



To simply say that Matt Powers Custom Homes & Renovations constructs energy-efficient new homes in Houston is an understatement. Matt Powers Custom Homes stands apart in the industry because of its energy efficient home plans, but also because it certifies through the US Green Building Council's LEED (Leadership in Energy and Environmental Design) for Homes program and is an Energy Star Partner. This means that you are not only saving money in the long run due to reduced utility bills and home maintenance, but also creating a positive impact on the environment.



LEED-Certified

Most of the Matt Powers Custom Homes built in Houston are LEED-certified. Some, due to size and scale of the project are not eligible for LEED certification. However, even these large-scale projects are built to the same LEED standard and utilize the same construction techniques and methods. LEED certification requires Matt Powers Custom Homes to strictly follow mandates for indoor air quality, material specifications and resource origination. Our product and vendor selection process is very rigorous and demanding. To learn more about the U.S. Green Building Councils LEED certification process, visit greenhomeguide.com/program/leed-for-homes.

Energy Star Partner

ENERGY STAR. It's the little label with the big message: Better is Better.

Matt Powers Custom Homes is proud to offer new homes that have earned the ENERGY STAR® label. The ENERGY STAR label means that your new home has been designed and built to standards well above other homes in the market today. It means better quality, better comfort, and better durability. It also means that your new home is a better value for today, and a better investment for tomorrow. The ENERGY STAR label gives you the peace of mind that your home has undergone a better process for inspections, testing, and verification to ensure that it meets strict

requirements set by the U.S. Environmental Protection Agency (EPA). ENERGY STAR certified homes are better because they are designed and built to provide homeowners:

Peace of Mind. The result of a home that's built better.

With the ENERGY STAR label on your new home, you can be confident that it will deliver. When ENERGY STAR requirements are applied to new home construction, an integrated approach to design combined with tried-and-true best building practices adds up to a durable, comfortable home with reduced utility and maintenance costs. Our ENERGY STAR certified homes have undergone more inspections and testing than typical homes to ensure that your new home was built to higher standards.

Enduring Quality. Better systems make all the difference.

Purchasing a new home is a big investment, so it's important to be sure that it's built to last. We've designed all of our new ENERGY STAR certified homes to include value-adding energy efficiency features, and a combination of materials and equipment that will deliver better performance.

ENERGY STAR certified new homes include features like:

- A complete Thermal Enclosure System that includes comprehensive air sealing, quality-installed insulation, and high-performance windows, to deliver improved comfort and lower utility bills.
- A high-efficiency Heating, Ventilation, and Cooling System that is designed and installed for optimal performance.
- A comprehensive Water Management System to protect roofs, walls, and foundations from moisture damage.
- Energy-efficient Lighting and Appliances to help keep utility bills low, while providing high-quality performance and longevity.

Wall-to-Wall Comfort. A better way to live.

Ask anyone who lives in an ENERGY STAR certified home to go back to their old home. You'll likely hear that there's no way they'll give up the comfort that came with the ENERGY STAR label on their new home. From the moment you walk in the door of an ENERGY STAR certified home, you'll see, feel, and hear the difference.

Proven Value. A better investment for today and tomorrow.

ENERGY STAR certified new homes offer better energy efficiency and performance compared to other homes, making them a better value for today and a better investment for tomorrow. Homes earning the ENERGY STAR label use 20-30 percent less energy than typical new homes, and even more when compared to most resale homes on the market today.

For more information on our ENERGY STAR certified new homes, [contact us](#).

Learn more about ENERGY STAR certified new homes at www.energystar.gov/newhomes.

Efficiency Promise

Owners of LEED Certified new homes in Houston built by Matt Powers Custom Homes get a limited guarantee of two years that the cooling and heating used in the building will not exceed a capacity* as specified by the Efficiency Promise Program. Learn more at www.energypromise.com.

* The energy used to heat and cool the home will not exceed the guaranteed usage listed on the front of the limited guarantee subject to the terms of the limited guarantee. The energy usage is for the heating and cooling portion only of your energy bill and is calculated based on your individual home plans. Since this is a limited guarantee of energy usage and not cost, any reference to dollar amounts is strictly an estimate. Actual costs will vary with the cost of energy. Learn more details at www.energypromise.com.

