Better Buildings Residential Network Peer Exchange Call Series: *Comfort and Safety: Family-Oriented Marketing*

February 9, 2017

*Call Slides and Discussion Summary*
Agenda

- Agenda Review and Ground Rules
- Opening Poll
- Brief Residential Network Overview and Upcoming Call Schedule
- Featured Speaker
  - Dan Thomsen, President and Founder, Building Doctors (Network Member)
- Discussion
  - What innovative ways have you seen to appeal to parents with energy efficiency messaging?
  - Children can also influence their parents – what can programs do to spark these conversations in families?
  - Have you encountered obstacles or challenges in outreach to families?
  - What messages are there in addition to comfort and safety that appeal to parents and elder-caregivers?
  - Please share your experience in promoting residential energy efficiency to families.
- Closing Poll
Better Buildings Residential Network: Connects energy efficiency programs and partners to share best practices and learn from one another to increase the number of homes that are energy efficient.

Membership: Open to organizations committed to accelerating the pace of home energy upgrades.

Benefits:
- Peer Exchange Calls 4x/month
- Tools, templates, & resources
- Recognition in media, materials
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- Residential Program Solution Center guided tours

Commitment: Provide DOE with annual number of residential upgrades, and information about associated benefits.

For more information or to join, email bbresidentialnetwork@ee.doe.gov, or go to energy.gov/eere/bbrn and click Join
Peer Exchange Call Series

We hold one Peer Exchange call the first four Thursdays of each month from 1:00-2:30 pm ET

Calls cover a range of topics, including financing & revenue, data & evaluation, business partners, multifamily housing, and marketing & outreach for all stages of program development and implementation

Upcoming calls:

- February 16: Innovative Approaches to Financing
- February 23: Making an Impact: Low-Income Energy Efficiency Programs
- March 2: It’s a Beautiful Day in the Neighborhood: Scale Interventions
- March 16: Sold! Engaging the Real Estate Industry in Home Performance

Send call topic ideas to peerexchange@rossstrategic.com

See the Better Buildings Residential Network Program website to register
March Energy Madness: Join the game!

Submit your most creative residential energy-related marketing messages to: peerexchange@rossstrategic.com

Due date: February 17, 2017

Tournament Details:
- We will announce the Sweet 16 entering the race on the March 2 Peer Exchange call.
- Call Participants will make their picks to determine what messages are best in the 8 head-to-head match ups.
- On each following Peer Exchange Calls in March, you’ll find out who has made it on to the next round and vote on your favorites.
- The winning message will be selected on the March 23 call!

Better Buildings Residential Network members may be given priority consideration.
Setting the scene: The U.S. family market
Families in American households…

116.7 million U.S. households*

5.1 million multigenerational households in 2010, making up 4.4% of all U.S. households.**

18% of U.S. households have young children (under 6 years)*

~14.3% of all U.S. households serve as family caregivers for an adult relative aged 50+.***

Sources:
* U.S. Census Bureau: [https://www.census.gov/hhes/families/](https://www.census.gov/hhes/families/)
...have a great impact on the country's economy...

- At 70 million strong, the generation of grandparents is one of the fastest-growing segments of the U.S. population.
  - Research shows that there is a continued strong spending, in part because the employment rate among grandparents has increased 10%.
  - The value of services provided by informal caregivers has steadily increased over the last decade, with an estimated economic value of $470 billion in 2013.


Source: https://www.caregiver.org/caregiver-statistics-demographics
...as they are strongly driven by comfort, health and safety

Participants highly value comfort and safety as energy efficiency benefits

<table>
<thead>
<tr>
<th>Category</th>
<th>Benefit</th>
<th>Measure applies to</th>
<th>Calculation method</th>
<th>Value range (% of utility bill savings)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resource</strong></td>
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<tr>
<td>Reduction in water</td>
<td>Reduced water and sewer costs</td>
<td>Faucet aerators, showerheads, clothes washers, dishwashers</td>
<td>Algorithm based on water savings from each device, and cost of water and sewer service</td>
<td>5–60%</td>
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<tr>
<td></td>
<td>Highly important to participants, quantified/valued by some</td>
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<tr>
<td>Increased home</td>
<td></td>
<td>Retrofit programs</td>
<td>Survey</td>
<td>7%</td>
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<tr>
<td>durability, less</td>
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<td>maintenance</td>
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<tr>
<td>Reduced equipment</td>
<td></td>
<td>Retrofit, lighting, equipment, and appliance programs</td>
<td>Survey</td>
<td>2–26%</td>
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<td>and appliance</td>
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<td>maintenance</td>
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<td><strong>Comfort</strong></td>
<td></td>
<td>Retrofit programs</td>
<td>Survey</td>
<td>2–26%</td>
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<tr>
<td>Higher comfort levels</td>
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<tr>
<td>Noise: quieter indoor environment</td>
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<td>Retrofit programs</td>
<td>Survey</td>
<td>5–15%</td>
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</table>

