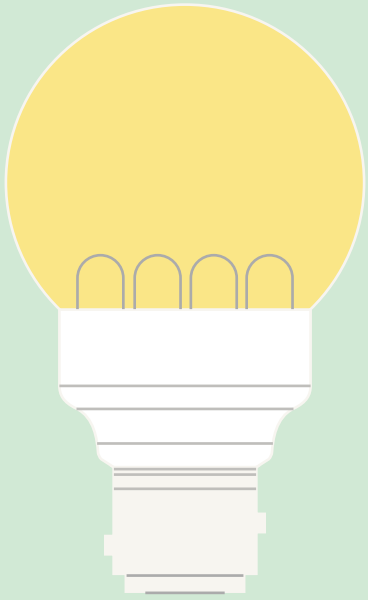
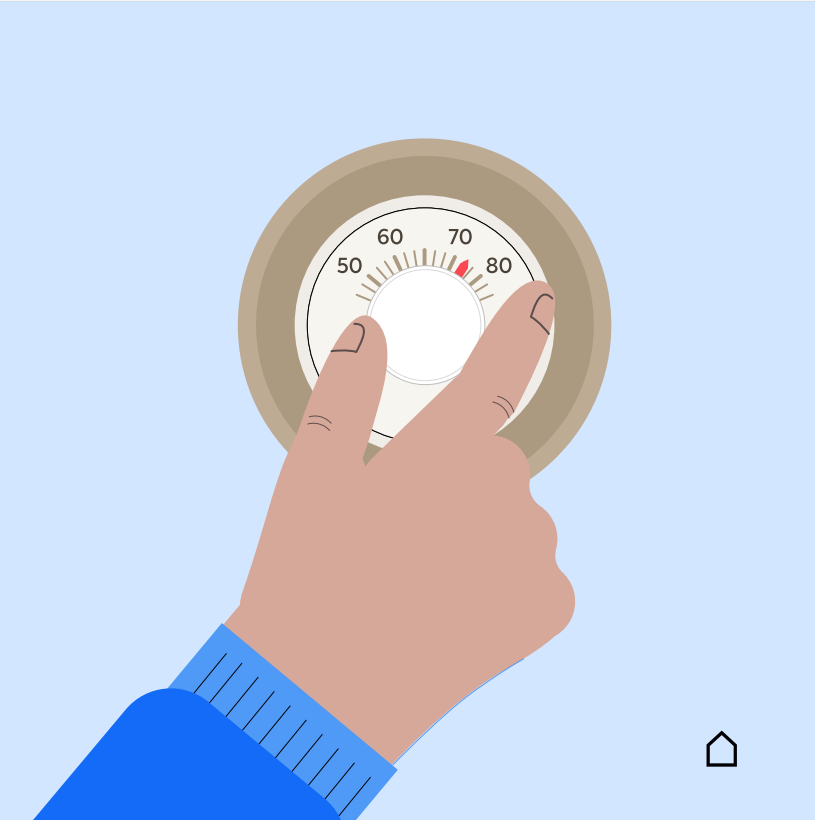
Sealed

5 Home Comfort and Efficiency **Myths Busted**

How to make your home **feel amazing** and cut energy waste year-round





Created by the home performance experts at Sealed.
Visit **www.sealed.com** ↗ for more homeowner education about weatherization and energy efficiency.

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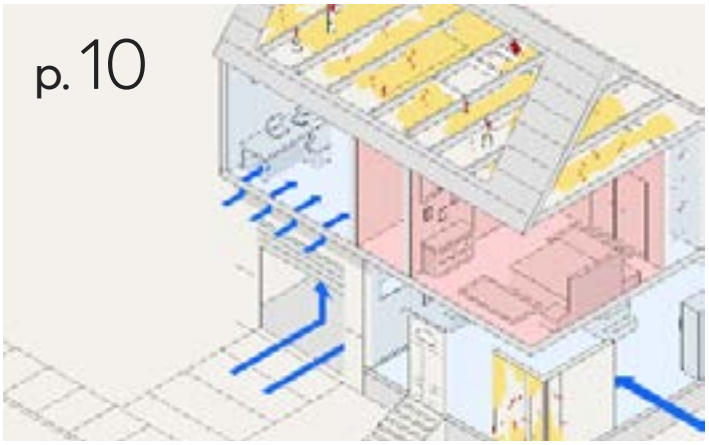


Is your uncomfortable house wasting energy?

