builders use white wood trim boards. These split, rot and decay at a much faster rate

No inspection or requirement for lumber waste or heat loss and gain. Headers are not required to be insulated.

Specifications, finish and designs subject to change without notice. Features, trims, details and elevations will vary from artist rendering and marketing plan. Materials subject to market fluctuations, supplier availability and product cycles; which may require substitution of equal or better than items solely at the discretion of the builder. REV. 2/1/2019