**Category** | **Benefit** | **Measure applies to** | **Calculation method** | **Value range (% of utility bill savings)** |
--- | --- | --- | --- | --- |
Safety | Improved safety (fewer fires, reduced CO poisoning) | Retrofit programs | Incidence from program data | 1–12% |
Home improvements | Increased housing property value | Retrofit programs | Survey | 2–20%, or quantified as a one-time value (NMR Group 2011) |

**Sources:** NMR Group 2011; Shumate 2014; Thomas 2014; Aman 2006; Toen et al. 2014; Pigg et al. 2014.

*Source: ACEEE report on “Recognizing the Value of Energy Efficiency’s Multiple Benefits” (2015)*
Best Practices: Building Doctors
Comfort and Safety: 
Family-Oriented Marketing

Dan Thomsen
President and Founder of:

Building Performance Institute (BPI) certified Building Analyst and Envelope Specialist
California Building Performance Contractor’s Association (CBPCA) trainer & verified contractor
Efficiency First (National) founding member and former Board of Directors
Efficiency First CA founding member, So Cal Chapter Chair and on the Board of Directors
California Home Energy Ratings System (CHEERS) certified HERS Rater
Home Performance with Energy Star program verified contractor
Energy Upgrade California program verified contractor
Build It Green certified green professional

www.buildingdoctors.com
Solving Problems With Home Performance

**Comfort**
- Cold Rooms in Winter
- Hot House in Summer

**Health**
- Allergies / Asthma
- Mold or Moisture

**Safety**
- Potential Fire Hazards
- Indoor Air Quality
What Is Home Performance and how do we focus on family?

1. Audit
2. Treatment Plan
3. Retrofitting
4. Quality Assurance
Pregnant Families

Have they prepared their home for the new addition on the way.

Is your nest ready?
1. Comprehensive Energy Audit

- Building Performance Institute certified building analyst
- Clients concerns
- Current energy efficiency of the whole home
- Indoor air quality
- Safety

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Building Doctors Home Performance Check Up

The Whole Home Performance Checkup

Based on sound principles of Building Science and implemented by one of our Building Performance Institute (BPI) Certified Analysts, a Whole Home Performance Checkup is a comprehensive series of tests, inspections and analyses of your home to determine how it is currently using and losing energy.

Our building analyst will be your guide to understanding the complexities of this energy system, and will provide you with solutions that, if acted upon, will help lower your annual energy usage and increase the comfort, health and value of your home.

* Depending upon the conditions some tests may not be able to be performed on certain homes
Diagnostic Tools

1. Blower Door
2. Duct Blaster
3. Infrared Camera
4. Combustion Safety

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Temperate Climates = Poor ROI

- Won’t die of exposure here in Southern California
- Don’t have to have heating or air conditioning
2. TREATMENT PLAN

• Detailed analysis of the data
• Use of energy modeling software
• Addresses the clients concerns
• Lists the recommended retrofits in order of importance
Whole Home Energy Loss

Where is energy being lost in your home?

We have catalogued your home’s actual energy performance (the building load) using a software program that is approved for rebate verification in California. This process allows us to precisely understand how each component of your building affects the heating and cooling loads of your home, and identify which areas are most appropriate to improve based on your current health, comfort and efficiency goals.

Duct Leakage: 16%
Air Leakage: 16%
Attics: 17%
Floors: 17%
Walls: 17%
Windows / Doors: 17%

Annual % of Heating & Cooling energy loss in your home: 20%

Photos of Health and Safety Issues

The HVAC ducts and air register boots in the attic may contain asbestos. These register boots should be tested by a professional asbestos abatement company and removed if they contain asbestos.