You don't have to live this way.

Your home can and should feel amazing.

But over time, most houses develop issues that lead to serious comfort problems, uneven temperatures, and significant energy waste. Keep in mind, many houses were (and still are) built without energy efficiency in mind.

10 indicators that your house has big energy-wasting comfort issues

- ☐ Drafty rooms
- ☐ Uneven temperatures
- ☐ Muggy, stale, or stuffy air
- ☐ Too hot upstairs in summer
- ☐ Ice dams on the roof
- ☐ Cold floors in winter
- ☐ High heating bills
- ☐ Aging HVAC system, furnace, or boiler
- ☐ AC is running constantly in summer
- ☐ Heater is always kicking on and off

Did you check any boxes?

If so, we've got unfortunate news: Having any one of these issues means your house is wasting significant amounts of energy—about 35% on average[1] —which you probably already see reflected in your energy bills.

But these problems are solvable—as long as you don't fall prey to the common home improvement myths that waste your money without providing real solutions.

Here's your key takeaway:

Having a comfortable home year round is absolutely possible. It's time to use the money you're wasting on high energy bills to stop energy loss and make your home feel incredible—permanently.

First, let's take a quick look at the 5 biggest myths of home comfort and efficiency. We'll start by looking at what ***doesn't*** work—and then you'll learn what will.

Here's what you'll learn:

- 5 popular home energy-efficiency and comfort myths debunked
- Why your home feels uncomfortable in the first place
- The top 3 energy-wasters in your home—and how they cause big comfort problems
- The custom solutions that can improve the comfort and efficiency of 3 popular architectural styles
- Bonus: Seasonal home comfort and efficiency checklists to keep you on track

Did you know?

The problems that cause energy waste are the same issues that make your house uncomfortable. When you resolve comfort problems, you resolve energy waste issues, too.

85% of single-family homes in the U.S. were built before residential energy standards became prevalent.[2]

This means at least **8/10 American homes** are inefficient.

The 5 Biggest Myths:
Popular home efficiency fixes that don't actually work

Myth 1:
Updating your windows will fix everything.

Window companies have advertised that window upgrades solve your home's energy waste and comfort issues. The truth? New windows can help, but they won't fix the underlying problem. Plus they're expensive and have a limited return on investment.

To see why, let's do a little window-replacement math:

It would take almost 53 years to recoup the cost of your window installation project based on your energy savings—if you saved the maximum amount of heating and cooling energy.

And if you sold your house right after the upgrade? Well, it's an estimated loss of more than **$6,000.**[3,4]

$19,385
Average cost of window upgrade job

$87–$366 / year
Average yearly reduction in heating and cooling costs depending on the type of window upgrade

53 years
Estimated years until you recoup initial costs if you stay in the same house

Myth 2:
Reducing waste means wrangling the thermostat.

Most of us believe that to reduce heating and cooling bills, your thermostat has to be set at almost-unbearable temps—think 80°F in summer or 60°F in winter.

This inevitably leads to grumpiness and family revolt. But it's a myth that your home's temperature must be set to unreasonable levels to reduce your energy use.

Sure, adjusting your thermostat can reduce your energy waste. But the truth is you don't *have* to sacrifice your comfort to save energy.

10% The maximum amount of energy you could save on heating and cooling by messing with your thermostat.[5]

Myth 3:
Changing your lighting will magically fix your home's efficiency.

