

Why smart home tech will revolutionize the energy efficiency game

ENERGY STAR Partners Meeting • October 25, 2016

Shelton^{Grp}

Gain a sustainable advantage

Our Vision: Every home & building in America is energy responsible and sustainability is ordinary



Gain a sustainable advantage



We create **a market advantage** for organizations who create a sustainable, energy-responsible future.



energypulse™

ecopulse™

b2bpulse™

Gain a sustainable advantage

Shelton Grp



Gain a sustainable advantage



<http://sheltongrp.com/lp/energy-pulse-2015-special-report/#gendergap>

The Smart Home Gender Gap

What it is and how to bridge it

The smart home technology market is a sleeping giant – and no one's sure exactly when it will awaken. Many market observers think the tipping point will be an advance in technology that proves impossible for consumers to resist. But we think market success may actually hinge on speaking credibly to an audience that has been largely overlooked: women. See what our research shows about the smart home gender gap: what it is and how to bridge it.



Gain a sustainable advantage

Shelton^{Grp}

<http://sheltongrp.com/lp/energy-pulse-2015-special-report/#gendergap>



Smart Home Strategies for Utilities

Five reasons you should get in the game

The energy landscape is changing, and utilities are retooling old business models to include more products and services. Smart home technology is a natural fit, offering utilities unbeatable opportunities for increasing customer revenue and loyalty. But you'd never know it, judging by how slowly utilities are moving into the space. Our research shows that now is the time to act – and we've got five compelling reasons why.

Gain a sustainable advantage

Shelton^{Grp}

The short answer



Gain a sustainable advantage



9%

choose **smart thermostats** as one of the top things that have an impact on making a home more energy efficient

9%

choose **insulation** as one of the top things that have an impact on making a home more energy efficient

Source: Energy Pulse 2015

Gain a sustainable advantage

Shelton^{Grp}

The longer answer

1.8b

Connected home devices expected to ship in 2019

\$490b

Expected connected home revenues in 2019

Source: <http://www.businessinsider.com/connected-home-forecasts-and-growth-report-2015-4>

Gain a sustainable advantage

Shelton^{Grp}

60%

believe a fully connected home will be achievable
within five years

Source: www.throughtek.com/report/ThroughTek_Internet%20of%20Challenges%20Report.pdf

Gain a sustainable advantage

Shelton^{Grp}

84%

of smartphone or tablet owners either currently, or plan to, control a connected home device in the next year

Source: Energy Pulse 2015

Gain a sustainable advantage

N=1,423

Shelton^{Grp}

39%

prioritize smart thermostats as the technology they'd
“try” if given a chance

Source: Energy Pulse 2015

Gain a sustainable advantage

N=920

Shelton^{Grp}

Within the year...

19.8m

Likely household penetration for smart thermostats

19.5m

Likely household penetration for smart lighting

Source: Energy Pulse 2015

Gain a sustainable advantage

Shelton^{Grp}

Meanwhile...

Gain a sustainable advantage

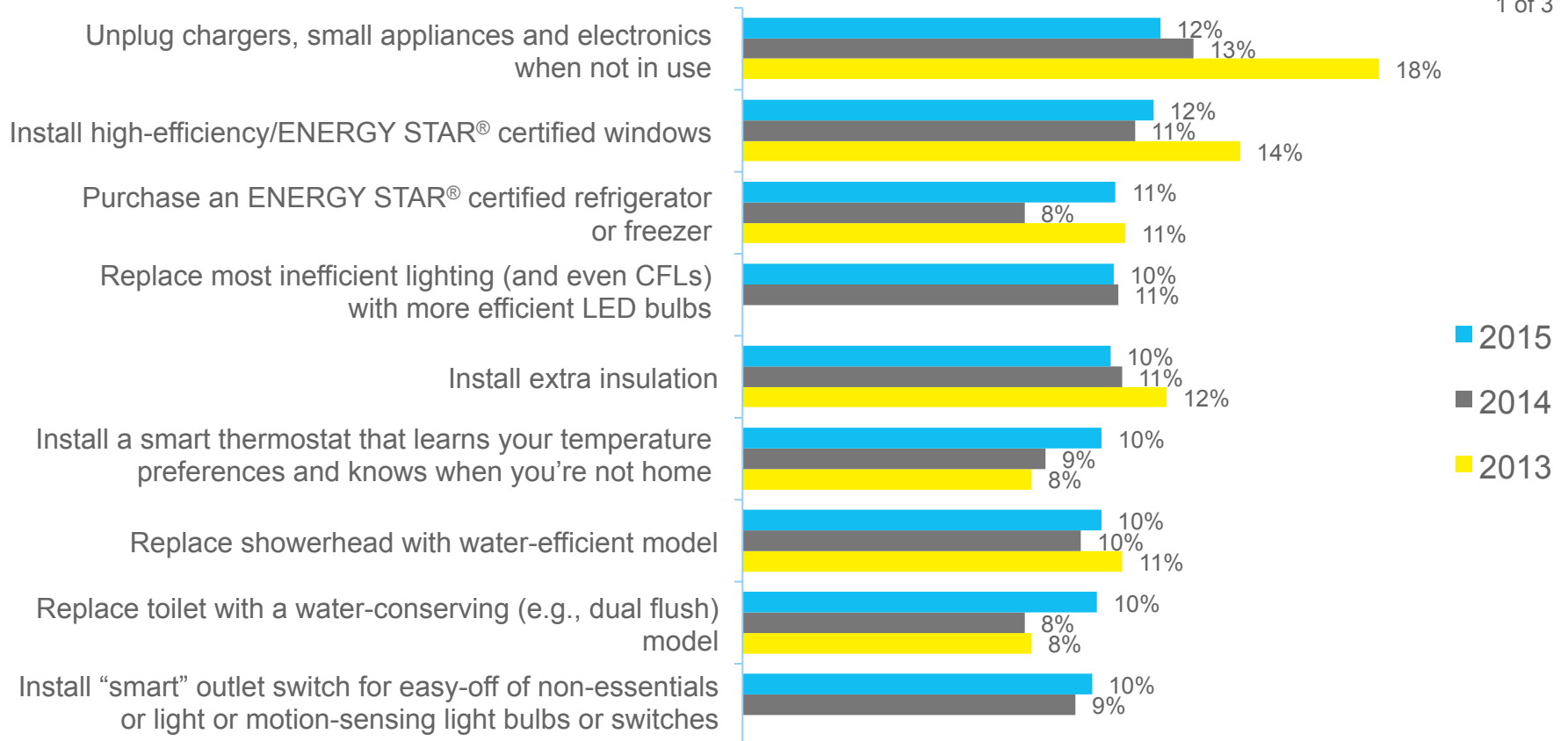
Shelton^{Grp}

Likelihood of doing nearly every EE home improvement we track is in a 3-4 year flatline.