Friable asbestos wrapped ducts:

Friable asbestoswrapped air plenum:

877-411-BLDG (2534)
Whole Home Energy Loss (Heating/Cooling)

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Annual % of Heating & Cooling energy loss in your home

Photos of Health and Safety Issues

There were many pest entry points found throughout the home. Pest entry points should be sealed in order to avoid potential infestation.

It appears you have or have had rodent issues in the attic. If a rodent problem still exists, it should be addressed for health & safety reasons.

Building DOCTORS.com
877-411-BLDG (2534)
Photos of Health and Safety Issues

Knob and tube cloth wiring
Whole Home Energy Loss

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Attics: 17%
Floors: 17%
Walls: 17%
Windows / Doors: 17%

Annual % of Heating & Cooling energy loss in your home: 23%
Whole Home Energy Loss (Heating/Cooling)

Where is energy being lost in your home?
We have catalogued your home's actual energy performance (the building load) using a software program that is approved for rebate verification in California. This process allows us to precisely understand how each component of your building affects the heating and cooling loads of your home, and identify which areas are most appropriate to improve based on your current health, comfort and efficiency goals.

Annual % of Heating & Cooling energy loss in your home

- Windows / Doors: 17%
- Duct Leakage: 16%
- Walls: 17%
- Air Leakage: 16%
- Floors: 17%
- Attics: 17%
Photos of Your Attic

Several areas of the attic have no insulation at all. Insulating the attic to R-38 with blown-in cellulose is recommended.
There is no insulation in the attic. Insulating the attic to R-38 with 12" of loose-fill Cellulose will drastically reduce the heating and cooling loads of your home and make it exceptionally more comfortable in both the summer and winter.
Attic Insulation Upgrade Example

Cellulose Blown-In Insulation: The greenest and most effective solution
Most homes have some insulation, but they are usually grossly under-insulated or the installation quality renders the insulation useless. According to the Building Performance Institute, a mere \( \frac{3}{4} \) inch air gap in batt insulation reduces its R-value by up to 80%! Most homes can benefit dramatically by re-insulating the attic with blown-in cellulose to an R-38 level for complete coverage.

Before Example: Attic with no insulation

After Example: Attic with R-38 blown in insulation, ID flags and attic rulers
Infrared Photos of Your Walls

In infrared, darker colors show cooler temperatures and bright colors show warmer temperatures.

Infrared imaging reveals no insulation in the exterior walls of your home.

Exterior wall in the living room:

Shows intense heat conduction through wall:
Wall Insulation Upgrade Example: Drill-and-Fill

Wall insulation makes a huge difference in the comfort of a home. CA homes built before 1978 were not required by code to install insulation in the walls.

When insulating a wall, it is critical to have the insulation dense-packed into the wall cavity.

Benefits of the Drill-and-Fill dense-packing process:

- Allows an insulation value of R-13
- Avoids insulation settling over time
- Reduces heat transfer (keeping your home cooler in the summer and warmer in the winter)
- Reduces air movement in the walls
- Helps reduce noise through the walls

Dense-packing involves drilling 2.5" holes in the walls above and below the fire-blocks, from either inside or outside the home (with varying pros and cons to both). These sets of holes are made every 16" across the wall to access each bay. The walls are then filled with cellulose insulation beyond its natural density until densely packed. The holes are plugged, caulked and rough-patched. Finish work is also available through Building Doctors.
Photos of Your Crawlspace

There is no insulation in the crawl space beneath the floors of your home. Insulating the crawl space to R-19 with formaldehyde-free fiberglass batts is recommended, as well as installing a moisture vapor barrier along the dirt crawl space floor to minimize moisture and humidity from entering the home.
Properly installed floor insulation can make a big comfort difference, especially if you have hardwood floors, because people notice the temperature of surfaces that their body is in direct contact with more than air temperature. Remember, a mere ¾ inch air gap in poorly installed batt insulation reduces its R-value by up to 80%. Installing a moisture vapor barrier along the floor of the crawl space will help to reduce the humidity levels in your home. When all of your windows are closed, 60% of the air you breathe comes from your crawlspace.
Example of the Blower Door Test

The blower door test measures the air leakage of your home. The pressure gauge reads the cubic feet per minute (CFM) of air through the fan needed to pressurize your home to 50 pascals of positive air pressure. At approximately \( \text{square feet} \) square feet to the home and using the appropriate “default” blower door leakage rate of \( \text{CFM}_{50} \), to energy model an improvement for potential savings and rebate, your home would be considered a fairly leaky building.

