SCHELLTER™
advanced building science

WHAT IS IT?
WHY YOU WANT IT!

INCLUDED IN ALL OUR HOMES



SCHELL brothers

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SCHELLTER™

advanced building science

We developed Schellter™ Advanced Building Science as part of our continual commitment to provide our homeowners with an exceptional home worthy of the Schell Brothers name and reputation. Schellter™ is composed of four pillars: Enerwize™, SanctuAIR™, 4Tress™, and HomeIQ™. Our goal was to use the scientific process to create a new type of home – a home that is extremely energy efficient (Enerwize™), eliminates the health risks associated with homes (SanctuAIR™), provides unparalleled durability, longevity, strength, and quality (4Tress™), all while making your life easier and your family safer (HomeIQ™).

We developed Schellter™ in collaboration with one of the top building science firms in the country. It incorporates the research and technologies of the U.S. Department of Energy's Building America program and the U.S. EPA's Indoor airPLUS program. The extensive research and testing that went into the development of Schellter™ Advanced Building Science have allowed us to create homes that are leaps and bounds ahead of other new homes today.

Schellter™ not only contributes to the pride our homeowners take in their Schell Brothers home but also increases the resale value and significantly reduces the ongoing utility and maintenance costs associated with owning a home. Best of all, Schellter™ is included in every Schell Brothers home, paying for itself twice.

SCHELLTER™

enerwize™
ENERGY OPTIMIZED

SANCTUAIR™
harboring health

4TRESS™
LEGENDARY QUALITY

homeIQ™
SMART LIVING



"I have asthma and allergies, so the extra steps Schell Brothers has taken to improve indoor air quality and prevent moisture and humidity in the home and crawl space will help me breath more easily."

-James and Maria

IS IT WORTH THE COST?

We get this question a lot. The short answer? Yes. Every Schell Brothers home includes Schellter™ features as part of the base price. These high-quality, energy-smart upgrades surpass what most new homes include.

At first, adding these features would have cost around $31,000. But by including them in every home, we brought that down to about $9,600—thanks to discounts for buying in bulk and smaller, more efficient heating and cooling systems.

Here's the cool part: the average Schell Brothers homeowner in Delaware saved about $1,328 a year on energy bills in 2024 compared to other new homes—and $1,579 compared to homes built 10 years ago.

That's more than twice the extra cost added to the mortgage. And as energy prices go up, the savings get even better. Plus, these features help with air quality, durability, and resale value—so you're saving money and getting more out of your home.



"Our son has always struggled with asthma. It was refreshing to learn that Schell Brothers goes above and beyond and cares about indoor air quality just as much as we do. It brings us peace of mind to know that Joshua will be breathing easier in our new home."

-The Winslows

SANCTUAIR™

harboring health

Indoor air quality is one of the most serious—and often overlooked—public health risks. The EPA ranks it among the top risks to public health, with poor indoor air quality linked to respiratory issues like asthma and chronic coughing—especially in children and older adults. Many homes contain materials that release harmful VOCs (Volatile Organic Compounds), and moisture can lead to mold and bacteria growth.

That's why every Schell Brothers home includes SanctuAIR™—a system of features designed to create a healthier indoor environment. This includes MERV 13 air filters, low-VOC materials, fresh air ventilation, and advanced moisture control.

With SanctuAIR™, your home is built to support your family's daily well-being.





"After many months spent exploring locations and costs of existing housing and new construction options, we decided the Schell Brothers leading edge technology and clean, green, energy efficient innovations were the right match for us."

- The Rudgers

enerwize™
ENERGY OPTIMIZED

While all Schell Brothers homes are certified to meet Energy Star® requirements, Enerwize™ goes well beyond those standards. Thanks to advanced building techniques and technologies, houses built with Enerwize™ are approximately 50% more energy efficient than a typical Energy Star® certified home.

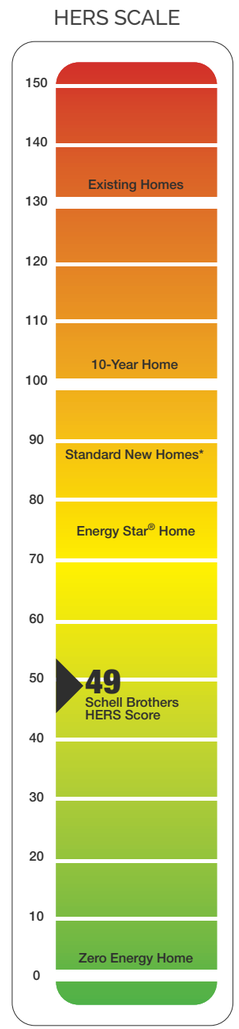
Compared to a 10-year-old resale home—which is similar in performance to a home built to the 2006 energy code—Enerwize™ homes are more than twice as efficient. That means your energy costs could be less than half of what you'd pay in an equivalently sized older home.

When you choose a Schellter™ home, you save money each month, reduce your home's carbon footprint, and support a more sustainable future.

HERS SCORE

Developed by RESNET®, the Home Energy Rating System Index (HERS) is the industry standard by which a home's energy efficiency is measured and is the nationally recognized system for inspecting and calculating a home's energy performance. The lower a home's HERS Score, the more energy efficient it is. A home built by Schell Brothers is well above code requirements.

You wouldn't buy a new car without knowing its "miles per gallon" rating. So why buy a home without knowing its "home energy rating"?





DID YOU KNOW?
Advanced framing combined with 2x6 exterior walls, blown-in blanket insulation, high-performance windows, and thorough air sealing throughout helps create a sound barrier from the exterior.

> *"While my wife was checking out the newly furnished models, I was busy walking your job sites and observing what goes behind your walls. Based on my experience in building, I was impressed with the techniques and materials you use."*
> - Nick Quercetti

4TRESS™
LEGENDARY QUALITY

Since most people know very little about the materials and techniques used in home construction, many builders use inexpensive materials and low-cost labor to lower the cost of the home. The thinking is: why spend extra money on things the home buyer doesn't know about? Unfortunately, this philosophy yields homes with very low quality that might look fine at the outset, but very quickly become plagued with costly repair and maintenance problems. At Schell Brothers, we are proud of our homes' reputation for exceptional quality, so we are constantly researching new products and techniques to further this reputation. With 4Tress™ Technology, we've taken Schell Brothers quality to a new level. All Schellter™ Homes meet stringent requirements in 4 categories: durability, strength, moisture & water protection, and sound attenuation.

You can be assured that a Schellter™ built home will stand the test of time and provide your family with safety and comfort for many years.

