

# Delivering Turnkey Home Performance and Healthy Home Solutions

*Hal Smith, Halco Home Solutions, CEO*



# Introduction

- Founder & CEO of Halco Home Solutions (established in 1984)
- 40+ years as an industry trailblazer in home performance & energy solutions
- Grew Halco into a multi-million-dollar enterprise with 4 locations across Upstate NY
- Nationally recognized leader in electrification & energy efficiency
- President, Building Performance Contractors Association of NYS (BPCA)
- Board Member, Building Performance Association (BPA) – Chairperson of the Workforce Committee, Policy & Nominations Committees
- Licensed Electrician, Master Plumber, HVAC Contractor
- Certified BPI Healthy Home Evaluator, Building Analyst, Envelope Professional, Manufactured Housing Specialist





# About Halco Home Solutions

- Headquartered in Phelps, NY, with additional locations in *Ithaca, Syracuse, and Rochester*)
- Serving 23 counties
- Over 40 years of experience in plumbing, HVAC, electrical, healthy homes, and energy efficiency
- Full-service home performance contractor

## OUR MISSION

- Deliver top-tier, high-efficiency home performance solutions for residential & commercial clients
- Always prioritize safety, comfort, and sustainability
- Create customers for life!



# Full Service Approach

- At Halco, we provide a complete range of services under one roof, including HVAC, plumbing, electrical, insulation, air sealing, healthy home solutions, moisture mitigation, basement waterproofing, gutters, and **so much more**.
- This integrated approach allows us to offer turnkey solutions that are faster, more efficient, and more reliable than relying on multiple subcontractors.
- By managing most of the work in-house, we maintain control over quality, timelines, and the customer experience.

# Yes, we do that!



# HALCO

## HOME SOLUTIONS



We strive to earn  
customers for *life!*



# Comprehensive Home Evaluation

We begin each project with a thorough home evaluation that typically takes three to four hours. During this assessment:

- We review health & safety concerns.
- We focus on healthy home solutions, including radon testing, AirAdvice IAQ testing, and a comprehensive moisture evaluation.
- Insulation and air sealing are evaluated to identify areas for improvement.
- We run a blower door and thermal imaging tests.
- Heat loss and heat gain calculations are completed using Amply.
- HVAC equipment and related distribution systems are assessed for potential improvements, including static pressure testing of ductwork.
- Homeowners are surveyed about their interest in electrification and renewable energy solutions to identify opportunities for efficiency upgrades.

After the evaluation, we provide a detailed report that outlines our findings and recommendations.

# Healthy Homes at the Heart of Home Performance

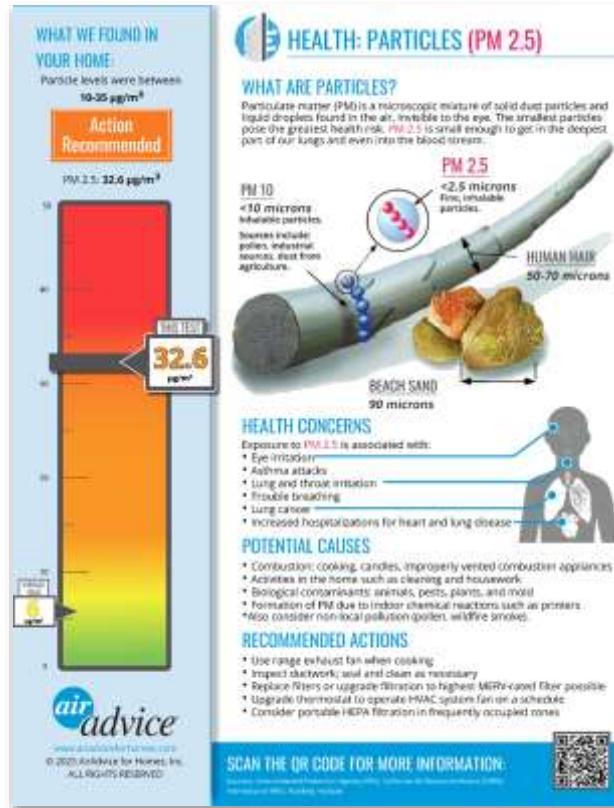
- Home performance today goes far beyond simply improving energy efficiency.
- Our goal is to create homes that are healthier, safer, and more comfortable for the people who live in them.
- Assessment and safety evaluations also include:
  - Complete evaluation of any moisture threats in the home.
  - Complete evaluation of any fresh air and exhaust fans that are currently being used.
  - Always looking for mold-like substance (MLS), asbestos-like substance (ALS), and lead paint.
  - We provide homeowners with an AirAdvice report to guide ongoing IAQ management.
- **Indoor air quality is central to our approach**, and we offer a variety of solutions to improve it. These include:
  - Energy recovery ventilators (ERVs)
  - Ventilating dehumidifiers
  - Radon testing & mitigation
  - Centralized dehumidifiers
  - Air purification options
  - Duct cleaning options
- Each of these solutions works together to create a healthier indoor environment.