Gain a sustainable advantage

Shelton^{Grp}

Propensities have declined and stagnated

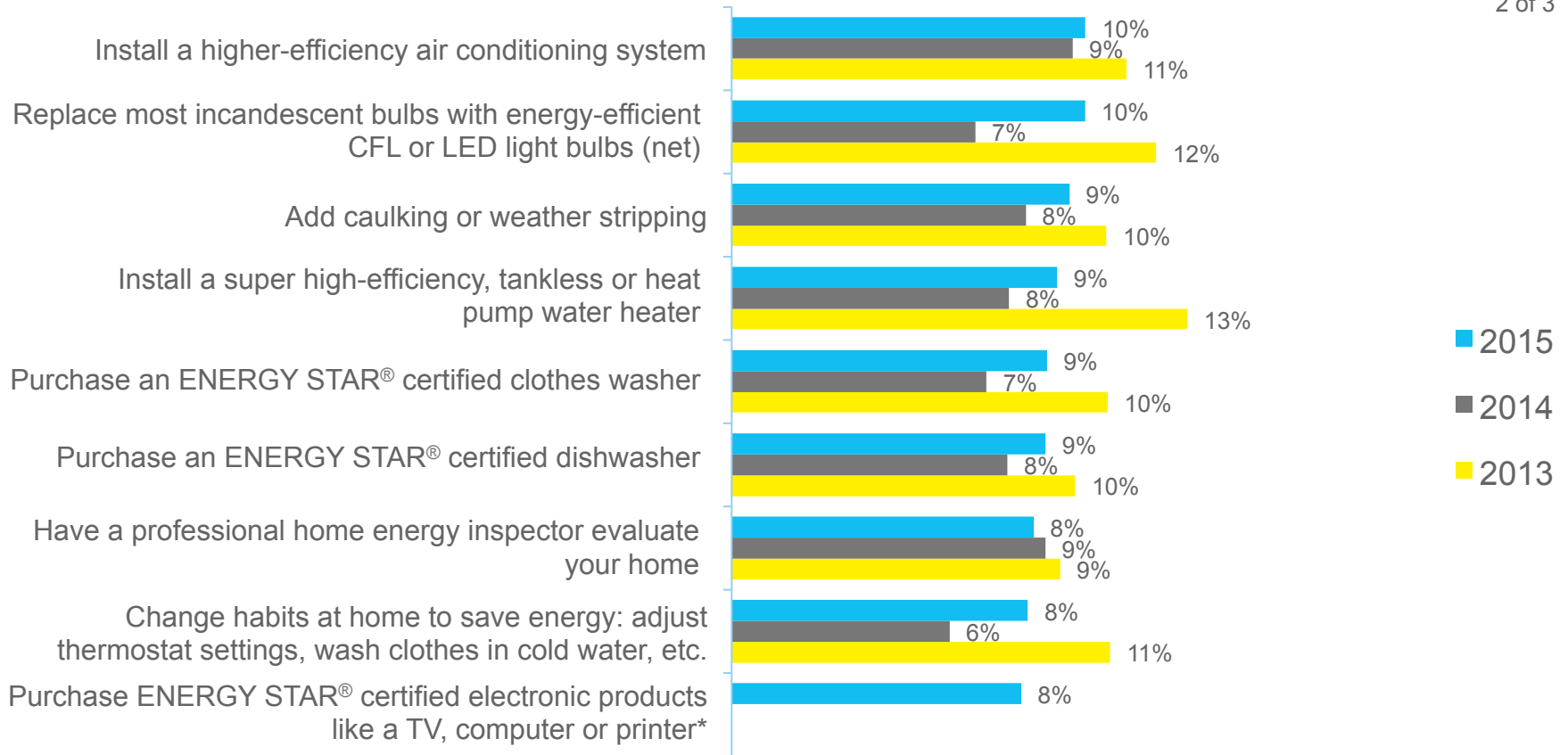


N=2,029

Energy-Efficient Home Activity Propensity

energypulse™
2015





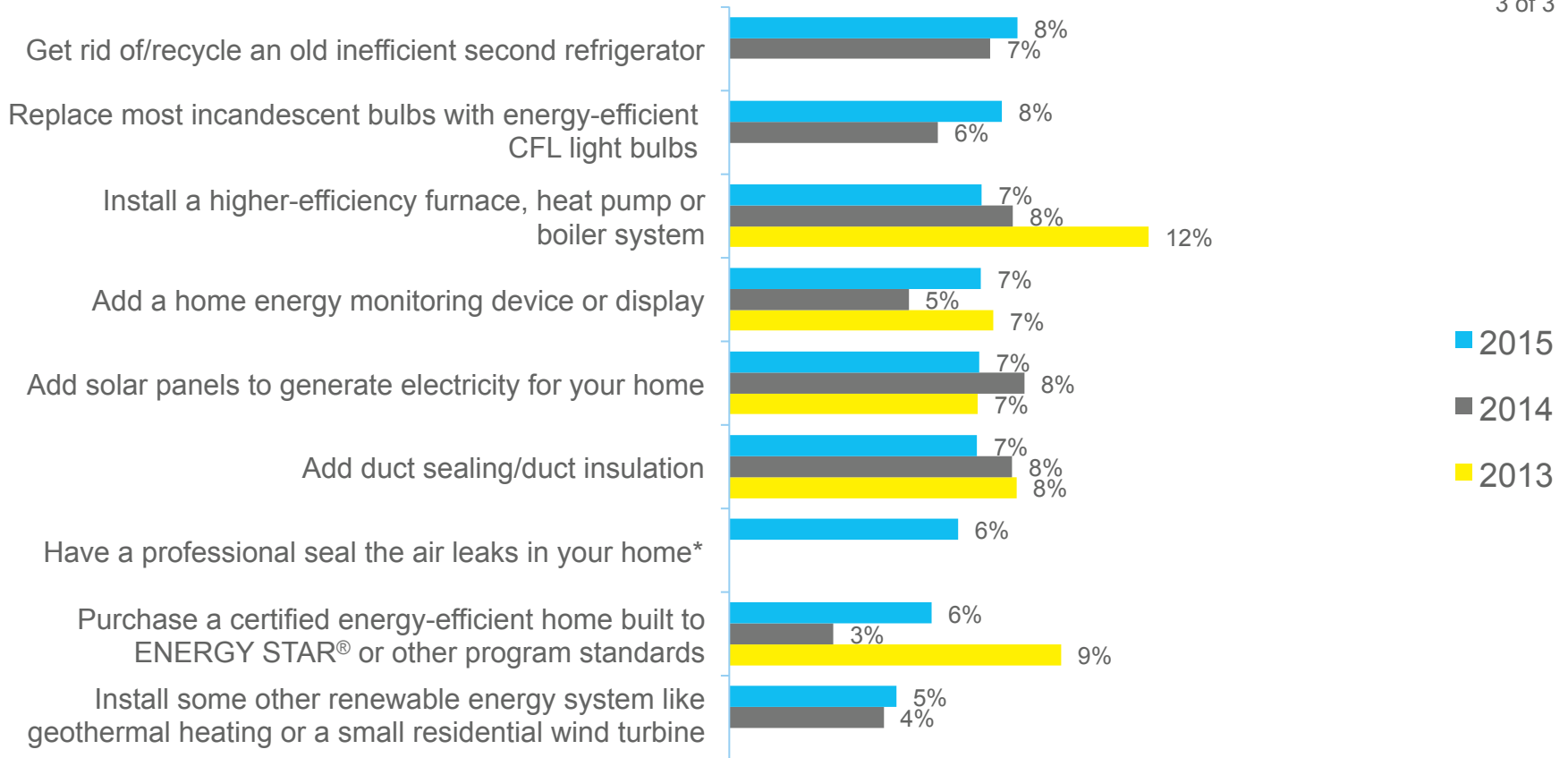
*New item in 2015

N=2,029

Energy-Efficient Home Activity Propensity – Continued

energypulse™
2015

Shelton Grp