DID YOU KNOW?
One of the benefits most appreciated by our homeowners is how quiet it is within their new home. Advanced framing with 2x6 walls, blown-in insulation, high performance windows, and Energy Star® air sealing combine to create a surprisingly effective sound barrier from outside noise

"HomeIQ has made our daily routine feel effortless. From turning on the lights before we arrive home to adjusting the temperature from our phones, the little conveniences add up to a home that feels safer, simpler, and truly designed around us."

-Andy and Alyssa

homeIQ™

SMART LIVING

HomeIQ™ gives you the convenience of a smarter home from the moment you move in. Built-in smart switches let you control select interior and exterior lighting manually or through the Alexa app. You can even create routines that turn exterior lights on at dusk and off at dawn, adding everyday ease and an extra sense of security.

The system can also connect with compatible features such as the garage door, thermostat, front-door lock, and Wi-Fi-enabled appliances, allowing you to manage more of your home from one place. A personalized activation appointment includes setup and hands-on training, so you'll feel confident using the technology and tailoring it to your lifestyle. It is a thoughtful, ready-to-use lifestyle upgrade built into your home that makes daily life feel simpler, safer, and more connected.



SCHELLTER™

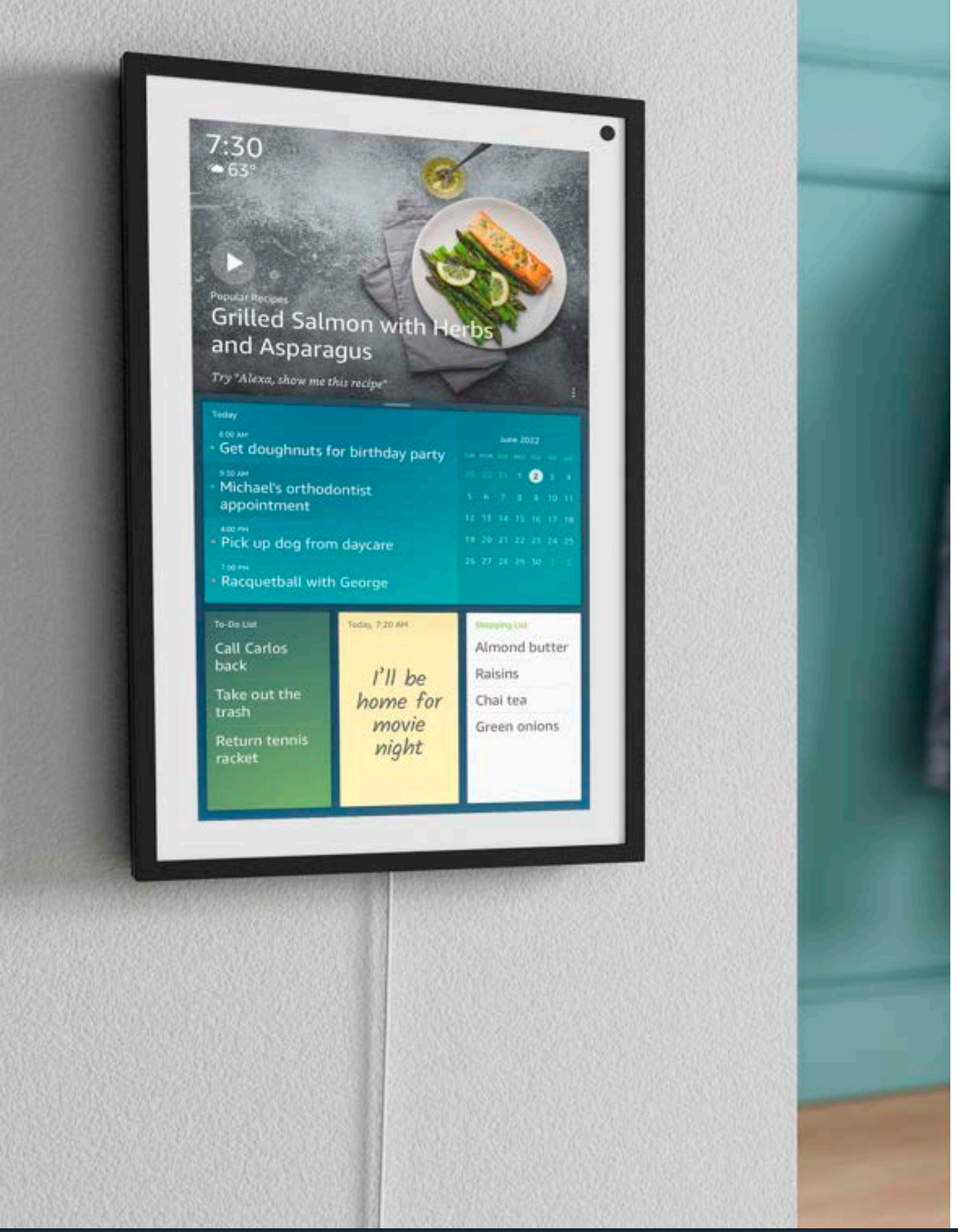
enerwize™
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SMART LIVING

The following pages showcase examples of how Schellter™ is included in our homes. Each example includes an icon that represents the appropriate Schellter™ component related to that technology or building technique.





LIVE SMART WITH HOME AUTOMATION

WHAT IS IT?

Our HomeIQ™ system ensures your family lives at home with ease and offers technology at your fingertips. Ensure security, manage appliances and lighting, and access a variety of apps right from your hub. Smart Home Technology allows you to be more efficient and monitor your home even when you aren't there.

SMART HOME COMMAND CENTER

Our Smart Home Command Center, mounted in your kitchen, allows you full control of your home from a single monitor. With this technology, you will have full control of your smart home environment and be able to set up multiple user settings for each member of your family. This Command Center allows you to communicate with one another throughout the home using Alexa devices, set reminders, create shopping lists, access recipe books, manage To-Do Lists, play music, make phone calls, and more.