Example of the blower door test being performed:

Pressure gauge measures building air leakage at \( \text{CFM}_{50} \):

An air “tight” home should have about one CFM@50 per each square foot of floor space
Common Locations of Building Air Leaks

- Building Envelope
- Blower Door
- Duct Register
- Attic Hatch
- Recessed Light
- Plumbing Vent Stack
- Crawl Space
- Top Plate
- Sill Plate
- Dropped Soffit
- Dryer Vent
- Outdoor Faucet

Source: U.S. EPA

www.buildingdoctors.com
Photos of Leaks In Building Envelope

Plumbing penetrations in the floor of the crawl space are breaks in the building shell.

Example picture of pipe penetrations in the floor of the crawl space:
Infrared Images of Air Leaks

In infrared, darker colors show cooler temperatures and bright colors show warmer temperatures.

Not only are the older recessed lights NOT IC-rated, but they are also very leaky.
Infrared Images of Air Leaks

In infrared, darker colors show cooler temperatures and bright colors show warmer temperatures.

The attic and crawl space hatches should be weather-stripped so they sit air tight and also insulated with rigid foam board.
Air Leakage Sealing Upgrade Example

Benefits of Air Sealing

- Improves indoor air quality by reducing air infiltration from crawl space and attic
- Increases energy efficiency by reducing loss of conditioned air through leakage points i.e. leaks around can lights, plumbing and electrical penetrations
- Increases indoor comfort by reducing draftiness of the home

What to Expect

- Sealing process reduces envelope leakage significantly
- We use materials such as foam board, expanding foam, caulk and fire rated material to seal penetrations to the extent necessary
- We provide verification of improvement by using Blower Door building leakage test
It is important to understand that air sealing and insulation are inter-dependent.

Since the air barrier (building shell) and the insulation are in alignment, the condition of one directly impacts the performance of the other.

In a home that is well-insulated but not air sealed, the performance of the insulation will be compromised by air passing through or around the insulation and leaking into or out of the house.

In a home that has been air-sealed but has little (or no) insulation, the impact of a tight building shell will be negligible, because massive amounts of heat will be transferring into or out of your home through the un-insulated (or poorly insulated) ceilings, walls and/or floors.

If we properly air seal and insulate the building shell, the temperature indoors will be significantly less influenced by the temperature outside, meaning improved comfort.
Shell Improvement

- Thermal Barrier is like a Fleece jacket
- Air Barrier is like a wind breaker
- This is why sleeping bags and ski jackets have both a thermal barrier and air barrier.
A Upgraded Home Is Like a Thermos

1. If it is insulated well and pretty air tight it will retain its heat or cold for longer periods of time.

2. If you leave the cap off, the heat will escape fairly quickly.

3. If you pour what is inside into a cup it will quickly lose its temperature.

4. Older homes are the cup.
Ventilation Options: Heat Recovery Ventilator (HRV)

After air sealing is completed we want to make sure your home has the proper amount of air changes per hour (ACH) and clean, filtered air. An HRV system pulls the stale air from bathrooms, kitchens and laundry rooms and supplies fresh air to bedrooms and living rooms. It is a perfect solution for circulating the air in your home and ensuring you have fresh filtered air at all times.

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Your Central Heating System

**How efficient is your heating system?**

A properly sized heater will reduce run-time cycling and increase comfort and efficiency. The only way to truly size a heating system correctly is to have an energy load calculation performed on your home. This calculation factors in, among other things, the size of your home, type and quantity of insulation and windows, and the average climate in your area. The bottom line is that an oversized HVAC system is an energy waste.

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<table>
<thead>
<tr>
<th>Existing HVAC System</th>
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<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2000</td>
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<tr>
<td><strong>Make</strong></td>
<td>Payne</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>PG8DAA048095</td>
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<tr>
<td><strong>Current BTU Input</strong></td>
<td>92,000 BTUs</td>
</tr>
<tr>
<td><strong>Current Efficiency (AFUE)</strong></td>
<td>80%</td>
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<tr>
<td><strong>Recommended BTU Input</strong></td>
<td>55,000 BTUs</td>
</tr>
<tr>
<td><strong>Recommended Efficiency</strong></td>
<td>95%</td>
</tr>
</tbody>
</table>

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877-411-BLDG (2534)
Ventilation Options: Heat Recovery Ventilator (HRV)

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Your Central Cooling System

How efficient is your cooling system?