First, let's be clear: Turning off unneeded lights and switching to LED bulbs will save some energy. But lighting only makes up about 5% of your annual energy use.[6]

Even if you make all the right lighting decisions, you won't see a significant change in your energy bills—and you certainly won't solve any home comfort issues.

It's more likely the gaps and seams around your light fixtures are causing your problems. But more on that later.

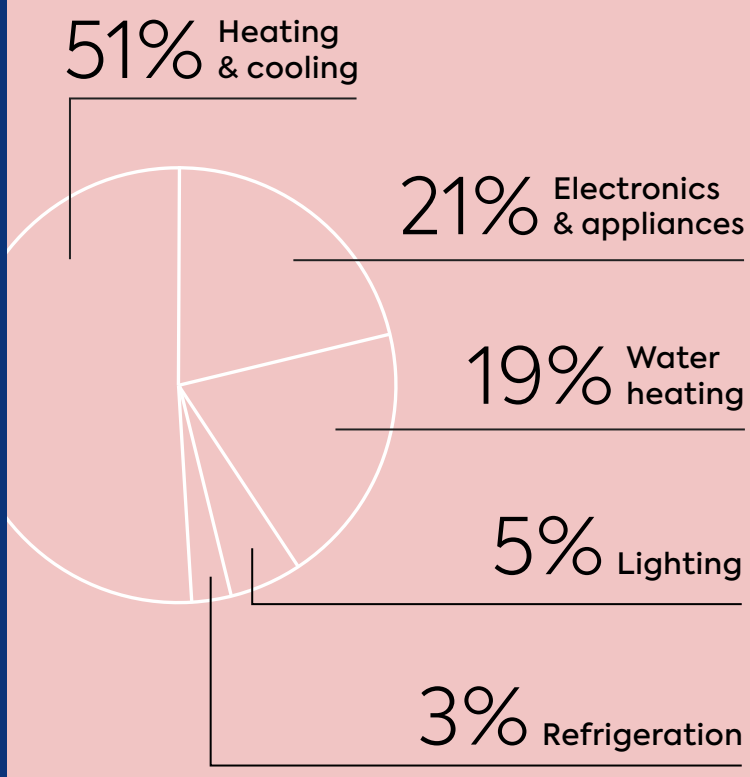
Myth 4:
Updating outdated appliances will solve energy waste.

Updating your older appliances—like your refrigerator or washer and dryer—can save some energy and be a big life upgrade.

But it's a myth that this upgrade will significantly cut energy waste in your home. The energy you'll save by updating your non-HVAC appliances is minor.

Refrigeration only makes up about **3%** of your home's energy use—and **all other** energy used in the home (including TVs, computers, laundry, cooking, etc.) makes up about **21%**.[7]

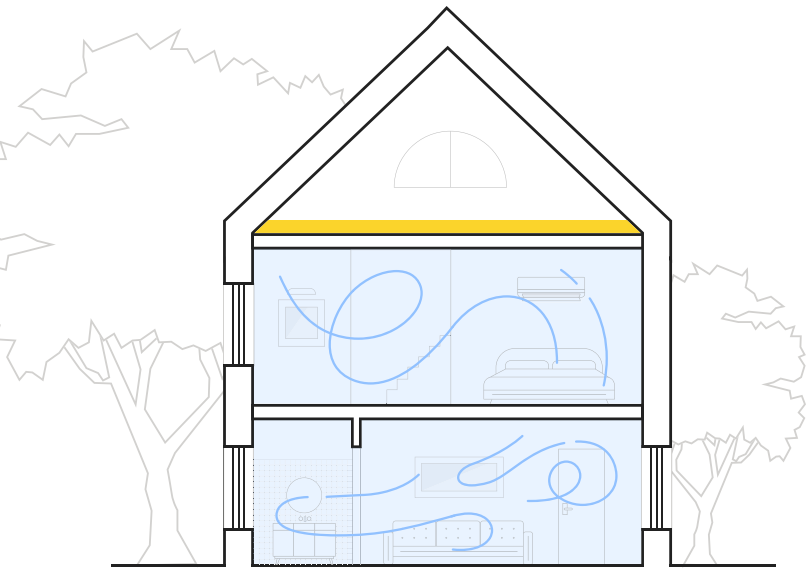
Average Energy Consumption in U.S. Homes[8]



Myth 5:
Plastic wrap and draft blockers will make everything better.