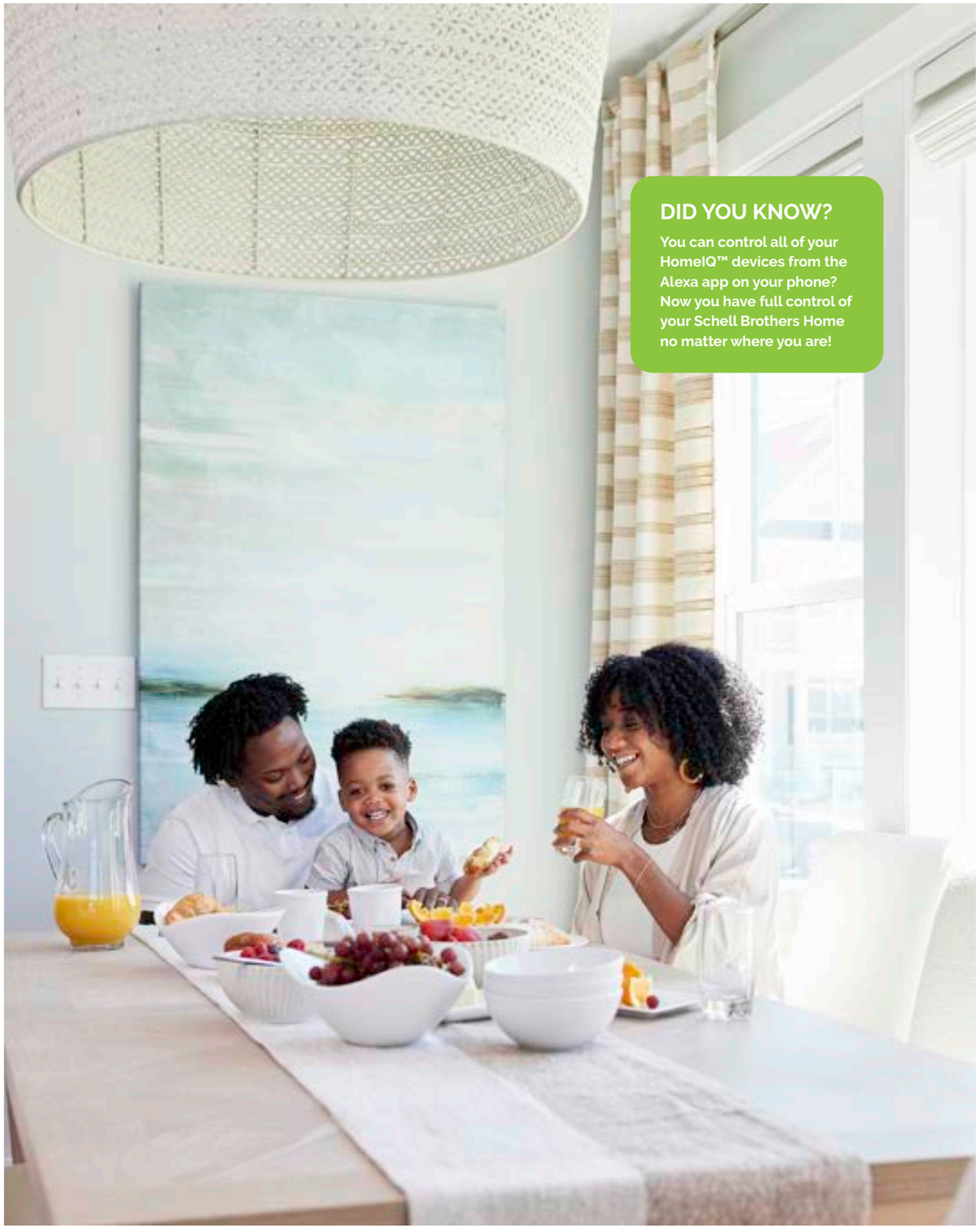
SMART SWITCH FOR INTERIOR LIGHTS

With HomeIQ™ every bedroom features an Smart Switch. This allows you to use Alexa, receive announcements from other Alexa devices, set a reminder or alarm, play music, and check the weather. Additionally, through the Alexa App you can turn the lights off and on and can set a night light. You also can use your remote control via the Alexa application.



DID YOU KNOW?

You can control all of your HomeIQ™ devices from the Alexa app on your phone? Now you have full control of your Schell Brothers Home no matter where you are!



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You can control all of your HomeIQ™ devices from the Alexa app on your phone? Now you have full control of your Schell Brothers Home no matter where you are!

CONNECTED SWITCH FOR EXTERIOR LIGHTS

Smart switches are installed in standard locations throughout the home, including bedrooms, the foyer (for 1st-floor porch lights), the garage (for coach lights), and any front-facing exterior lights on upper floors. If your home includes a front porch or balcony on the 2nd or 3rd floor, those exterior lights will also be connected to a smart switch.

Any front-facing exterior light wired to a smart switch can be programmed through the Alexa app, including automated on/off schedules at dawn and dusk.

In bedrooms, smart switches are wired to the ceiling-fan/light rough-in. Because fans and fixtures vary widely—fan/light combos with remotes, fans without lights, or lights without fans—you'll need to tell your post-settlement electrician how you want your fixture to work with the smart switch. For example:

- The light controlled through Alexa; the fan operated by its wall switch
- The fan controlled through Alexa; the light operated by its wall switch
- Both powered by the smart switch so your remote handles fan speed and light levels

All smart switches are installed, registered, and programmed during construction. At your Guardian Activation Appointment, the technician will show you how to use and customize them in the Alexa app and introduce additional Alexa "skills" that work with your Home IQ features,

OUTLETS FOR YOUR DEVICES

The search for your charger is over.

Your HomeIQ™ comes equipped with four USB-C/USB-A combination outlets at optimal locations in the kitchen.

OVERHEAD GARAGE DOOR

Your HomeIQ™ features a Liftmaster My Q Gateway garage door which can be operated from the kitchen Command Center. You can also operate the door from the Alexa app. When your kids forget to close the door after their bike ride, you no longer have to worry! Alexa will notify you and you can close it remotely. HomeIQ™ also uses geofencing technology so your garage door will auto-open when you are nearby.

ALARM SYSTEM, LOCKS, AND DOORBELL

Your Home IQ features a home security panel where you can monitor, control and program your security system, overhead garage door, and included keyless entry system and video doorbell.

SMART FRONT DOOR LOCK

A keyless entry door lock will give you the freedom from keys and hiding them under the door mat. Set-up personal codes for the kids, neighbor, dog walker or the cleaners and give quick entry access to those you trust. Remotely lock/unlock the door from anywhere you are and receive messages on who's entered the home. It also communicates directly to your alarm panel.



2X6 CALIFORNIA CORNER

2x6 STUDS = 63% MORE INSULATION

More insulation makes a huge difference in heating and cooling cost. **2x6 walls are also significantly stronger than 2x4 walls.**

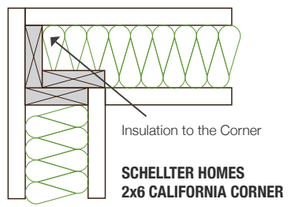
ADVANCED FRAMING

WHAT IS IT?

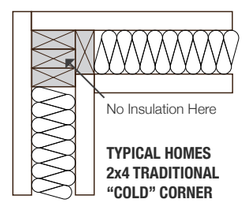
A combination of cutting edge framing techniques designed to make the home stronger and more energy efficient.