*New item in 2015

N=2,029

Energy-Efficient Home Activity Propensity – Continued

energypulse™
2015

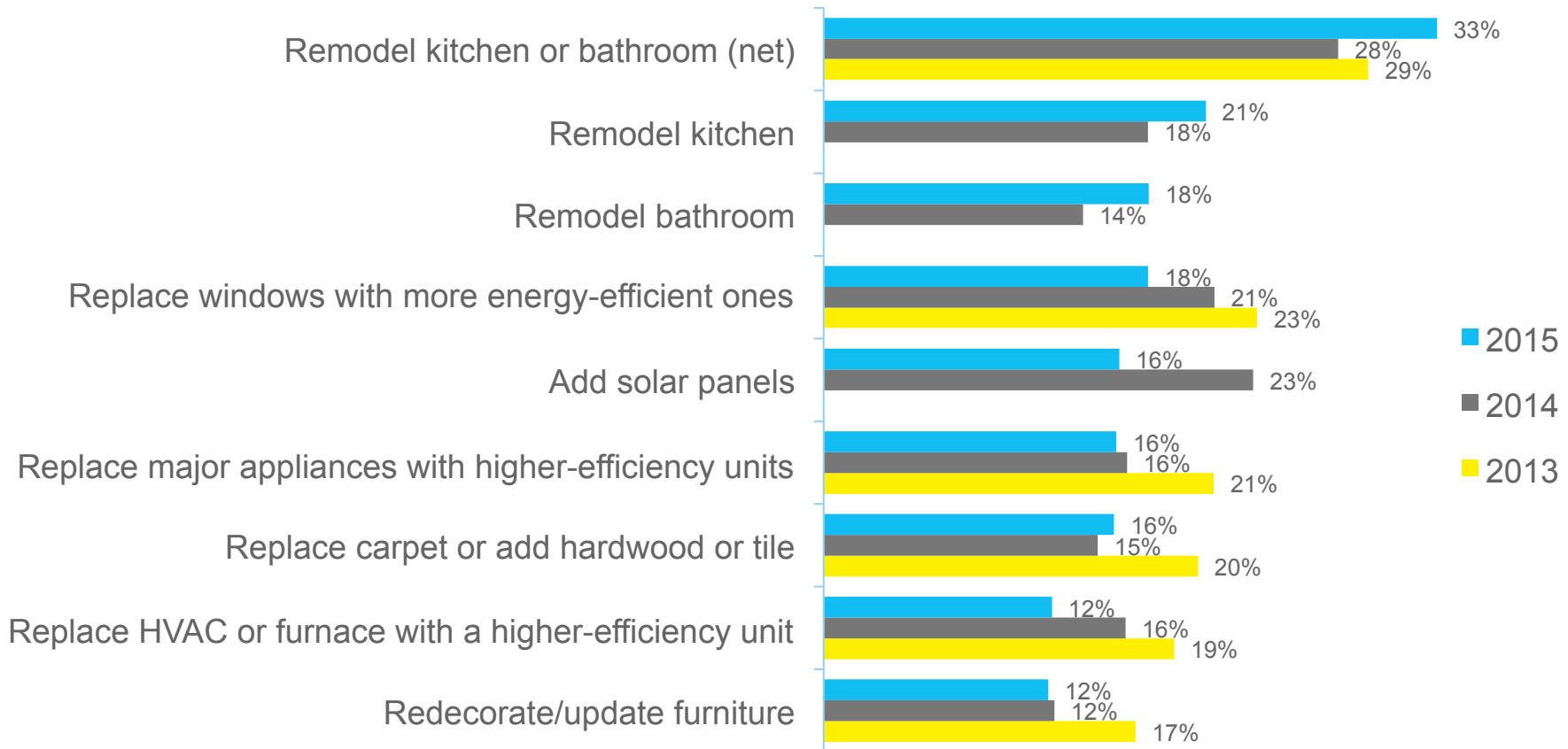
Shelton Grp



Gain a sustainable advantage



Most homeowners prioritize aesthetic remodeling



N=2,029

Q15 – If you were suddenly given \$10,000 to make home improvements, which two of the following things would you do?