A properly sized air conditioner will reduce run-time cycling and increase comfort and efficiency. The only way to truly size a cooling system correctly is to have an energy load calculation performed on your home. This calculation factors in, among other things, the size of your home, type and quantity of insulation and windows, and the average climate in your area. The bottom line is that an oversized HVAC system is an energy waste.

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<td>AC Size</td>
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<td>AC Efficiency</td>
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<tr>
<td>Recommended AC Size</td>
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<tr>
<td>Recommended AC Efficiency</td>
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</table>
A common complaint is that some rooms are too hot and/or cold and don't receive enough airflow. Sealing duct leaks and adjusting inline dampers can redirect the heat where we want it and provide more air flow to particular rooms.

We seal both existing and new ducts using low VOC mastic to make those locations air tight. This allows us to control not only the air flow, but the source of the air as well.

Example of an unsealed start collar on a plenum. This allows air to leak out on the supply side, and it allows potentially unhealthy air to leak in on the return side.

Two supply duct runs in the attic are partly disconnected, contributing to the HVAC system duct leakage.
Duct System Sealing Example

A common complaint is that some rooms are too hot and/or cold and don’t receive enough airflow. Sealing duct leaks and adjusting inline dampers can redirect the heat where we want it and provide more air flow to particular rooms.

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HVAC System Design  (Manuals J, D, S & T)

In order to meet today’s strict energy guidelines, the proper design and installation of a new HVAC system requires complex engineering software to ensure the proper system size, efficient operation and the ability to provide uniform comfort throughout your home. After the installation is complete, we test the entire system to make sure it is performing as engineered.

Total heating and cooling BTU loads:

Example of engineered HVAC/air distribution system layout:

All of our system designs are done in accordance to ACCA (Air Conditioning Contractors of America) guidelines for 1) sizing and BTU load calculations (Manual J), 2) equipment selection (Manual S), 3) duct sizing and design (Manual D), and 4) air distribution dynamics (Manual T).
Attic Located Deep Buried Ducts

During the summer, air temperatures can reach up to 140 degrees in the attic. The best way to protect the conditioned air traveling through the ducts is to deep bury them in loose-fill insulation.

Blown-in cellulose with an insulation value of R-38 is approximately 12 inches deep, which is typically not enough insulation to completely bury the air ducts. However, the homeowner does have the option to have the ducts deep buried with additional insulation.
Current Airflow vs. Designed Airflow

How is the actual air flow compared to the designed system air flow?
Your HVAC system’s designed airflow is based upon its designed heating and/or cooling potential. Using the bolometer, we measure the air being delivered into each room of your home. By totaling these numbers, we can see how much of this air is actually being delivered into your living space. The difference between the designed airflow and current airflow reveals the amount of air lost due to defects in your ducting system, its installation and its design.

Total supply airflow into the house via the HVAC system (in cubic feet per minute)

<table>
<thead>
<tr>
<th>Designed System Output</th>
<th>Current System Output</th>
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<tbody>
<tr>
<td><strong>1400 CFM</strong></td>
<td><strong>675 CFM</strong></td>
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</table>

Your HVAC distribution is operating at 48% of its Designed Capacity
Fun Infrared Images

Darker Infrared colors show cooler temperatures / brighter colors show warmer temperatures

Fluffy increasing the Btu load of the home:
Indoor Air Quality

- Decrease in bar width indicates a decrease in effect.

<table>
<thead>
<tr>
<th>Percentage of Relative Humidity</th>
<th>Optimum Zone</th>
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<tbody>
<tr>
<td>10</td>
<td>Red</td>
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<tr>
<td>20</td>
<td>Yellow</td>
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<tr>
<td>30</td>
<td>Green</td>
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<td>40</td>
<td>Blue</td>
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<tr>
<td>80</td>
<td>Blue</td>
</tr>
<tr>
<td>90</td>
<td>Red</td>
</tr>
</tbody>
</table>

- Bacteria
- Viruses
- Fungus
- Mites
  - Respiratory Infections
  - Allergic Rhinitis and Asthma
  - Chemical Interactions
  - Ozone Production

1 Insufficient data above 50% RH

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Stack Effect and Neutral Plane of Pressure

As warm, buoyant air rises in your home, it escapes into the attic through common leakage points such as ventilation openings, recessed lights, ceiling fans and attic accesses. This escaping air causes a negative pressure indoors.