Do you put plastic over your windows every winter? Have a closet filled with space heaters and draft stoppers?

Draft stoppers, space heaters, and thermal curtains are Band-Aids—not cures. And putting plastic on your windows in winter is almost no help at all.



So if the problem isn't your windows, lighting, or appliances, what's actually wasting energy and causing your home to feel so uncomfortable?

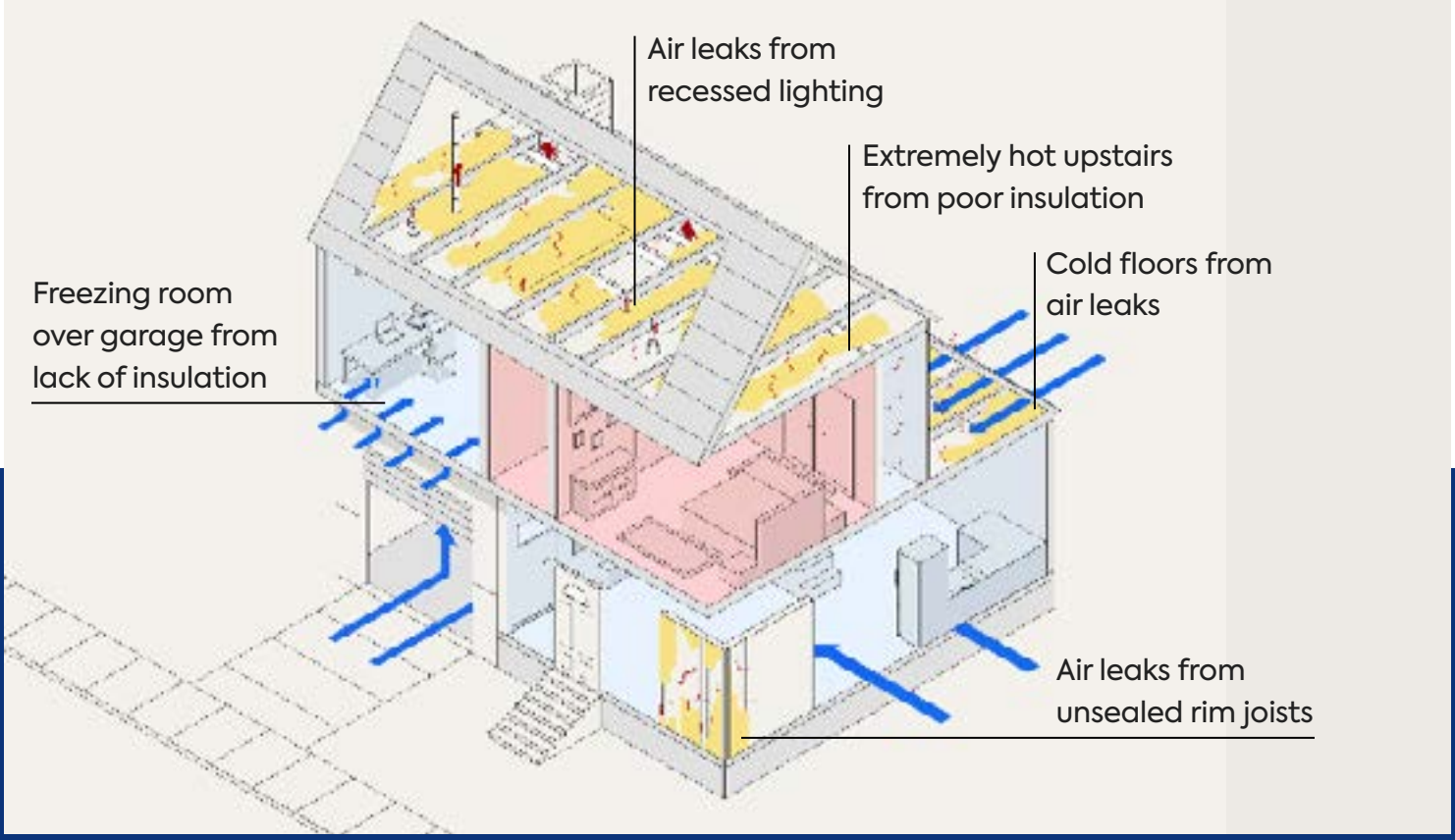
It's your home's air intake and output.