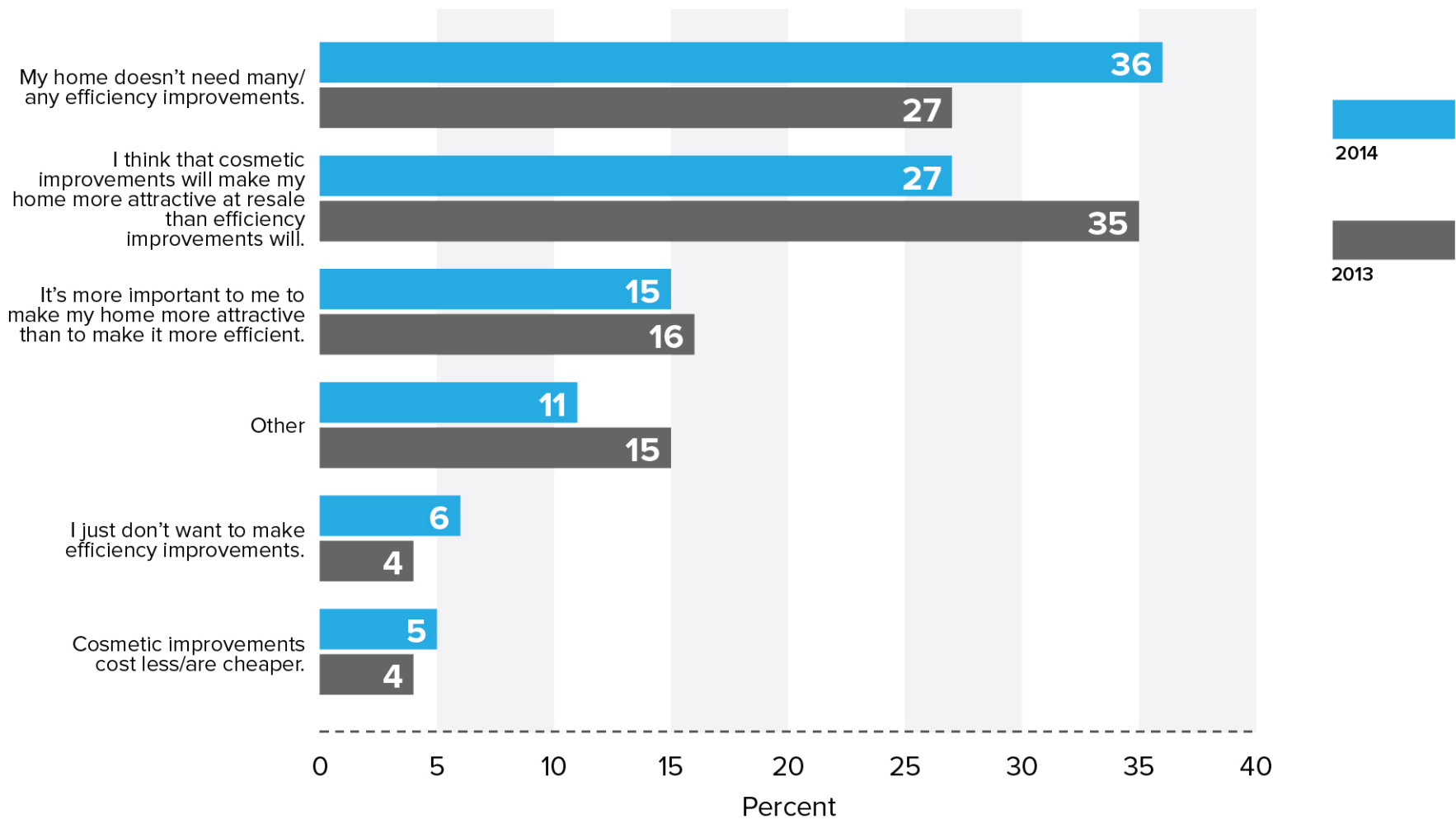
energypulse™
2015

Shelton Grp

43%

Plan to make aesthetic improvements

They deny they have a problem & don't think efficiency is "worth it".



N=479

You say you're likely to make cosmetic improvements to your home, but earlier you said you were not likely to make very many energy efficiency improvements. Why is that?

energypulse™
2014

Shelton^{Grp}

By contrast...

Gain a sustainable advantage

Shelton^{Grp}

66%

of those who said they had installed a smart thermostat in their current home saw a reduction in their energy use due to their smart thermostat

Source: Energy Pulse 2015

N=212

Gain a sustainable advantage

Shelton^{Grp}

COOL

Gain a sustainable advantage

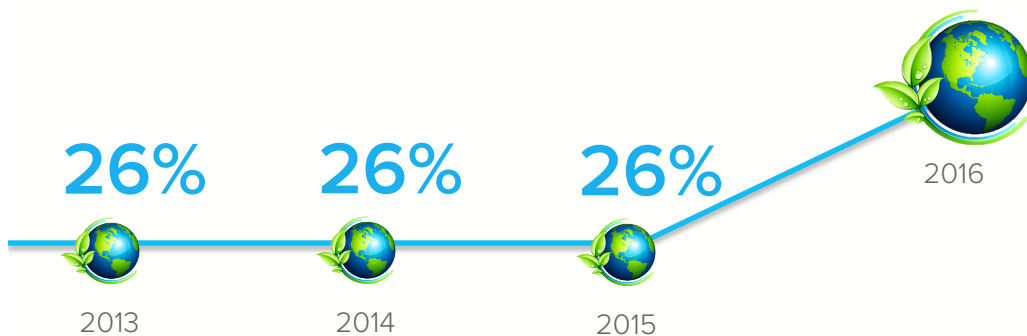
Shelton^{Grp}

70%

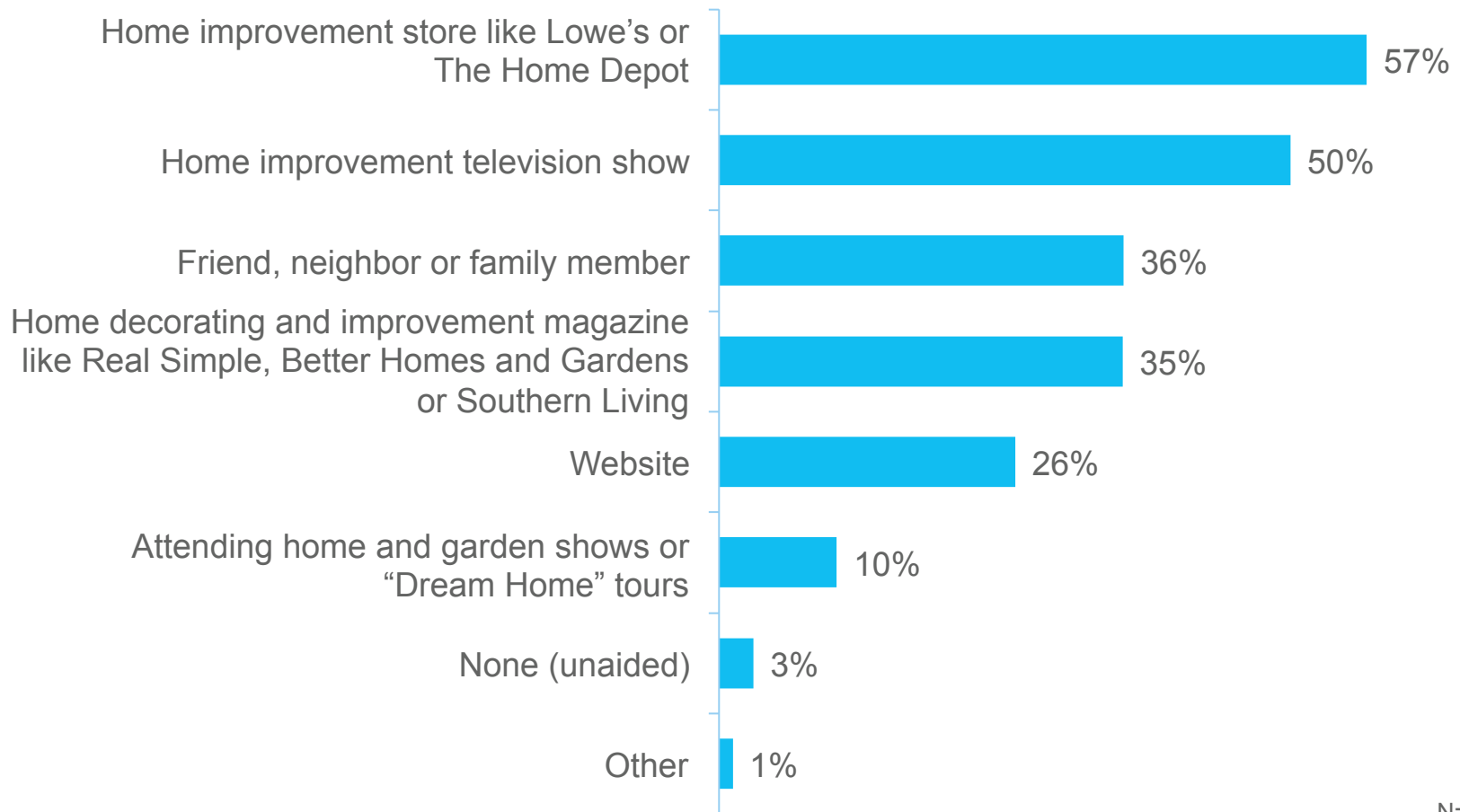
Say energy conservation is important-very important in the way it impacts their daily purchases and activities.

45%

say buying/using eco-friendly products is an important part of their personal image



One more piece...



N=1,025

Q41 – Where do you get ideas and information for home improvements?

energypulse™
2015

Shelton Grp

Walmart has a connected home section for online shopping.

Product offerings continue to increase and now include smart appliances, health and fitness. The site even allows searching by platform.



Featured Categories



Shop By Platform



What is home automation?

The goal of home automation is to make life simpler for busy families. By connecting everyday things in your home to your smart device, you can control them from just one place, wherever you are. It may sound complicated, but getting started is easy and we'll help explain along the way.