In order to make up for this lost air and the negative pressures it creates, cool outdoor air is naturally pulled inside from the lower areas of your home, mainly unhealthy crawl space air through leaks in the floor.

The first step to eradicating the Stack Effect in your home is to air seal the attic, thereby creating an air barrier between the attic and the living space.

This will keep warm air from rising into the attic, curtail the subsequent pressure differences inside, and your home will no longer need to pull cold outdoor air in from places like the crawl space.
After air sealing is completed we want to make sure you have the proper amount of natural Air Changes per Hour (ACH) in your home. Bath fans serve to induce the air changes that are recommended for healthy air.

These fans are also important for removing moisture from bathrooms. Just because a fan exists does not mean it is being used. The Panasonic Whisper Green series is hands down the best fan on the market.

Installing a switch with an occupancy sensor so the fan turns on automatically avoids issues with occupants forgetting to turn on the fan. There is also the option of a humidistat which turns the fan on when there is too much humidity in the bathroom.
Ventilation Options: Heat Recovery Ventilator (HRV)

After air sealing is completed we want to make sure your home has the proper amount of air changes per hour (ACH) and clean, filtered air. An HRV system pulls the stale air from bathrooms, kitchens and laundry rooms and supplies fresh air to bedrooms and living rooms. It is a perfect solution for circulating the air in your home and ensuring you have fresh filtered air at all times.
3. Retrofitting or Upgrades

• Customer chooses the retrofits they want
• Trained crews implement those choices
• Measures are installed based on performance based standards
• There is a loading order to retrofitting

[Images of Blown Insulation, Duct Sealing or Replacement, Highly efficient equipment, and Building Envelope Sealing]
Retrofitting Loading Order

Fundamentals
- Air Sealing
- Duct Sealing
- Lighting
- Appliances
- Water Conservation
- Plug Loads
- Behavior
- Insulation

Major Systems
- Heating
- Air Conditioning
- Ventilation
- Water Heating

Renewables
- Solar PV
- Solar Thermal
- Wind
- Water Catchment

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Before we leave we “test out”

• When the retrofitting is complete we do the diagnostic tests again or “test out” to show the customer and document the improvements we have made
4. Quality Assurance

• Third party verification process

• Check a percentage of the jobs

• Assures customers we are delivering on our promise
In Summary, With Home Performance Contracting, Your Home Will Be:

- Healthier
- Comfortable
- Energy Efficient
- Durable
- Safer
- Lower Carbon Footprint
- Valuable
Comfort and Safety: Family-Oriented Marketing

Dan Thomsen

@buildingdoctors  @buildingdoctors  @thebuildingdocs

www.buildingdoctors.com
Key lessons learned to engage more homeowners in home energy upgrades by promoting comfort and safety benefits:

- **Use segment-based messaging and approaches:**
  - The general drivers for pregnant women or families with children are health, safety, and comfort.
  - Building Doctors can deploy up to three crews for families with small children, to ensure quick upgrades and comfort.

- **Listen to their motivations and offer tailored advice** based on homeowners’ needs, and technical expertise.
  - Some basic upgrades are not top-of-mind priorities for some homeowners. Helping them prioritize and understand the order of the necessary upgrades is key.

- **Despite the general belief, offering free energy audits might not spur homeowner engagement.**
Educate homeowners through clear and simple messages:
- While it adds more time in the process, Building Doctors’ comprehensive and personalized audit report led to increased closure rates and happier customers.
- Analogies and concrete examples are an effective way of getting your messages across. Homeowners won’t understand the technical jargon.

Leverage current technologies to connect with prospective customers. To explain its audit reports, Building Doctors uses applications such as Skype and join.me.

Ensure reliability and continued engagement after upgrades are finalized. The free maintenance plan that Building Doctors offers for the first year helps to:
- Identify and correct any mistakes made during the improvement work;
- Offer feedback and further educate homeowners on how to use the new applications installed in their homes.
There are many ways to promote home energy upgrades and appeal to certain market segments:

- **The more you personalize your website, the greater success you'll have.**
  - Drop the general pictures from your website. Use instead real pictures from your work on the field.
  - Include testimonials on your website from owners of upgraded homes and let them be your voice.