And next, we're going to take a closer look at how to fix it for good.

Why your house feels **uncomfortable** and is wasting up to **50% of its energy**

Here's why your house feels uncomfortable

What's actually going on in your house when it wastes so much energy? It's simple. The building envelope for your house isn't doing a great job—and if you have outdated HVAC equipment or ductwork that needs repair, that's contributing, too. The building envelope is the (invisible) dividing line that helps create a thermal boundary between the temperatures on the inside and outside of your house.



But if your house is like many in the US, it has some kind of thermal boundary problem. Maybe the insulation is degrading or the house doesn't have the right kind. And if your house isn't brand-new, it's likely developed hundreds of tiny air leaks and gaps around the windows, doors, foundation, and roof.

An effective boundary for your home is created by two things:

1. Proper insulation
2. Well-sealed, gap-free exterior construction

Basically: An insufficient thermal boundary causes uneven temperatures, muggy air, poor indoor air quality, drafty winters, and big energy waste.

The good news: You can fix your house's thermal boundary—permanently. And when you do, you'll both stop energy waste and make your house feel amazing.

Over 51%

of your home's energy consumption is for heating and cooling alone.[9]

25–40%

of your home's heating & cooling loss can be accounted to air leakage.[10] That means, you're losing comfort —and wasting tons of energy!