WHY YOU WANT IT

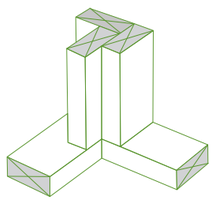
Advanced Framing techniques maximize the thermal barrier provided by your exterior walls. This is accomplished using enhanced framing techniques to increase insulation and reduce the "thermal bridging" caused by excess wood (a very poor insulator) in exterior walls. Advanced Framing also increases the strength of a home with precision placement of studs in exterior walls to properly transfer loads (weight) from the roof all the way down to the foundation.



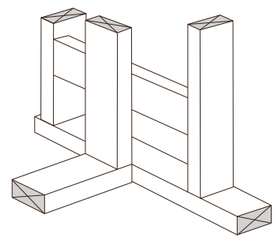
SCHELLTER HOMES
2x6 CALIFORNIA CORNER



TYPICAL HOMES
2x4 TRADITIONAL
"COLD" CORNER



Schellter Homes "California" Corners
California corners decrease lumber use and increase insulation compared with typical corners.



Schellter Homes T-Wall Alternatives
Allows for significantly more insulation at intersections of an interior wall and an exterior wall.

"Schell built the best house, to my eye, of the builders we checked out. We looked at a number of homes partially built and Schell was impressive for what went into the house under the skin; anyone can do great cosmetics. Engineering-wise, it is impressive how the energy saving elements work together. The mechanical systems are excellent; you have good design with great construction methods"
- James & Dianne Stevens

OPEN-WEB FLOOR TRUSSES

WHAT IS IT?

An engineered open floor system connected with gusset plates.

WHY YOU WANT IT

Open-web trusses are custom designed and precisely manufactured to the specifications of each individual home. They also give you the advantages of high strength-to-weight ratios, long span capabilities which provide open floor plans and stronger, straighter, and quieter floors. The open configuration in the trusses also allow for mechanical systems such as plumbing, electrical and HVAC to be installed within the frame rather than under, minimizing the need for cutting on-site, bulkheads, and lowered ceilings heights.

Open-web trusses create ceilings that maximize livable space and headroom throughout the home.

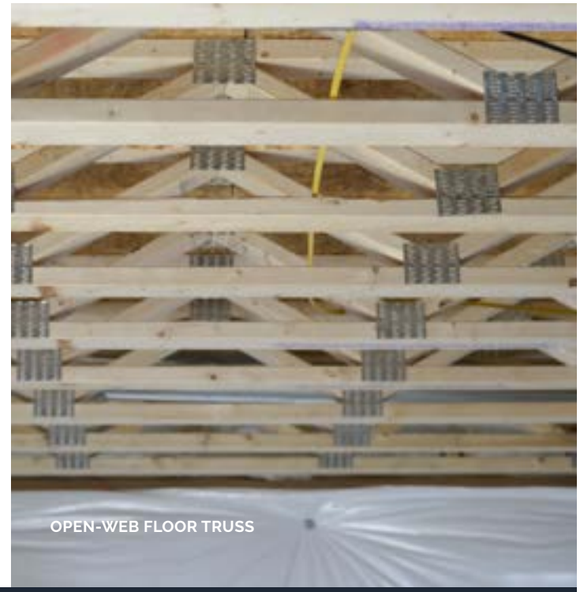
2X6 EXTERIOR WALLS

WHAT IS IT?

An exterior wall constructed with 2x6 studs rather than the more common 2x4 studs.

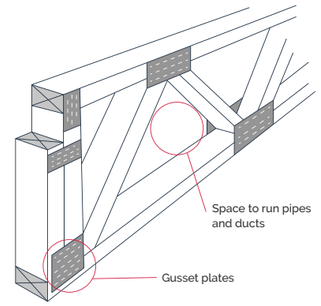
WHY YOU WANT IT

A 2x6 wall is not only significantly stronger than a 2x4 wall, but a 2x6 wall that is on 24" centers allows for 63% more insulation than a 2x4 wall that is on 16" centers. More insulation makes a huge difference in heating and cooling costs. The extra insulation also makes it much quieter inside the home.



OPEN-WEB FLOOR TRUSS

SCHELLTER HOMES OPEN-WEB FLOOR TRUSS



The U.S. Department of Energy estimates that the elimination of cold corners and other insulation voids, coupled with the reduced thermal bridging of wider stud spacing, can increase the effective R-value of exterior walls by as much as 30%.



2X4 VS 2X6

STICK-BUILT CONSTRUCTION

WHAT IS IT?

Walls that are framed on-site as opposed to panelized walls that are built in a factory.

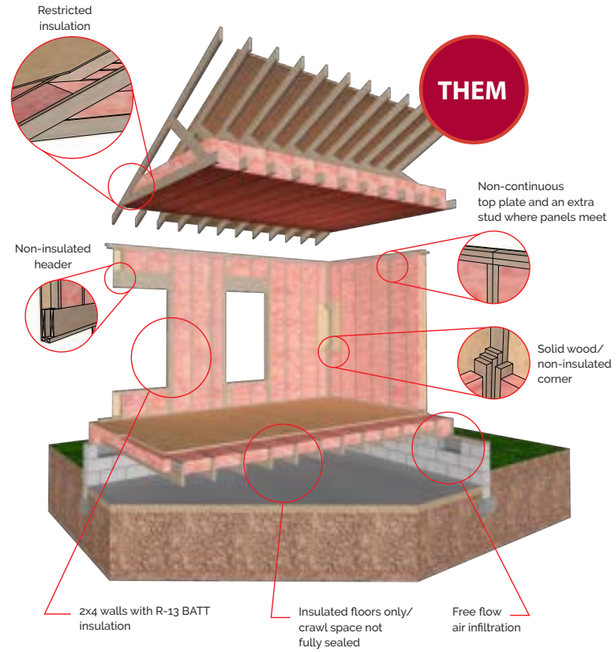
WHY YOU WANT IT

Most production home builders use panelized walls in their homes because it costs less. Although framing is certainly less expensive and quicker using panels, stick-built homes are stronger and more energy efficient. Each wall of a stick-built home is built as one continuous and connected structure with overlapping bottom and top plates. Wall sheathing (the OSB or plywood on the outside of an exterior wall) provides a significant amount of a stick-built home's structural integrity by tying the walls and floor systems together via overlapping sheathing. The added strength associated with stick-built homes is one of the primary reasons factory built or panelized homes tend to suffer far more damage during tornadoes and hurricanes.