[Get started](#)



Benefits of a smart home

Safety

Monitor your home, secure your front door and control your lighting when you are away.

Entertainment

Turn on music or TV shows with just your voice, and set lighting "themes" for entertaining.

Energy savings

Assess energy usage and have better control over heating or cooling with a smart thermostat.

Convenience

Imagine lights gently waking you up as the thermostat warms your home before getting out of bed, or opening the garage door with your smartphone.

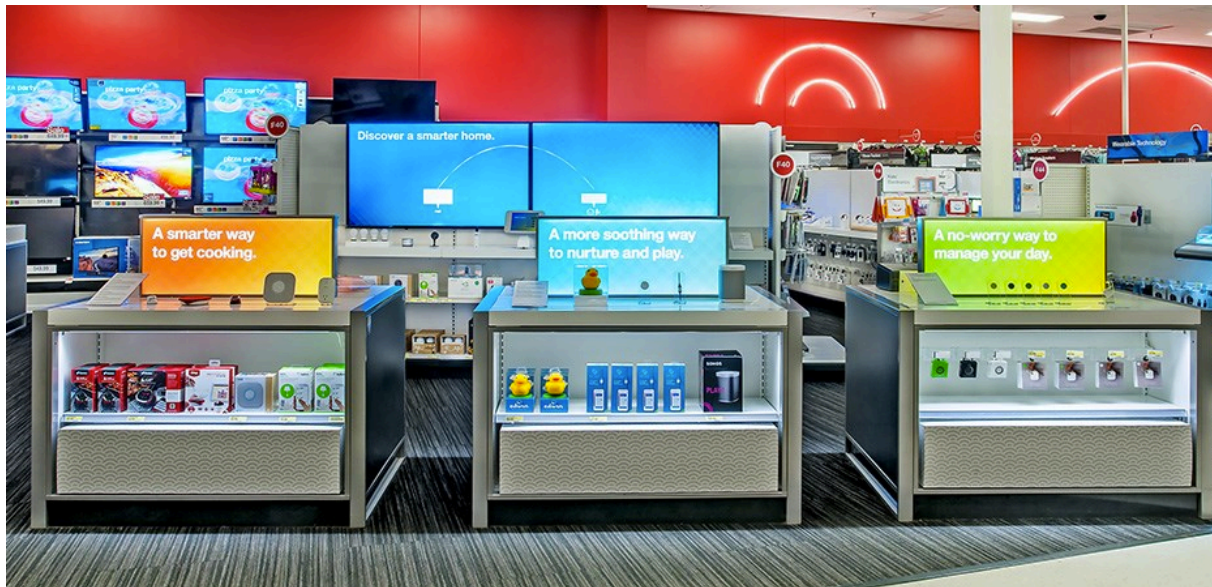
Gain a sustainable advantage



Target is creating a smart home section in stores.

Target's Open House includes connected light bulbs, baby monitors, sprinklers, doorbells and more, displayed in rooms with clear plastic furniture to better highlight the devices and their uses.

Target announced in June it would expand to three more existing stores (Minneapolis, Cupertino, CA and NYC) which would have a "connected living experience" department.



Gain a sustainable advantage

Shelton Grp

Best Buy built a demonstration model of a connected home in the Mall of America.

Connected products displayed include Samsung Family Hub refrigerator, ecobee 3 smart thermostat, Yale smart locks, and Philips Hue lighting.



Gain a sustainable advantage

Shelton Grp

Many big-box, brick-and-mortar stores now have connected home display space.

- For Lowes, EE products (except for lighting) generally do not have separate displays, but are included with all products in the category.
 - End cap displays are used to highlight connected home products separately.



Gain a sustainable advantage

Shelton Grp

So let's recap:

- People care about energy efficiency, and being green is now a mainstream value
- It's a mainstream concept because it's cool
- Smart home devices are cool
- People can give themselves permission to buy smart home devices because they'll save energy
- And because they're really convenient
- And because they see them everywhere when they're shopping – clearly everyone's doing it, so I should, too!

To leverage the promise of smart tech and
push energy efficiency forward...

Gain a sustainable advantage

Shelton^{Grp}



We'll need to bridge the gender gap.

Gain a sustainable advantage

Shelton^{Grp}

Profile of home technology enthusiasts (13% of the population):

- Male
- Millennials or Gen X
- Well-educated, with bachelor's degree or higher
- High income (\$75K+)
- White-collar and professionals
- Married with children present in the household
- Homeowners (83%)
- Predominantly white, but over-index for minorities (index 126)
- Concerned Parents, True Believers



Women are the driver behind home purchases, yet they are ...

- Less likely to be technophiles or home technology enthusiasts
- Less likely to prioritize home automation when spending money on their homes
- More likely to prioritize making their homes healthier/safer and more beautiful
- Significantly less likely to think that smart/connected homes help save energy, make people feel more secure, or save money

So we must position smart home tech as easy, undaunting and as a means to an end to achieve what she really wants – a comfortable, beautiful, quality home.

Gain a sustainable advantage

Shelton^{Grp}

How to

Gain a sustainable advantage

Shelton^{Grp}

Building an effective campaign

- Be super clear about who your target audience actually is
 - Profile past buyers, not future/likely buyers
- Be where they're searching
 - Contextual targeting
 - Behavioral targeting
 - Retargeting
- Use messaging that hits their care-about's
 - Comfort, control, health, peace of mind and/or resale value
- Leverage their desires
 - Remember that aesthetics trump efficiency/sustainability
- Learn from results
 - Do A/B testing; ditch what's not working
- Make it super easy for them to act; give them no more than two actions to take.

CertainTeed

SAINT-GOBAIN

Gain a sustainable advantage

Shelton^{Grp}



Thermal
Performance



Air
Tightness



Acoustics



Moisture
Management

There's more to insulation
than you think.

Find out more

CertainTeed
SAINT-GOBAIN
Insulation



SMARTBATT™ knows how to
help keep mold out of your walls.

Find out how

CertainTeed
SAINT-GOBAIN
Insulation



When "good
enough" isn't
good enough,
**choose
CertainTeed
Insulation.**

Find out more

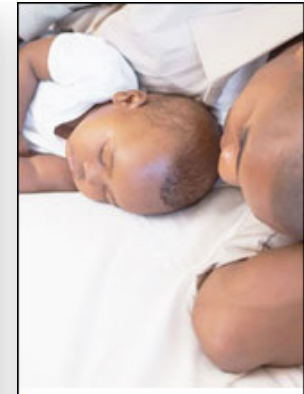
CertainTeed
SAINT-GOBAIN
Insulation



Remodeling?
**Your
insulation
matters.**

Choose
CertainTeed

CertainTeed
SAINT-GOBAIN
Insulation



SMARTBATT™
Insulation helps
protect your
home & family.

Here's how

CertainTeed
SAINT-GOBAIN
Insulation

Engineered for
comfortable
to protect

Find out more



CertainTeed
SAINT-GOBAIN
Insulation



Gain a sustainable advantage



What's going on between your studs? Insulation 101

Insulation isn't rocket science, but it does involve some other sciences: building science, materials science and some basic physics. Fortunately, you don't need to know all that to choose the right insulation for your project. You just need a few of the basics.

Why you're insulating

It's not complicated, but there's more to it than simply keeping your home comfortable, temperature-wise.