- **Leverage social media**: Facebook is a useful tool to connect with various market segments, including families with children.

- **Word-of-mouth is a powerful marketing medium** that works by itself once you identify your correct audience.
  - This is another reason to invest in homeowners’ education and arm them with clear and simple information through the audit report.
Explore resources related to comfort and safety: family-oriented marketing:

- Learn about the value of energy efficiency in terms of comfort, health, and safety benefits and their role in program marketing in this [ACEEE report](https://rpsc.energy.gov).
- Read this comprehensive [DOE literature review](https://rpsc.energy.gov) of studies addressing the health benefits of home performance.
- Follow steps on determining priority target audience segments, messaging, and incentives that will motivate customers in this [Marketing & Outreach handbook](https://rpsc.energy.gov).

- Check out the latest [Proven Practices](https://rpsc.energy.gov) post on [Recognizing Good Contractor Performance](https://rpsc.energy.gov).
- The Solution Center is continually updated to support residential energy efficiency programs—[member ideas are wanted](https://rpsc.energy.gov)!
Example of customer testimonials for Building Doctors: https://www.youtube.com/watch?v=E8itWsesf1Q

Related Better Buildings Residential Network Peer Exchange Call Summaries:

- Do You Hear Me Now? Communicating the Value of Non-Energy Benefits (101)
- The Dog Days of Summer: Capitalizing on the Pet Market
2017 Better Buildings Summit
Registration is now open!

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#BBSummit17 registration is right around the corner. Get ready to learn about expert #EnergyEfficiency enhancements http://bit.ly/2iZCMsB
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We can't wait to hear from you!
Addenda: Attendee Information and Poll Results
Call Attendees: Network Members

- Austin Energy
- Cold Climate Housing Research Center
- City of Fort Collins (CO)
- City of Plano (TX)
- CLEAResult
- Connecticut Green Bank
- Cleveland Public Power
- Earth Advantage Institute
- Energy Efficiency Specialists
- Enhabit
- Greater Cincinnati Energy Alliance
- Katsujinken Foundation
- Group14 Engineering Inc.

- Local Energy Alliance Program (LEAP)
- HEAT Squad - NeighborWorks of Western Vermont
- New York Homeowners Construction Company
- Rocky Mountain Institute
- Ryan Taylor Architects, LLC
- County of San Luis Obispo
- South Burlington Energy Committee
- Southface
- WattzOn
- Wisconsin Energy Conservation Corporation (WECC)
Call Attendees: Non-Members (1 of 2)

- Alliant Energy
- Apogee Interactive
- AppleBlossom Energy
- BA Consult
- Bay City Electric Light & Power’s Energy Optimization program (BCELP)
- BKi
- Bonneville Power Administration
- California Public Utilities Commission
- City of Milwaukee (WI)
- CivicSpark

- Center for Sustainable Energy (CSE)
- Energize NY
- Energy Management Services (EMS)
- Energy Smart Colorado
- Eric Kjelshus Energy Heating and Cooling
- FCI Management
- Flathead Electric Cooperative
- Franklin Energy Services, LLC
- GoodCents
- Green & Healthy Homes Initiative
• Holland Board of Public Works
• Holy Cross Energy
• Johnson Home Performance
• LINC Housing
• La Plata Electric Association
• Mercy Housing Management Group
• Michaels Energy
• NANA Regional Corporation, Inc.

• Off The Grid Renovations, LLC.
• Orangeman Energy Services
• PosiGen Solar
• Clallam County (WA)
• Civic Works - Retrofit Baltimore
• SIM2
• Snohomish County (WA)
• Stone Energy Associates
Opening Poll

Which of the following best describes your organization’s experience with family-oriented marketing?

- Some experience/familiarity – 42%
- Limited experience/familiarity – 25%
- Very experienced/familiar – 17%
- No experience/familiarity – 16%
- Not applicable – 0%
Closing Poll

- After today's call, what will you do?
  - Consider implementing one or more of the ideas discussed – 52%
  - Seek out additional information on one or more of the ideas – 39%
  - Make no changes to your current approach – 9%
  - Other (please explain) – 0%