# AirAdvice Testing & Reporting

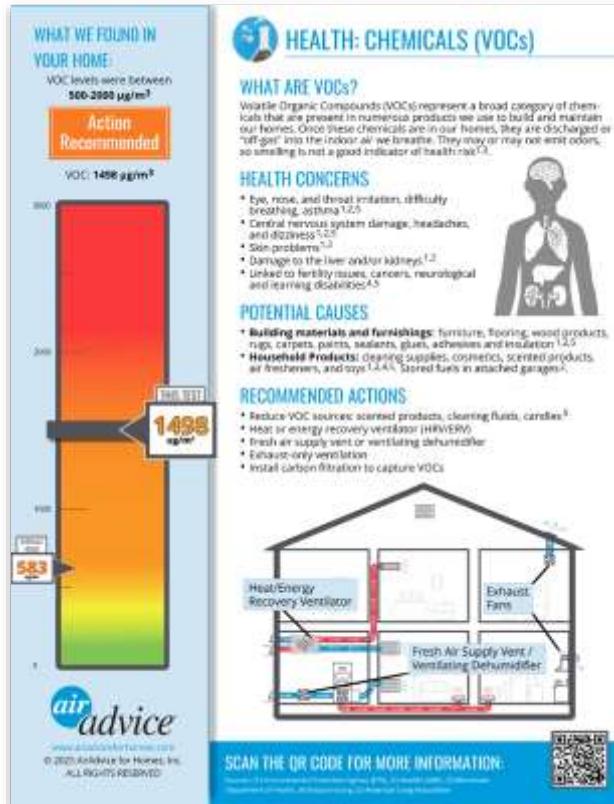
- We run a 30-minute initial AirAdvice test as part of every home energy evaluation.
- We provide homeowners with an Air Advice report that measures and explains indoor air quality issues in clear, actionable terms.
- These reports help homeowners understand the sources of air quality concerns and see the impact of recommended solutions.
- By offering data-driven insights, we guide homeowners toward informed decisions and long-term IAQ improvements.
- If warranted, we would follow up with a 4-day AirAdvice evaluation.



# AirAdvice Sample Report



# AirAdvice Sample Report



## 1 HEALTH: CHEMICALS (VOCs)

### WHAT ARE VOCs?

Volatile Organic Compounds (VOCs) represent a broad category of chemicals that are present in numerous products we use to build and maintain our homes. Once these chemicals are in our homes, they are discharged or "off-gas" into the indoor air we breathe. They may or may not emit odors, so smelling is not a good indicator of health risks.



### HEALTH CONCERN

- Eye, nose, and throat irritation, difficulty breathing, asthma<sup>1,2,3</sup>
- Central nervous system damage, headaches, and dizziness<sup>1,2,3,4</sup>
- Damage to the liver and/or kidneys<sup>1,2</sup>
- Linked to fertility issues, cancers, neurological and learning disabilities<sup>1,3,5</sup>

### POTENTIAL CAUSES

- Building materials and furnishings:** Furniture, flooring, wood products, vinyl, carpet, insulation, paints, glues, sealants, and adhesives<sup>1,2,3</sup>
- Household products:** Cleaning supplies, cosmetics, scented products, air fresheners, and toys<sup>1,2,4,5</sup>. Stored fuels in attached garages.

### RECOMMENDED ACTIONS

- Reduce VOC sources: scented products, cleaning fluids, candles<sup>3</sup>
- Heat or energy recovery ventilator (HENRVE)
- Fresh air supply vent or ventilating dehumidifier
- Exhaust-only ventilation
- Install carbon filtration to capture VOCs

**SCANN THE QR CODE FOR MORE INFORMATION:**

## WHAT WE FOUND IN YOUR HOME

CO<sub>2</sub> levels were above 1000 ppm

**Action Required**

CO<sub>2</sub>: 1347 ppm

Rebreathed fraction: 2.60%

**TEST: 897 ppm**

**THIS TEST: 1347 ppm**

## 2 HEALTH: CARBON DIOXIDE (CO<sub>2</sub>)

**WHAT IS CARBON DIOXIDE?**

Carbon dioxide (CO<sub>2</sub>) is a gas we exhale. It builds up in the home when there is no mechanical ventilation for fresh outdoor air. Ventilation has a great impact on health, comfort, and performance. Well-ventilated homes with adequate air exchange should have CO<sub>2</sub> levels of 600-1,000 ppm, with an average of 800 ppm or less<sup>1</sup>. The rebreathed fraction is the percent of the indoor air that has been previously exhaled<sup>2</sup>.