- **Energy efficiency.** Insulation can make a big difference in your energy bill. That means a more comfortable budget.
- **Acoustics.** Your home should be an oasis of peace and quiet. Insulation can help block the sound of your neighbor's barking dog and the movie the kids are watching in the next room.
- **Moisture management.** When moisture gets into your wall cavities, it can condense on every surface and create a breeding ground for mold, mildew and wood rot. A vapor retarder installed with your insulation can help keep moisture out; some types can do even more.
- **Air tightness.** Air (and noise and moisture) can sneak into and out of your home through the tiniest of gaps. The right insulation system, properly installed, can help with that.



How insulation works (just in case you care)

Heat flows from warmer areas to cooler ones. That's basic thermodynamics. Insulation works by slowing that flow of heat. Whether it's fiberglass, foam or blown-in, it's the little pockets of air (or other gas) between the fibers or within the foam that create *thermal resistance*, which is given as the insulation's *R-value* (see below).

We could get even more technical and tell you that there are three different types of heat flow (aka *heat transfer*). We could explain that insulation works by slowing *conductive* heat flow, and it's the *conductivity* of the air in the pockets that determines the thermal resistance of the material. We could also tell you that the U-factor you may have heard of when you selected new windows or doors measures heat transfer, and that R-value is U-factor literally turned on its head – its inverse. But we won't.

The vocabulary

Batt: Batts are panels of insulation, sized for the most common widths between studs and joists. The term refers both to pre-cut lengths of insulation and the big fat rolls you see at retail stores.

Envelope: Just as a paper envelope is the wrapping on a piece of mail, a building's envelope is its "wrapping": the totality of what separates the indoor, conditioned and the outdoor, unconditioned environments. Technically it comprises a weather barrier, an air barrier and a thermal barrier, but the term is often used to mean the building enclosure.

Faced/unfaced: Some insulation comes with a facing (see "Kraft" below), some doesn't. We're sure you can figure out which is which.

R-value: If you were paying attention up in the How Insulation Works section above, you already know this one. R-value is a measure of how well a material – your insulation – resists the flow of heat through it. The recommended minimum R-value for your home depends on where you live – your climate zone.

Kraft: Sometimes capitalized, sometimes not, but never does it have anything to do with mac & cheese. Kraft is what many companies and contractors call that paper facing attached to batt insulation. The facing typically incorporates flanges (flaps of paper) on both edges used for stapling the insulation in place. Kraft facing also performs as a vapor barrier, but perhaps not optimally.

Vapor barrier/retarder: A vapor barrier is meant to block the movement of moisture (water vapor) through walls, ceilings and floors.

Note that "barrier" is actually a misnomer. "Retarder" is the more accurate term, because most materials have some degree of permeability, so some moisture can still get through. Call it what you will though, the point – the very important point – is moisture management. Left uncontrolled, moisture can lead to mold and wood rot issues, putting your home and your family at risk.

The types of insulation appropriate and available for remodeling projects

There are many different types of insulation, but only a few you need to know about for a remodeling project. Here are the ones appropriate for walls. There are many different types of insulation, but only a few you need to know about for a remodeling project. Here are the ones appropriate for walls built with wood studs in a residential building.

Fiberglass batt, faced: For exterior walls and interior walls in kitchens, bathrooms and laundry rooms – anywhere a vapor retarder is appropriate.

Fiberglass batt, unfaced: For exterior walls when installed in conjunction with a vapor retarder. Also appropriate for interior walls to dampen room-to-room noise.

Blown-in fiberglass: Blown-in fiberglass can provide superior R-value. It easily fills all voids, so it's great for irregular cavities.

Spray polyurethane foam: Commonly called spray foam or SPF, this product provides the highest insulation R-value per inch, expands to seal every crack and void and is ideal for tough to insulate areas like rim joists and crawls spaces.

So there you go. That's pretty much everything you need to know to talk to your contractor or choose the right insulation for your project. Now go test your insulation IQ by taking this [fun little quiz](#) – it's easy, and most of the answers are right here in this article. When you're done, you can explore the rest of that page to continue building your knowledge and learn about the full range of insulation products available from CertainTeed.

5 things DIYers need to know

Insulation isn't pretty. Choosing countertops, flooring, wall colors and window treatments – that's the fun part of building or remodeling a home. Those are the things that will make your home pretty and impress your visitors. Insulation? Not so much.

So why think about it? Why not just let your builder or contractor put whatever into your walls?

Because it's way more important than you think. Here are the top five reasons you should give your insulation some serious thought.

1. There's more to it than you think

Insulation products can – and should – do more than help maintain comfortable temperatures within your home and help control your energy bills. Thanks to some recent advances in building science, today's insulation products can go much further in helping you:

- Achieve a truly comfortable environment – and that involves air quality, noise levels, and an air-tight home
- Guard your family's health
- Protect the investment you've made in your home



2. Your climate matters

This is probably the most straightforward part of choosing insulation. Insulation comes in different "R-values," which measure its ability to block cold air movement from one side of it to the other. The colder your climate, the higher the R-value you'll need to stay comfortable – and energy efficient.

3. What you're insulating matters

We hope you don't think it's only your exterior walls that need insulation. It's crucial to insulate attics, basements and crawl spaces as well, and by helping reduce room-to-room noise, insulating the walls between rooms can make a big difference too. The tricky part can be in knowing the right kind of insulation to use in each area.

4. The type – and even the brand – of insulation products matter

Fiberglass batts, blown-in fiberglass, spray foam, vapor barriers ... what type will you use in which areas of your home? While you can get different insulation products from various manufacturers, you must understand that even standard fiberglass batts are not all created equal. Some are certified by independent organizations like GREENGUARD. Others aren't. Some help with moisture management. Others don't. And to date, only one can be considered "smart." From CertainTeed, SMARTBATT™ with MoistureSense™ Technology helps control the moisture that can seep into your walls, and in doing so, helps protect your home and family from the ravages of mold, mildew and rot.

5. You need to get it right the first time

~~You need to get it right the first time~~

Don't like the color of your walls? Easy enough to repaint. Don't like that rug as much as you thought you would? Simple – get a new one. With many of the decisions you'll make building or remodeling your home, it's not the end of the world if you find your choice was not quite right. But if you discover mold, noise, draftiness or temperature problems after your walls are closed up, fixing them is going to be trouble. Big, expensive trouble.

We hope these tips have given you some food for thought. With just a little bit of knowledge, you'll be able to make insulation choices that will create the comfort, efficiency and protection your family deserves.

To help you get started, let's find out what you really know about insulation.

Take our quiz

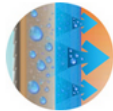
Tip: It's easy! Most of the answers are right here in this article.



MOISTURE IS AFOOT.

Rainbows, babbling brooks, long hot baths ... there's no denying the glory of water – but it does have a dark side. Moisture in the air creeps unnoticed into the walls of your home where mold, mildew and rot can pose threats to the health of your family and your home.

That moisture is unavoidable – but it's manageable. Thanks to CertainTeed, there's now a very smart way to take control of the risks that moisture creates: SMARTBATT™ insulation with MoistureSense™ Technology.



MoistureSense™ – the brains behind SMARTBATT

SMARTBATT's MoistureSense facing is a smart vapor retarder that adapts to the humidity in your walls.