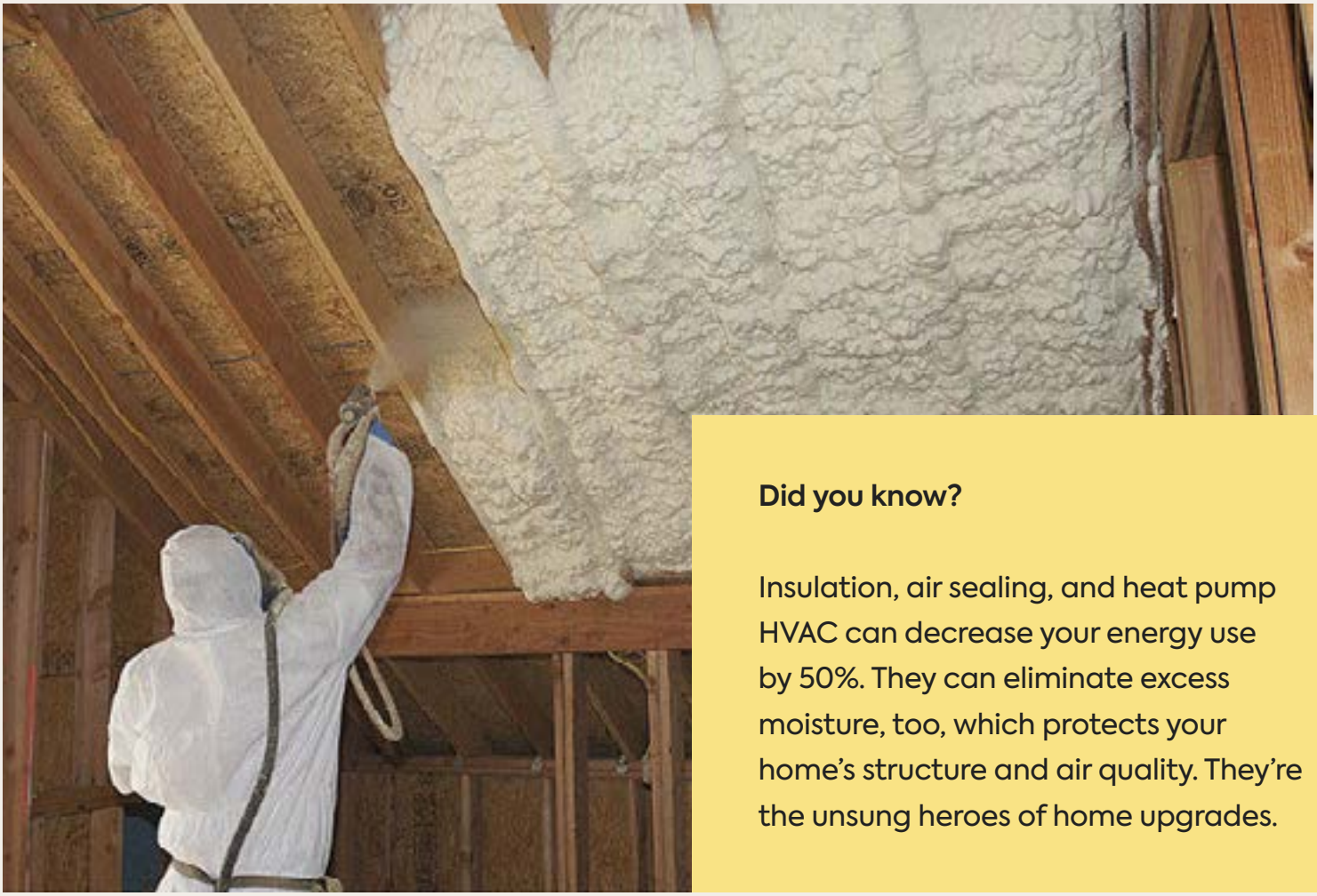
The **3 home upgrades** that can fix uneven temperatures and cut **energy waste** in half

Now that you know the real issues, here's where to put your budget and time for the best results.

1. Fix your insulation

Insulation is supposed to keep the air you pay to heat and cool inside your home. But it breaks down over time. And if your home was built more than 10 years ago—or if you have a newer home with not enough or poorly installed insulation—you're likely overdue for an upgrade.

Read our **Guide to Attic Insulation ↗** to learn more.



Did you know?

Insulation, air sealing, and heat pump HVAC can decrease your energy use by 50%. They can eliminate excess moisture, too, which protects your home's structure and air quality. They're the unsung heroes of home upgrades.

2. Seal the holes in your house

Over time, houses settle and develop gaps, seams, and holes called *air leaks*. Even new builds can have air leaks. Almost every home has them. Houses lose a significant amount of energy through air leaks—in fact, 25–40% of the energy you pay to heat and cool your home, on average, is wasted through them.[11]

Air sealing is more than caulking and weatherstripping, though—effective air sealing requires accurate science and ventilation know-how. Worried that sealing your home will prevent healthy airflow? Don't be. Home performance contractors are trained in the technical art of building science, and they know how to seal your home while ensuring amazing comfort and healthy airflow.

Check out our **Guide to Air Sealing ↗** to learn more.

Did you know?

Houses exchange air at 3–4 times the rate necessary. That's like having an extra window open in your house 365 days a year.[12]

3. High-efficiency heat pump heating and cooling

Professional air sealing and insulation will definitely make your existing HVAC system significantly more efficient.

But if you have an older HVAC system, or one that runs on fossil fuels, it may be time to upgrade to an air-source heat pump. Why? Heat pumps are whisper-quiet—ductless options even allow for precise room-by-room temperature control—and heat pumps filter and dehumidify the air in your home. Plus, they use as little as ⅓ the energy of traditional HVAC systems. A high-tech heat pump paired with air sealing and insulation is the perfect combination to resolve a whole host of comfort and energy waste issues.