### HEALTH CONCERN

- Lower cognitive function<sup>3</sup>
- CO<sub>2</sub> levels above 1000 ppm - higher risk of illness<sup>1</sup>
- Snoring or an irregularly ticked nose<sup>1,4</sup>
- Eye irritation, sore throat, throat, coughing, sneezing, and stuffy, congested or runny nose<sup>1</sup>
- Increased risk of airborne disease<sup>4</sup>



### POTENTIAL CAUSES

**Source cause:**  
Tight or energy-efficient home construction without adequate ventilation, malfunctioning or shut off ventilation, heating, combustion activities, HVAC equipment needs repair.

**Heating & cooling issues:**  
Lack of supplied fresh ventilation, malfunctioning or shut off ventilation, heating, combustion activities, HVAC equipment needs repair.

### RECOMMENDED ACTIONS

- Heat or energy recovery ventilator (HENRVE)
- Fresh air supply vent or ventilating dehumidifier
- Exhaust-only ventilation
- Inspect ventilation system to ensure performance and adjust as needed

**SCANN THE QR CODE FOR MORE INFORMATION:**



# Radon Testing & Mitigation

- Radon is a serious health concern in many homes, and addressing it is an essential part of creating a safe indoor environment.
- At Halco, we leave behind a 3-day radon test during our comprehensive home evaluations to identify elevated levels that may pose a risk to the occupants. We follow up with the homeowner after they have mailed in their 3-day test.
- When elevated radon levels are found, we provide full mitigation services that effectively reduce radon concentrations and protect the long-term health of the household.
- By integrating radon testing and mitigation into our standard process, we ensure that IAQ concerns are addressed thoroughly and responsibly as part of our whole-home approach.

# ERV's & Ventilating Dehumidifiers

- Energy Recovery Ventilators and ventilating dehumidifiers are our preferred method of bringing fresh air into the home when needed.
- We use energy recovery ventilators (ERVs) to improve ventilation while maintaining energy efficiency.
- These systems bring fresh air into the home while exhausting stale air, and they recover energy from the outgoing air to reduce heating and cooling demands.
- At Halco, we use trusted ERV brands including Panasonic, RenewAire, and FanTec to ensure reliability and performance.



# Ventilating Dehumidifiers

- When we identify both moisture issues as well as a lack of fresh air, sometimes a ventilating dehumidifier is the best choice.
- Excess humidity can lead to mold growth, discomfort, and structural issues.
- We install ventilating dehumidifiers that remove moisture while introducing fresh air, helping maintain a balanced indoor environment.
- These systems are especially valuable in basements and other areas prone to dampness, keeping homes healthy and comfortable.



# Santa-Fe Ventilating Dehumidifier

- The Santa Fe Ultra Series provides dedicated whole-house dehumidification, keeping humidity at healthy, comfortable levels year-round.
- Reduces health risks associated with poor indoor air quality, including allergies, asthma triggers, and musty odors.
- Helps protect the home by keeping humidity below 60%.
- Offers optional outdoor air ventilation and MERV 13 filtration, enhancing IAQ.



# Sedona Centralized Dehumidifier

- The SaniDry Sedona is a centralized dehumidifier designed to manage moisture levels throughout an entire home.
- This system protects against mold and humidity-related issues while improving comfort and supporting HVAC performance.
- We typically use this system in damp basements and crawl spaces.
- When combined with proper ventilation and purification, the Sedona plays a key role in creating a healthy and well-balanced indoor environment.