[Show me how it works](#)

While you're at it, check out our [SMARTBATT web page](#) for tools, resources and more information.



RELAX. COMPLETELY.

Think about it. Comfort is not just about the temperature in your home. It's also about air quality, noise levels, drafts ... and saving money on your energy bills.

Now think about the insulation going into your home ... because it can have a huge impact on all of those.

CertainTeed insulation products are engineered to help you achieve **Complete Comfort**.



More comfort, more choice


Known for quality, known for innovation, CertainTeed offers the industry's most comprehensive line of insulation products.

- Sustainable Insulation® fiberglass batts
- SMARTBATT™ – the industry's only moisture-managing fiberglass batts
- MemBrain™ – the state-of-the-art smart vapor retarder
- CertaSpray® spray foam insulation
- OPTIMA® blow-in insulation
- InsulSafe® SP – blow-in attic insulation
- Hybrid solutions – advanced product combinations that provide superior thermal resistance, moisture management, an air-tight seal and outstanding noise reduction

Ask your builder or contractor which CertainTeed solution is right for your project.

[Ask now!](#)

CertainTeed My CertainTeed Insulation SMARTBATT® Complete Comfort



INSULATION: IT DOES MORE THAN YOU THINK

It's time to think beyond aesthetics. Beyond countertops, cabinets and flooring. It's time to think about what's going inside your walls, because that's what affects your family's comfort – and even their health.

Insulation can – and should! – do more than help maintain a comfortable temperature within your home. So if you're planning or have already started to remodel, renovate or build a home, you need to learn how insulation can help keep your family truly comfortable and protect your investment.

You can learn about it right here.

What's to think about?

Energy efficiency and performance: consistent indoor temperatures of course. That, too, is the value – in plenty of circumstances. But in recent years, building scientists have made some remarkable advances in insulation techniques that can help protect both your home and your family better than ever before.

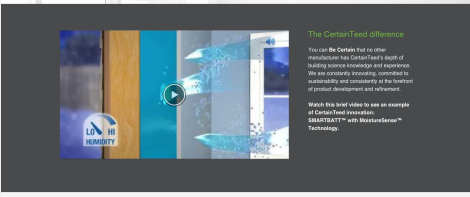
Take the steps – and when the time comes – of insulation products used in each area of your home can make a big difference in its air tightness, noise levels and most importantly, its ability to manage moisture and help reduce the potential for mold and mildew growth within your walls.

Why think about it now?

This is a key step you need to think about it now, when you're planning to renovate or while your walls are already open, because separating later can be a nightmare – a difficult, disruptive and expensive one. For cost, savings and protecting your investment in the long run, you need to make the right choice now.

Why choose CertainTeed?

CertainTeed offers the widest selection of high-performance insulation products available. Each product has been specifically developed to provide the maximum in comfort, protection and efficiency. Regardless of your location or the challenges of your project, whether the answer is fiberglass, spray foam, blown-in or a hybrid system of products, CertainTeed has the right option.



The CertainTeed difference.

You can be Certain that no other manufacturer has CertainTeed's breadth of building science knowledge and expertise, the in-house research, commitment to sustainability and consistency at the forefront of product development and refinement.

Watch this brief video to see an example of CertainTeed innovation: SMARTBATT® with MoistureSense™ Technology.

WHAT'S YOUR INSULATION IQ?

Test your knowledge by taking this fun little quiz.

[Start quiz](#)

TELL YOUR BUILDER OR CONTRACTOR YOU WANT CERTAINTEED INSULATION

Click a button below and we'll send an email for you saying when it comes time to choose insulation for your project, you choose CertainTeed. Don't have a professional on your project? Find a pro near you.

Building a new home?
[Email your builder](#)

Remodeling your home?
[Email your contractor](#)


Resources and calculators

- [Complete Comfort brochure](#)
- [Rebates and incentives calculator](#)
- [Insulation calculator](#)
- [Energy savings calculator](#)

Learn more about CertainTeed insulation

- [Discover Insulation with an IQ](#)
- [Explore how to create a comfortable home](#)
- [The sustainability of CertainTeed insulation](#)
- [CertainTeed home page](#)
- [Follow the Project](#)
- [CertainTeed blog](#)

CertainTeed My CertainTeed Insulation SMARTBATT® Complete Comfort



SMARTBATT: INSULATION WITH AN IQ

Moisture is the enemy of a healthy home – it can lead to mold growth, health issues and even structural damage. SMARTBATT insulation with MoistureSense™ Technology knows that – you need to know that too.

SMARTBATT is the first and only insulation that helps protect your family and your home from moisture's damaging effects. If you're planning or have already started to renovate, renovate or build a home, you need to know about – and ask for – SMARTBATT.

Find out what makes it so smart.

Moisture management

Moisture will seep into your walls. It's unavoidable. Inside your walls, where you can't see it happening inside and where problems can start. Traditional paper has been used to help control moisture and actually help it inside your walls, creating a breeding ground for mold. SMARTBATT doesn't.

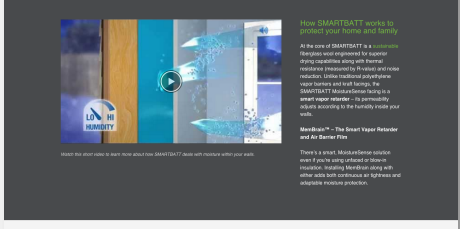
When the humidity comes in, SMARTBATT's unique moisture managing technology to prevent moisture generated by normal activities within your home, such as cooking, bathing and laundry, from seeping into your walls. Effectively turning it high IQ paper to allow the moisture inside the walls to seep out into the conditioned environment of your home.

For a healthier family

Mold and mildew can have a significant impact on the quality of life inside your home – the air your family breathes every day. When mold spores make their way into your home, they can trigger asthma and allergic reactions, including eye irritation, runny noses, coughs and other respiratory symptoms. With SMARTBATT, you help reduce the risk of mold growth in your home and that risk of potentially serious health issues for those living in it.

For a healthier home

Persistent moisture inside your walls can cause wood framing to rot. With outstanding drying capabilities along with a moisture-tolerant foam, SMARTBATT can help reduce the risk of expensive structural damage to your home.



How SMARTBATT works to protect your home and family

As the first of SMARTBATT's in-house research and development to support family sustainability and better moisture management for residential applications, SMARTBATT's unique moisture managing technology helps prevent moisture from seeping into your walls. Effectively turning it high IQ paper to allow the moisture inside the walls to seep out into the conditioned environment of your home.

MoistureSense™ – The Smart Vapor Retarder and Air Barrier Film

There's a smart MoistureSense science inside you're going to want to know. Innovation, moisture barrier film along with other walls both continuous or high mass and extensive moisture protection.

WHAT'S YOUR INSULATION IQ?

Test your knowledge by taking this fun little quiz.

[Start quiz](#)

TELL YOUR BUILDER OR CONTRACTOR YOU WANT SMARTBATT

Click a button below and we'll send an email for you saying when it comes time to choose insulation for your project, you choose SMARTBATT. Don't have a professional on your project? Find a pro near you.