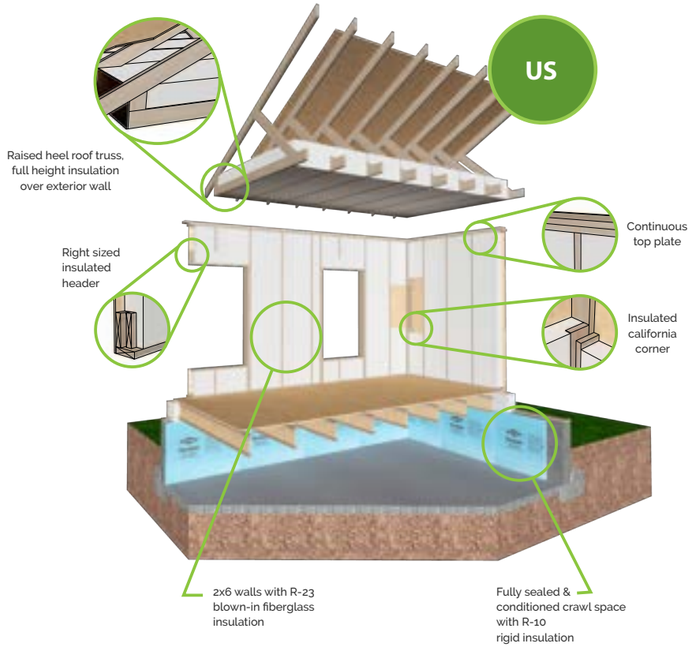
Further, panelized homes introduce extra studs into the exterior walls because there are two studs next to each other where panels meet. Wood is a poor insulator so extra studs means extra energy loss through the walls. In addition, small gaps between studs, walls, and floor systems are a common source of air infiltration into a home. In a stick-built home, the sheathing covers these gaps and inhibits the air leak.



TYPICAL PANELIZED HOME BUILT TO CODE



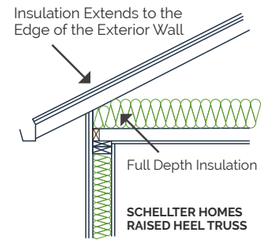
SCHELLTER STICK-BUILT HOME



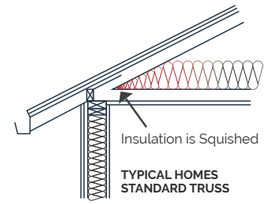
IN OTHER WORDS...

Schellter™ stick-built homes are stronger, more energy efficient homes compared to panelized homes and will better stand the test of time.

RAISED HEEL ROOF TRUSS



A raised heel truss allows insulation to be installed to full depth.



Little to no insulation in corners allows heat loss.



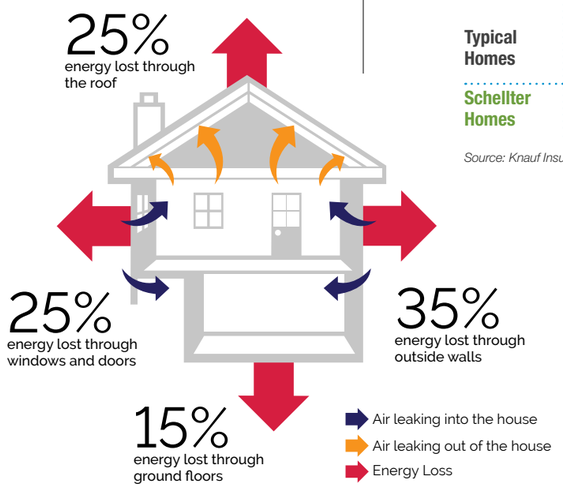
ENERGY STAR
DRAFT STOPPING

We use 3rd party testing to verify that our air exchange rate is less than 3.0 ACH50. The lower the ACH, the lower the energy bill.

IN OTHER WORDS...

Air sealing protects your home from any drafting coming in from exterior walls.

SOURCES OF ENERGY LOSS IN A TYPICAL HOME



ENERGY STAR® DRAFT-STOPPING

WHAT IS IT?

Spray foam applied to joints and other areas of the home's exterior envelope designed to prevent unwanted airflow between the outside and inside of the home.

WHY YOU WANT IT

Air infiltration is a major cause of heat and cooling loss within a home. Even a well-insulated home can have high energy bills and uncomfortable drafts if the home is not properly draft-stopped. To ensure the exterior envelopes of our homes are sealed properly, we conduct a third party blower door test on every home. This test measures the effectiveness of the draft-stopping and allows us to identify and correct any deficiencies discovered.

WHY AIR SEAL?

Insulation is like a fuzzy wool sweater on a winter day. It will certainly keep you warm if the air is calm. But, if the wind picks up, you are going to need a windbreaker to keep the breeze from carrying away the heat. Air sealing is like adding the windbreaker. It keeps the conditioned air where it belongs.*

R-VALUE

Insulation's primary purpose is to reduce heat transfer. Measuring its effectiveness is referred to as R-Value, which measures insulation's thermal resistance, or its ability to resist the flow of heat through the insulation. The higher the R-Value, the more effective the insulation is at resisting heat flow.

R-VALUE CHART

	STUD/JOIST SIZE	THICKNESS	R-VALUE
Typical Homes	2x4 BATT Insulation	3.5 Inches	13
Schellter Homes	2x6 Dense Pack Insulation	5.5 Inches	23

Source: Knauf Insulation

BLOWN-IN-BLANKET INSULATION

WHAT IS IT?

Dense Pack Fiberglass Insulation that is "blown-in"

WHY YOU WANT IT

BATT insulation, still used in most new homes, loses its effectiveness when it is cut or compressed to accommodate electric boxes, wires, light fixtures, or other objects installed in walls and ceilings. Blown-in insulation completely fills all the voids in walls/ ceilings, creating a consistent and more effective thermal and sound barrier. In addition, blown-in insulation of the same thickness achieves higher R-Values than BATT insulation (R-23 vs R-19 in a 2x6 wall). The blown-in insulation used in Schell Brothers homes is formaldehyde free, non-combustible, non-corrosive, and moisture resistant . . . that means you get a safer product that resists mold growth to protect your home and the people in it!

INSULATED CONDITIONED CRAWL SPACE

WHAT IS IT?

A crawl space that has no outside vents, is insulated, and is conditioned by the HVAC system.

WHY YOU WANT IT

It is universally acknowledged in the building science community that traditional vented crawl spaces included in most existing homes are harmful. The moist warm air found in vented crawls in the summer months creates a perfect environment for mold and bacteria, which can infiltrate the living area of the home through HVAC ducts and air leaks in the floor system. In addition, a vented crawl space makes the entire home a conditioned island surrounded by unconditioned air on all sides. Insulating and conditioning the crawl space creates a thermal connection to the ground and essentially eliminates the majority of heat loss through the floor system, not to mention eliminating the discomfort caused by cold floors in the winter.

*Each bag of blown-in insulation contains the equivalent of over 30 recycled bottles, and is verified as a GREENGUARD® certified, low VOC product.**

**Source: Knauf Insulation*



ENERGY STAR® DRAFT STOPPING



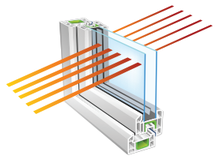
BLOWN-IN-BLANKET INSULATION

DID YOU KNOW?