[Efficiency Promise Certificate 1 >>](#)

[Efficiency Promise Certificate 2 >>](#)

Energy Savings

Matt Powers Custom Homes ensures that buyers are at ease in the knowledge that all Matt Powers Custom Homes are built as certified by the strict ENERGY STAR® and LEED energy efficiency programs. The ENERGY STAR® program warrants that a new home, at a minimum, improves efficiency up to 15 percent over houses constructed based on the 2009 codes and see up to a 30 percent improvement over houses built based on the 2000 codes. Matt Powers Custom Homes utilizes a number of building standards, which are:

- HVAC unit and duct size are designed based on the home's size as well as the type and size of the windows, home orientation, window and door placement, and numerous other factors. The entire home and its HVAC units must be merged together as a whole system. Each portion of the building envelope affects the whole, and is carefully considered.
- Detailed design schematics are produced so that every member of the MPCH team is tasked and enabled to design efficiency into our homes.
- An air leakage assessment using a "blower door test" to reduce air leakage – air leakages contributes up to 33% of the energy loss in your home;
- A "duct blaster" test mechanically verifies the integrity of the entire duct system of each unit. Minimum scores are demanded so that the entire system works as designed.
- ENERGY STAR®-rated appliances, including ceiling fans, dishwashers, light fixtures, bath fans, and programmable thermostats;

- All of our soffits are non-vented. Attic space is considered part of the insulated envelope and they are sealed as well. We utilize an expanding open cell foam insulation product that contributes to one of the best whole house sealing and insulation packages available. Since attics are considered semi-conditioned space, the mechanical HVAC systems located here work more efficiently, and outlast systems exposed to the long summer attic heat in most homes.
- Two speed high efficient 16 SEER air conditioning systems require less energy, and typically operate at the much quieter lower speed than other competing systems.
- Jump ducts and transfer grills are utilized within the HVAC system to ensure peak performance. Each system's performance is measured upon start up on a room-by-room basis to ensure it's operating within design standards.
- We install open cell foam insulation at the roof rafters to an R-26 and the walls are installed to R-13. This is the most effective insulation on the market. It also provides not only great insulation, but also helps to lower sound levels within the home.

Indoor Air Quality

Matt Powers Custom Homes are constructed with mechanical fresh air intakes. This allows us to introduce fresh air from a known healthy source. This air is introduced directly into the filtration system. We utilize high performance 4"- 6" MERV 11 pleated air filters to help ensure air quality.

An additional measure used to increase air quality is that each home receives a thermal bypass inspection. An experienced third party conducts these inspections. They visually assess framing areas, where air barriers are frequently missed, as well as inspecting to insure optimum alignment of insulation with the air barriers. This additional step enhances the HVAC long-term endurance and saves you money.

Water Efficiency

As part of our green building LEED program, Matt Powers Custom Homes also employ a number of water efficiency features. Features include water saving plumbing fixtures, on demand hot water systems, and a time tested CPVC plumbing system. CPVC is a system we have used for many years for better performance and water quality. Additionally, all hot water lines are insulated in the attic of the home.

Verification

Matt Powers Custom Homes features a further line of verification from the Residential Energy Services Network (RESNET) and the EPA. Matt Powers Custom Homes is a proud participant of the former's Quality Assurance Program and also a partner of ENERGY STAR®.

Many builders today try to state claims that they are “green”. However, just adding a few obvious energy features does not make their construction green. To make your home a high performance home, each component is carefully considered, and then a third party verifies its correct introduction and installation into the project.

Blower Door Test

We conduct a Blower Door Test on every home we build. This allows us to quantify the air leakage and make necessary corrections. Did you know that air leakage is responsible for 30-33% of a home’s heat loss? We use 3rd party providers to ensure transparency and consistency in the test and provide an improvement plan, if needed.

HVAC Unit and Duct Sizing

There are several ways in which Matt Powers Custom Homes assures energy efficiency. First, we use a unique AC/Heating blueprint that is designed for each home based on:

- The number, size, and energy efficiency of windows in the house
- Orientation of home
- Size and volume of the home
- Presence of other energy efficiency components
- Type and location of insulation to be installed in home
- To ensure all these components work together efficiently, we accurately size the HVAC equipment using the Manual J of the Air Conditioning Contractors of America. Matt Powers Custom Homes also follows EPA standards in HVAC Unit and Duct Sizing.