Building a new home?
[Email your builder](#)

Remodeling your home?
[Email your contractor](#)

Resources and calculators

- [SMARTBATT brochures](#)
- [Rebates and incentives calculator](#)
- [Insulation calculator](#)
- [Energy savings calculator](#)

Learn more about CertainTeed insulation

- [Get an overview of insulation](#)
- [Explore how to create a comfortable home](#)
- [Take a closer look at SMARTBATT](#)
- [Learn more about managing moisture](#)
- [The sustainability of CertainTeed insulation](#)
- [Follow the Project](#)
- [CertainTeed blog](#)

CertainTeed My CertainTeed Insulation SMARTBATT® Complete Comfort



THINK ABOUT WHAT COMFORT REALLY MEANS

Then think: are you doing everything you can to make sure your family is completely comfortable?

Because in your home, comfort is not just about a pleasant temperature. It's about drafts, noise and air quality. It's also about your energy bills.

It's about all the things insulation can – and should! – be helping you control.

Smart family members don't want 20% off their bills. They want to know that their home is comfortable. Now CertainTeed insulation can help you create Complete Comfort for them.

Thermal Performance

Heat always moves toward a cooler area, so to think that movement between the inside and outside of your home, you need a material that can prevent heat loss. A material that makes a measure of its thermal resistance – the higher the number, the greater the insulating power.

Your choice now determines the energy profile your home. CertainTeed offers a complete range of fiberglass and foam wall insulation that can help you create Complete Comfort, maximize performance and save you money.

Air Tightness

An air leaky home is never through more possible gas, no matter how remote, between the indoors and outdoors. Sealing air leaks within your conditioned walls, it also helps create a healthier indoor environment for your family and good for your wallet against potential energy bills.

CertainTeed has a wide variety of available air barrier products that help reduce air leaks and energy potential point of penetration in your home's envelope.

Moisture Management

Controlling the uncontrollable moisture that enters your walls – from outside your home when it's humid and from inside your home when it's dry – is critical to helping reduce the risk of mold and mildew growth. And when you learn about smart and durable, you also find a healthier indoor environment for your family and good for your wallet against potential energy bills.

Building and material science experts at CertainTeed have developed the first and only available insulation and vapor retarder products that help to manage heat and moisture management for moisture within your walls. SMARTBATT® is MoistureSense™.

Acoustics

It's really worth it. Even inside your home, the spaces from bedrooms, children playing and even animals outside can impact the comfort of those in the house. Insulation helps block sound waves from outside your home, and when installed in your interior walls, it can go a long way to helping you create Complete Comfort.



CertainTeed Insulation. For often good reasons.

You can be Certain that the unmatched quality of CertainTeed products – all backed by research, building science expertise – can help you create a healthier and more efficient home of Complete Comfort.

Our comprehensive product line includes a solution for every insulation challenge:

- Sustainable Protection™ Recycled-batts
- SMARTBATT™ Moisture-managing fiberglass walls
- SMARTBATT™ The ultimate high vapor retarder solution
- Complete Comfort™ Spray foam
- CertiFiberglass™ Fiberglass insulation
- CertiFoam™ Cellular glass insulation
- Hybrid solutions – advanced product combinations that provide moisture management, air-seal and energy savings with one solution.

WHAT'S YOUR INSULATION IQ?

Test your knowledge by taking this fun little quiz.

[Start quiz](#)

TELL YOUR BUILDER OR CONTRACTOR YOU WANT CERTAINTEED INSULATION

Click a button below and we'll send an email for you saying when it comes time to choose insulation for your project, you choose CertainTeed. Don't have a professional on your project? Find a pro near you.

Building a new home?
[Email your builder](#)

Remodeling your home?
[Email your contractor](#)

Resources and calculators

- [Complete Comfort brochure](#)
- [Rebates and incentives calculator](#)
- [Insulation calculator](#)
- [Energy savings calculator](#)

Learn more about CertainTeed insulation

- [Get an overview of insulation](#)
- [Discover Insulation with an IQ](#)
- [Explore the sustainability of CertainTeed insulation](#)
- [Learn more about Complete Comfort](#)
- [Follow the Project](#)
- [CertainTeed blog](#)



Moisture is the enemy of a healthy home – it can lead to mold growth, health issues and even structural damage. SMARTBATT insulation with MoistureSense™ Technology knows that – you need to know that too.

SMARTBATT is the first and only insulation that helps protect your family and your home from moisture's damaging effects. If you're planning or have already started to remodel, renovate or build a home, you need to know about – and ask for – SMARTBATT.

Find out what makes it so smart.



Moisture management

Moisture will migrate into your walls. It's unavoidable. Inside your walls, where you can't see it happening, mold and mildew problems can start. Traditional vapor barriers intended to help control moisture can actually trap it inside your walls, creating a breeding ground for nastiness. SMARTBATT doesn't.

When the humidity outside is low, SMARTBATT's facing remains moisture tight to prevent the moisture generated by normal activities within your home, such as cooking, bathing and laundry, from seeping into your walls. When the humidity is high, it opens up to allow the moisture inside the walls to escape into the conditioned environment of your home.



For a healthier family

Mold and mildew can have a significant impact on the quality of the air inside your home – the air your family breathes every day. When mold spores make their way into your home, they can trigger asthma and allergic reactions, including eye irritation, runny noses, coughs and other respiratory symptoms. With SMARTBATT, you help reduce the risk of mold growth in your home and the risk of potentially serious health issues for those living in it.



For a healthier home

Persistent moisture inside your walls can cause wood framing to rot. With outstanding drying capabilities along with its MoistureSense facing, SMARTBATT can help reduce the risk of expensive structural damage to your home.



Watch this short video to learn more about how SMARTBATT deals with moisture within your walls.

How SMARTBATT works to protect your home and family

At the core of SMARTBATT is a **sustainable** fiberglass wool engineered for superior drying capabilities along with thermal resistance (measured by R-value) and noise reduction. Unlike traditional polyethylene vapor barriers and kraft facings, the SMARTBATT MoistureSense facing is a **smart vapor retarder** – its permeability adjusts according to the humidity inside your walls.

MemBrain™ – The Smart Vapor Retarder and Air Barrier Film

There's a smart, MoistureSense solution even if you're using unfaced or blow-in insulation. Installing MemBrain along with either adds both continuous air tightness and adaptable moisture protection.



WHAT'S YOUR INSULATION IQ?

Test your knowledge by taking this fun little quiz.

[Start quiz](#)



TELL YOUR BUILDER OR CONTRACTOR YOU WANT SMARTBATT

Click a button below and we'll send an email for you saying when it comes time to choose insulation for your project, you choose SMARTBATT! **Don't have a professional on your project? Find a pro near you.**

Building a new home?

[Email your builder](#)

Remodeling your home?

[Email your contractor](#)

Resources and calculators



Results:

- Generated nearly 20,000,000 impressions and over 74,000 clicks to the brand's website — for less than half of the cost of one small advertisement in some leading home renovation magazines (a **savings of over 1400%** in terms of CPM).
- The campaign's click-through rate exceeded Google industry benchmarks for display advertising **by over 500%**.
- Our pre-roll video placement finished with a **76% completion rate** vs. the average of 59%.



Discussion

Thank You!

Suzanne Shelton, CEO

Shelton Group

sshelton@sheltongrp.com

[@sheltongrp](#)

865-524-8385

Shelton^{Grp}