In addition to greater energy-savings, fiberglass insulation delivers excellent sound absorption. The blown-in insulation used in Schellter™ Homes improves Sound Transmission Class (STC) ratings by 4 to 10 points.*

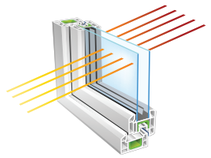
U-factor measures the rate of heat transfer. The lower the U-factor, the higher the insulating value of the window and the less energy required to heat and cool the home.

R-value measures the resistance to heat loss.



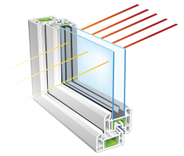
.47 STANDARD WINDOW U-VALUE

R2 R-VALUE



.32 LOW-E ENERGY STAR WINDOW U-VALUE*

R3 R-VALUE



.26 SCHELLTER HOMES WINDOW U-VALUE**

R4 R-VALUE

ULTRA HIGH PERFORMANCE WINDOWS

WHAT IS IT?

Extremely energy efficient windows with a very low U-Value (well insulated) and a very low SHGC (Solar Heat Gain Coefficient).

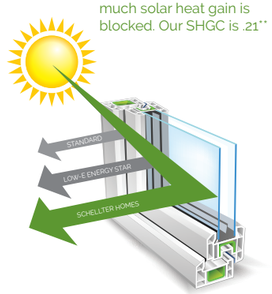
WHY YOU WANT IT

A home's windows can be a major source of heat and cooling loss. Many builders reduce the construction cost and energy loss associated with windows by simply including very few windows in their homes. At Schell Brothers, we recognize that natural light in a home greatly affects the feel or happiness of the home. For this reason, we do not "skimp" when it comes to the amount or quality of windows we provide in our homes. To prevent energy loss while including more windows, our windows are engineered to meet the ultra-energy efficient specs we insisted on. In addition, our windows minimize the transfer of ultraviolet light, protecting your furniture and finishes from fading.

NOT ALL LOW-E WINDOWS ARE CREATED EQUAL

The lower the U-Value, the greater a window's resistance to heat flow and the better its insulating value. U-Value measures the rate of non-solar heat loss or gain through a window, including the loss or gain due to the window's frame, glass, seals, and spacers. Simply put, the U-Value measures how well a window resists heat transfer through the window.

Solar Heat Gain Coefficient (SHGC) measures how much solar heat gain is blocked. Our SHGC is .21**



STANDARD BLOCKS 41% SHGC OF .59

LOW-E ENERGY STAR BLOCKS 60% SHGC OF .40*

SCHELLTER HOMES BLOCKS 79% SHGC OF .21**

*2012 IECC (Climate Zone 4)

**SHGC and R-Value may vary depending upon window size/design

4TRESS LEAK PREVENTION SYSTEM™ (LPS)

WHAT IS IT?

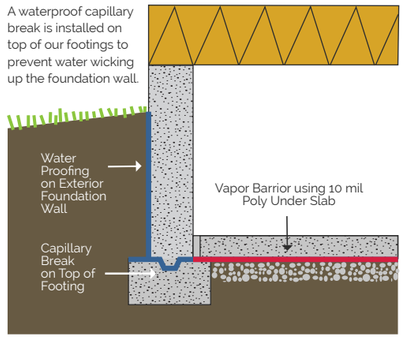
A collection of waterproofing and water infiltration prevention features designed to keep the inside of your home water and moisture free. 4Tress™ LPS™ features include foundation perimeter J-drains, a sump pump, waterproof capillary break above footings, Watchdog® H3 foundation waterproofing, and our 5 Check leak prevention system for window and door installation.

WHY YOU WANT IT

Water infiltration can wreak havoc on a home. Not only can water leaks ruin the finishes within your home, they can cause dangerous structural issues due to wood rot. In addition, water in the home causes mold growth which can be harmful and sometimes deadly to the home's inhabitants. Building scientists have recently discovered that even a leak free home can have moisture and mold problems due to ground water wicking up the foundation walls through the footing. The waterproof capillary break installed on top of our footings prevents this from occurring.

WATER MANAGEMENT

A waterproof capillary break is installed on top of our footings to prevent water wicking up the foundation wall.



*Shown as a basement foundation

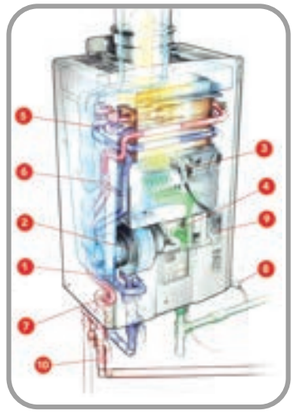


TANKLESS HOT WATER HEATER

DID YOU KNOW?

Tankless water heaters use up to 40% less energy than a traditional tank water heater.

Source: www.rinnai.us



1. A water-flow sensor triggers the heating sequence
2. The combustion fan forces air into the burner
3. The igniter sparks
4. The modulating gas valve supplies fuel to the burner
5. The water supply line passes through the copper heat exchanger multiple times
6. A bypass introduces cold water to the hot water
7. A temperature sensor (thermistor)
8. The electrical demands of the unit are met with a standard 120v power plug
9. The printed circuit board (PCB) is the brain of the unit
10. The hot-water supply flows to the tap at a capacity of roughly 7.5 gpm

TANKLESS WATER HEATER

WHAT IS IT?

A tankless gas hot water heater about the size of a briefcase.

WHY YOU WANT IT

A traditional tank hot water heater uses a tremendous amount of energy because it is constantly running. A tankless water heater only runs "on demand" when hot water is needed. Not only does a tankless water heater use much less energy than a typical tank water heater, it takes up less space, never runs out of hot water, and will last about twice as long.

fresh, clean WATER

Traditional tank water heaters can get a build up of rust and scale inside their tank.

ENDLESS HOT water

Only heat what you use

2X LONGEVITY

Typical life of up to 20 years

SPACE Savings

A traditional tank can take up to 16 sq feet . A tankless is about the size of a carry on suitcase.

Would you leave your car running all day? Certainly not! Then why leave your water heater running all day when you're not at home?

PEX PLUMBING LINES

WHAT IS IT?

A plumbing system that provides direct home runs through flexible pipes to each hot and cold water faucet.

WHY YOU WANT IT

PEX piping systems have far fewer joints and fittings, greatly reducing the potential for leaks. These systems also save water and keep your hard-earned money from going down the drain. In addition, the hot water lines return more heat than copper or CPVC.



DID YOU KNOW?

Keeping humidity in the optimal range indoors helps to control bacteria, viruses, fungi (including mold), allergies, and asthma.

Source: Acurite®

VARIABLE SPEED AIR HANDLER

WHAT IS IT?