Read **The Ultimate Guide to Heat Pumps ↗** to learn more.

81%

of people see their home's comfort improve with a heat pump.[13]

$10,400–17,000

The price premium, on average, a homeowner can experience when they sell their home that has a heat pump.[14]

Take a deeper dive:

- Learn about **how heat pumps work ↗** to keep your home healthy, comfortable, and up to 3 times more efficient.
- Discover how **upgraded insulation reduces high energy bills ↗** and makes your house feel better.
- Curious about air sealing? Check out our **Guide to Air Sealing ↗** to learn more about the process (and how experts make sure your home isn't "over-tightened.")

Case studies: Maximizing your comfort at home

The 3 houses you'll see next have similar comfort problems and energy waste issues:

- Uneven temperatures
- High energy waste
- Stuffy, stale air in summer
- Freezing cold, drafty rooms in winter

Each architectural style requires a customized, unique approach to stop energy waste and uneven temperatures for good.

The Center Hall Colonial

Known for their timeless good looks and symmetrical proportions, colonials are one of the earliest styles of American housing.

Unique Problems

- Large, uninsulated attics with recessed lights create multiple climate zones
- Uninsulated and poorly air sealed garages and crawl spaces lead to unwanted airflow and uneven temperatures
- Old stone foundations let in unwanted air all year round

Customized Solutions

- Insulate the entire attic and air seal around any lighting or wiring
- Insulate the garage walls and crawl spaces to create a thermal boundary
- Air seal the rim joist with spray foam

The Cozy Cape Cod

Unique Problems

- Uninsulated knee wall attics or triangular closets allow cold air to leak through in winter
- Degraded or fallen wall insulation causes heat loss
- Aging HVAC system leads to uneven temperatures and energy waste

Customized Solutions

- Air seal and insulate all knee wall attics
- Insulate roof slopes of any finished attic spaces
- Dense-pack exterior walls with insulation
- Upgrade to a ductless heat pump HVAC

An icon of American postwar hope and prosperity, the three-quarter Cape, more commonly known as the Cape Cod, remains one of the most popular styles of house architecture today.

The Valiant Victorian

Unique Problems

- Uneven temperatures due to elaborate floor plans and unique roof architecture
- Cave-like, cold, wet basements due to air leaks in the foundation
- Freezing drafts in rooms with fireplaces

Customized Solutions

- Install a combination of a ducted and ductless heat pump HVAC
- Multifaceted attic insulation approach, including roof slopes, attic floor and ceiling
- Air seal the foundation of the home
- Seal any unused fireplaces

Tall, colorful, and often elaborately decorated, these charming—some might say quirky—houses were constructed in the late 19th and early 20th centuries.

Ready to set aside energy-efficiency myths and **live in comfort?**

You really can end uncomfortable temperatures and muggy, drafty rooms for good—all while cutting your energy use by up to 50%.

Ready to get started?
Let's go.

Qualify Now

Or scan this QR code to take our 2-min quiz.

Bonus: Seasonal Home Comfort Checklists

How do you deal with your home comfort and energy waste issues?

These bonus checklists give you checkups and tasks throughout the year to maintain your home and make your house feel a bit better—until you get a permanent fix.

Home Comfort Checklist

Spring

- [ ] **Schedule an HVAC tune-up** for your air conditioner. Regular tune-ups can extend the life of your appliance.
- [ ] After a big rainy day, **check on your basement walls**. Consider sealing along the foundation if water is coming in.
- [ ] **Turn your dehumidifier** back on (if you have excessive moisture in your house). Make sure to keep healthy moisture levels in your home.
- [ ] **Pack away your flannel sheets** or thermal curtains. Transition to lighter fabrics until the weather turns chilly again.
- [ ] **Inspect your attic** for signs of water intrusion and damage. Does ice dam on your roof during winter? Take action. Homeowner's insurance often doesn't cover this.
- [ ] **Inspect your attic** for insulation breakdown. Look for crumbling insulation, thin layers measuring less than 14 in., signs of animal damage, or pockets of no insulation at all.
- [ ] **Change your HVAC filter.** Replace your filter every 90 days—or once per season. (Follow the directions outlined on your specific HVAC filter.)