ENERGY STAR® Rated Light Fixtures

The Matt Powers Custom Homes LEED Eco Smart program is ideal for a number of great reasons. Energy Star rated light fixtures will save you money, utilize fewer energy resources, and aid in protecting the environment. That’s why we feature Energy Star rated light fixtures in selected rooms. These fixtures unite appealing design with quality while providing energy efficiency levels that are second to none. We also utilize LED technology for many of our recess cans, and accent lighting.

Superior Insulation

Ensuring the most comfort, we build your home with optimum insulation Foam (R-13 wall, and R-26 flat, R-26 sloped ceiling). Also, to guarantee the correct installation, your insulation will be inspected by a third party.

16 SEER A/C System

Featuring a higher Seasonal Energy Efficiency Ratio (SEER), your Matt Powers Custom Homes A/C system uses less energy to operate making it more efficient. Additional

benefits for the homeowner are improved control of the internal climate, improved energy costs, and noise reduction.

Air Infiltration

By sealing all electrical, plumbing, and other diffusions of the floors and walls, we strive to optimize the inside of your home to be healthier and more comfortable. Additionally, to minimize air infiltration, we utilize polyurethane caulk to seal the joints between the building materials.

Third Party Energy Inspections

Not only do you have our certifications and our word that we built you an energy efficient home, but an unbiased 3rd party inspector will also give you their word. Independent inspections of the home's envelope looking for any possible penetrations with the goal of insuring that each new home meets all of the quality and energy efficiency standards. Lastly, each new home receives a final inspection from an independent 3rd party to warrant that the home meets the important HERS Index.

FAQs

Q: I see these homes are “LEED”. What is LEED anyway?

A: Think of it like this: there's green and then there's LEED. Our homes are LEED.

Q: Okay, can you tell me more?

A: LEED is a rating system that measures how green a building is. All around the world, LEED is the standard for green buildings: offices, hospitals, schools, stores and homes.

Q: So why should I care? How does LEED make this a better home?

A: Four critical ways:

- Savings: Your home will save you energy, water, and therefore money.
- Health: Your home has been built to provide a healthier environment for you and your family.
- Value: While there are no guarantees, LEED buildings often sell for more, and in less time, than non-green buildings.
- Track Record: The US Green Building Council administers the LEED green building certification program. It makes sure your home is inspected and tested by a third party so you can be confident that it will perform as you expect it to.

Q: Seems like I would have heard of LEED. I wonder why I havent?

A: LEED for Homes is only a few years old, but youve probably seen or been in LEED buildings. There are more than 10,000 LEED-Certified office buildings, hospitals, schools, stores even baseball fields, and more than 40,000 commercial buildings worldwide going through the LEED process. LEED buildings in the U.S. include the Willis (formerly) Sears Tower in Chicago, Dell Children's Hospital in Austin, The

California Academy of Sciences in San Francisco, the Empire State Building even your local Starbucks. In short, LEED is everywhere. Because saving energy, water, resources, and money are good for the environment and your pocket book.

Q: I hear a lot about other green building programs. What makes LEED special?

A: LEED's national reach means it has a lot of traction in the market. It's the most difficult to achieve, too. Its rigor, and the fact that it requires a third-party validation means you can count on LEED to deliver. LEED also focuses on more than just energy efficiency; it's also about sustainability and doing good for the environment.

Q: What do the levels (Certified, Silver, Gold, Platinum) mean?

A: LEED homes must meet 18 mandatory measures, and then earn enough optional points to reach certification. Higher-scoring homes within the LEED rating system can earn higher certification levels (Silver, Gold, Platinum). But every LEED home sets an example of the best in sustainable living.

Q: Can you give me a bit more information on how LEED approaches each of those "green" categories?

A: In summary, there are 4 green categories that LEED comprehensively covers. For specifics how we build your home in each of these categories, we go in depth throughout this page. Please contact for more information or if we could answer your questions regarding your LEED home.

- **Energy:** LEED requires that a home's energy performance exceed any local code requirements by at least 15%. This includes testing of the home's overall envelope and its ductwork, as well as multiple inspections during construction. Quality insulation is key.
- **Water:** LEED requires that the home incorporate a minimum number of water efficiency measures. Low-flow toilets and faucets make a dramatic impact in water use with no inconvenience.
- **Indoor Air Quality:** LEED ensures that the home ventilates properly, requires high-efficiency air filters and reduces moisture, helping eliminate mold and mildew.
- **Materials:** LEED ensures that construction waste is minimized and that environmentally preferable products are used where possible.