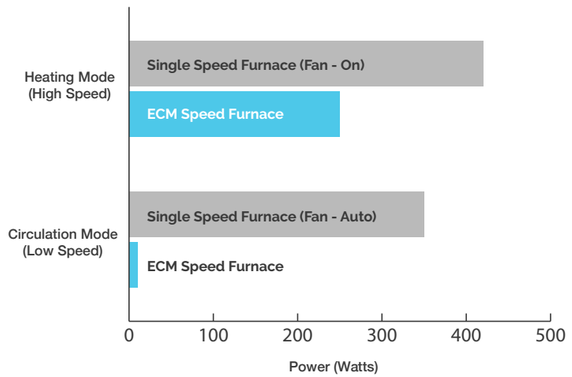
An HVAC system that has multiple fan speeds to precisely control the speed and volume of air flowing through the system.

WHY YOU WANT IT

A variable speed system with ECM (Electronic Communicating Motor) technology is more energy efficient, as most times of the year the air handler fan will only need to run on low speeds. The system is quieter and makes very little noise when it turns on due to the ability to start with a low fan speed. A variable speed air handler is much more effective at removing moisture (humidity) from the air, which not only improves comfort but reduces problems caused by moisture such as mold.

A VARIABLE SPEED AIR HANDLER RUNS AT LOW SPEED 80% OF THE TIME

makes less noise and reduces energy costs.



SMART THERMOSTAT

WHAT IS IT?

A thermostat that is programmed to monitor and regulate both temperature and humidity.*

WHY YOU WANT IT

Temperature is only part of what makes a home's interior environment comfortable. High humidity can make a home uncomfortable and potentially lead to an unhealthy environment in the home due to moisture-related problems. Traditional HVAC systems and thermostats only measure and regulate temperature. Our thermostats combined with our variable speed air handlers allow our HVAC system to independently reduce humidity by cycling down the fan speed to remove more moisture from the air while having a minimal effect on temperature.

*Our HVAC system can only decrease humidity levels when the A/C is running. Without a humidifier, an HVAC system has no way of increasing humidity levels.

DID YOU KNOW?

The amount of humidity varies depending on the season, weather and where you live. Generally, humidity levels are higher in the summer and lower during winter months. Ideally, humidity in your home should be between 30 and 50 percent. Humidity that's too low or too high can cause problems.

Source: The Mayo Clinic






PROPERLY SEALED DUCT WORK

PROPERLY SEALED DUCTWORK

WHAT IS IT?

Ductwork with all seams sealed with tape and mastic to ensure little to no air leakage.

WHY YOU WANT IT

According to the U.S. Department of Energy, up to 20% of the energy used to heat & cool a home is wasted energy lost due to duct leakage. Proper duct sealing can greatly reduce or eliminate this source of energy loss and increases the efficiency by reducing heat transfer through the duct walls.

2-STAGE HIGH EFFICIENCY FURNACE

WHAT IS IT?

An energy efficient furnace that has the ability to run at two speeds compared to most furnaces which are either on or off.

WHY YOU WANT IT

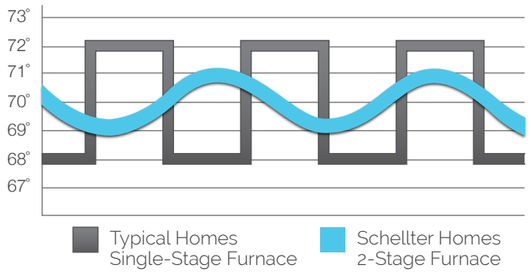
A 2-Stage Furnace is like having 2 furnaces in one: an energy efficient low-stage furnace for moderately cold days, and a heavy duty, high-stage furnace for very cold days.

Duct leakage is inefficient.

We hire a third party to test for duct leakage during the "rough in" stage prior to insulation and also prior to obtaining a final Certificate of Occupancy to ensure our homes are efficient as possible. Our third party energy rating company uses a sophisticated setup to conduct a blower door test and identify potential air leakage or inadequate insulation through the use of software and thermal cameras.

HIGH EFFICIENCY
2-STAGE FURNACE

2-Stage Furnaces are designed to allow the system to run at lower, more efficient levels providing more consistent comfort and lower energy bills.



DID YOU KNOW?

A 2-Stage Furnace is not only more energy efficient, it is also quieter. A 2-Stage Furnace typically operates in the low stage most of the time, producing far less combustion noise than a Single-Stage Furnace.

DID YOU KNOW?

Indoor air quality (IAQ) refers to the condition of the air in your home. It is made up of temperature, humidity, air purity, and air freshness. Poor IAQ can cause problems that effect your home furnishings, belongings and your family's health.

Source: EPA Home Helps

WHOLE HOUSE DEHUMIDIFIER

WHAT IS IT?

A dehumidifier that monitors and maintains proper humidity levels in the home independent of temperature or HVAC thermostat settings.

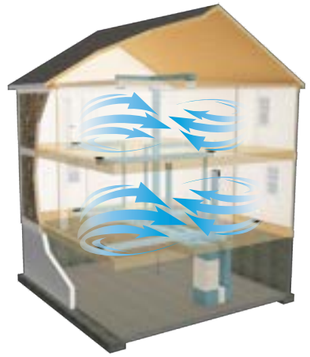
WHY YOU WANT IT

High humidity is uncomfortable, causes damage to interior finishes like hardwood floors and furniture, and is a primary contributor to mold growth in the home. Unfortunately, running the A/C is not always sufficient to maintain proper humidity levels, especially in the spring and fall when temperature is mild but humidity is high. A whole house dehumidifier is the most efficient and effective way to ensure safe and comfortable humidity levels year round within your home.