Home Comfort Checklist

Summer

- [ ] **Change the direction** of your ceiling fans. In summer, set fans to a counterclockwise spin to recirculate the air.
- [ ] **Check that exterior vents** aren't blocked by debris. This allows for proper airflow and helps move heat out of your home efficiently.
- [ ] **Clean gutters** and remove debris. This can help prevent ice dams in the winter.
- [ ] **Check smoke** and **carbon monoxide detectors** and replace batteries, if necessary. Use natural gas or heating oil? Take safety precautions around carbon monoxide monitoring.
- [ ] **Do a self-check** of uneven temperatures between rooms. Note where heat pockets are located, and talk with Sealed to resolve them.
- [ ] **Change your HVAC filter.** Replace your filter every 90 days, or as directed by the manufacturer.

Home Comfort Checklist

Autumn

- [ ] **Schedule an HVAC tune-up** for your home heater. Why? It extends the life of your appliance.
- [ ] **Budget and purchase** heating oil for the winter. Ready to move away from fossil fuels? Learn about converting from oil to electric heat ↗
- [ ] **Check all the weatherstripping** for your home. This simple project actually helps to reduce drafts.
- [ ] **Change the direction** of your ceiling fans. Set fans on a clockwise spin at a low speed to redirect heated air.
- [ ] **Turn off your dehumidifier.** If you have a heat pump, skip this step because they transition through seasons seamlessly.
- [ ] **Hang up your thermal curtains** and refresh your flannel sheets. If your house hasn't been insulated or air sealed, it's time to prepare.
- [ ] **Turn on your whole-house humidifier** or set out in-room humidifiers. A too-dry house can have an impact on your health and your home's structure.
- [ ] **Change your HVAC filter.** Replace it every 90 days, or as directed by the manufacturer.

Home Comfort Checklist

Winter

- [ ] During thaws, **check basement walls** and your foundation for moisture or air leaks. Notice cold air blowing in? Your foundation likely needs air sealing.
- [ ] **Do a quick year-end inventory** of your HVAC filters. Have enough filters on hand for next year, and set reminders to regularly change them.
- [ ] **Notice uneven temperatures** between rooms. Is the heat blasting in one room, while the other is freezing? Schedule a call with Sealed.
- [ ] **Do a quick energy-use review.** Compare the prior year's energy use to the current year.
- [ ] **Find cold air drafts** along your foundation via a quick self-check. Notice where cold spots linger, especially if you have wood or tile flooring.
- [ ] **Do a basic self-check** for air leaks that are causing heat loss. Mark each drafty spot with masking tape. Weatherstrip that area if you can.
- [ ] **Monitor your roof for ice dams**. Ice dam damage isn't covered by most homeowners insurance. Air sealing and insulation are the proper fix.
- [ ] **Change your HVAC filter.** It's time to update your filter—again. Remember, every 90 days!

At Sealed, we're on a mission to stop your home's energy waste and comfort problems.

We make it easy and affordable to make your home feel better by designing, managing, and paying the upfront costs for your project.

Our proven, holistic approach can reduce your home's energy use up to 50% through upgrades like high-performance insulation, air sealing, and heat pump HVAC.

You'll have an expert team behind your project. You'll work with top-rated local contractors who treat your home with care, and we'll manage the work from start to finish.

We're accountable to the results: If we don't cut energy waste, we don't get paid. (Yes, you read that right.) We take the hassle and guesswork out of every step.

Ready to get started? **Let's go.**

Qualify Now

Or scan this QR code to take our 2-min quiz.

Visit sealed.com ↗ for more homeowner education about weatherization and energy efficiency.

Or call us at 917-382-3729.