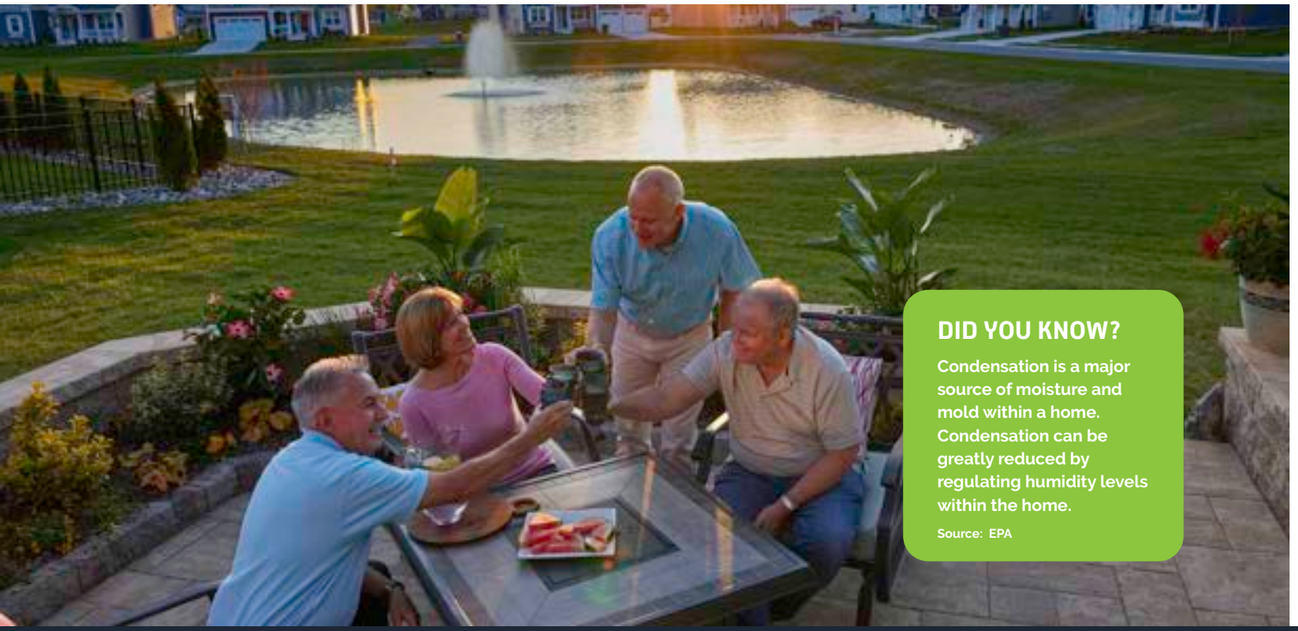
Note: Whole house dehumidifier may not be included and is dependent on geographical location and need for dehumidification.



PORTABLE DEHUMIDIFIER



WHOLE HOUSE DEHUMIDIFIER



DID YOU KNOW?

Condensation is a major source of moisture and mold within a home. Condensation can be greatly reduced by regulating humidity levels within the home.

Source: EPA



LOW VOC MATERIALS

WHAT IS IT?

Building materials that emit little to no VOCs (Volatile Organic Compounds).

WHY YOU WANT IT

Research funded by the EPA has found that most homes in the U.S. contain high levels of VOCs due to the products used in constructing the home. VOCs can lead to adverse health conditions such as eye, nose, and throat irritation; dizziness, headaches, loss of coordination, nausea; central nervous system, liver, and kidney damage; and even cancer. VOCs are emitted by building products such as paint, carpet, adhesives, OSB/plywood, and other building materials. The EPA discovered that not only do these products emit VOCs during installation but most will continue to emit VOCs long after installation. Schellter Homes use low to no VOC materials to ensure that our homes provide a healthy environment for our homeowners and their families

DID YOU KNOW?

We use low to no VOC materials in our homes and most are GREENGUARD Certified. A GREENGUARD Certification indicates products have been screened for over 10,000 chemicals. Certified products help create healthier indoor environments.

FRESH AIR VENTILATION SYSTEM

WHAT IS IT?

A ventilation system that circulates fresh air from outside into the home.

WHY YOU WANT IT

Schellter™ homes are built to be extremely energy efficient, which means there is very little air leakage through the home's exterior envelope. While this is great for energy efficiency, a home needs fresh air to create a healthy indoor environment. Schell Brothers homes include a fresh air ventilation system that circulates fresh air into the home at a rate consistent with the size of the home and sufficient to maintain healthy indoor air quality.

IN OTHER WORDS...

We build our homes so tight that we have to introduce fresh air into the home via this unit which also works as a whole home dehumidifier.









MERV 13 AIR FILTER

WHAT IS IT?

A MERV 13 rated high efficiency air filter installed in the HVAC system. MERV stands for Minimum Efficiency Reporting Value and measures the effectiveness of air filters. MERV values range from 1 to 16 with a higher value being more effective. A MERV 13 filter has 20 times the surface area of a standard pleated filter.

WHY YOU WANT IT

A typical residential air filter is less than MERV 5 and removes only large particles from the air. Most harmful particles such as bacteria, mold, and allergens are relatively small and can only be removed by more advanced filters. A MERV 13 filter will remove almost all of the harmful particles in the air. In fact, MERV 13 filters are rated high enough to be used in hospitals.

BRINGING HAPPINESS HOME

While our culture is the spirit of Schell Brothers, the foundation of our team lies in a relentless commitment to excellence, and that means using the highest quality materials, hiring the best employees and contractors, and designing the most attractive and functional homes. The bottom line is that you deserve a home that will make you proud and that's at the forefront of our mind throughout the entire process.

Home is where you can be yourself, spend time with family and entertain friends. At Schell Brothers, we're committed to providing a healthier, more comfortable and efficient living environment that will positively impact your life for years to come. We're proud to build your home and excited to welcome you into our extended family.

Save. Breathe. Relax. Smile.

"We had researched builders in the area and quickly learned of Schell's stellar reputation. Their amazing team and green home philosophy led us to narrow our search to only Schell communities."

- Carol Lynn Centonze & Anne Lonergan

MERV 13 FILTERS

MERV

(minimum efficiency reporting value)

describes the size of the holes in the filter that allow air to pass through. The higher the rating (1-16), the smaller the holes, and the better the filtration.

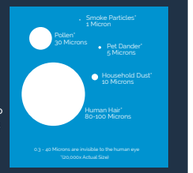


MERV 13 filters effectively reduce pollen, dust, pet dander, mold spores, dust mites, and other allergens from indoor air.

RATED HIGH ENOUGH TO BE USED IN HOSPITALS

HOW BIG IS A MICRON?

A micron is 1 millionth of a millimeter. The average strand of human hair is about 100 microns thick, so imagine just how small 0.3 microns of bacteria are.



PARTICLE-REMOVAL EFFICIENCY - HEALTHY AIR CLEANERS

Particle size in microns



MERV 13 filters have 20x the surface area of a standard pleated filter.



DID YOU KNOW?

In recent years, comparative risk studies performed by the EPA and its Science Advisory Board (SAB) have consistently ranked indoor air pollution among the top five environmental risks to public health.

Source: EPA

BUILDING VALUED PARTNERSHIPS

Schellter Homes receive only the highest certifications from the following organizations: U.S. Environmental Protection Agency's Indoor airPLUS Program, Energy Star®, The Builders and Remodelers Associatoin of Delaware, The Home Building Association of Richmond, and The National Association of Home Builders® (NAHB).

In 2015 the EPA recognized Schell Brothers with the Indoor airPLUS Leader Award for our outstanding commitment to building homes with improved indoor air quality.



SCHELLTER™
advanced building science

INCLUDED IN ALL OUR HOMES

ALWAYS INNOVATING

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