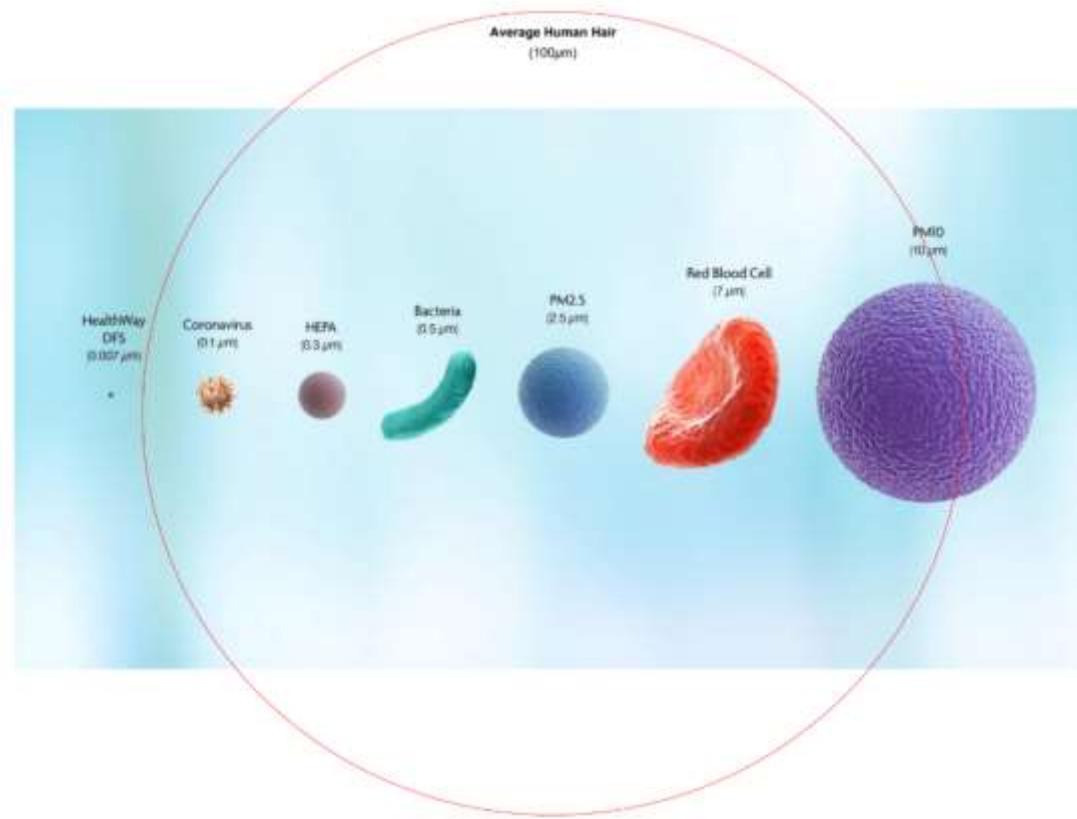


## Centralized Ducted Purification: Healthway Super V

- The Healthway Super V is a centralized ducted, hospital-grade air purification system that cleans and filters air throughout the entire home.
- By installing this system as part of our overall approach, we can provide homeowners with consistently clean air in every room.
- This unit works in combination with other ventilation and dehumidification solutions to create a truly healthy indoor environment.



# Healthway Super V



# Aspen Air Purifier

- The Aspen is a powerful, advanced portable air purifier designed to remove airborne pollutants, allergens, and particulates at a high efficiency.
- We use Aspen units in situations where homeowners need targeted purification in specific areas or when a standalone solution is better suited than a ducted system.
- The Aspen complements whole-home systems at a more affordable price.
- The Aspen is a 3-stage filtration system. **Stage 1** is a MERV-13 pleated filter. **Stage 2** is a 3lb carbon filter. And **Stage 3** is a true HEPA filter.



# Aspen Air Purifier

- Aspen is not sold in big-box retail or through general online marketplaces.
- Outside of standard Contractor Nation dealer partnerships, the only authorized pathway for companies to purchase or sell the Aspen is through the CN Air Group.
- The CN Air Group also offers a version of the SaniDry XP, expanding access to additional high-quality IAQ and moisture-management solutions.

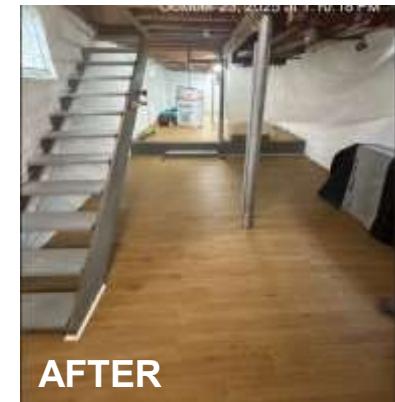
<https://www.cnairgroup.com/>

# Basement Finishing

- We also offer a complete line of mold-proof basement finishing options.
- As a certified Basement Systems dealer, we provide basement finishing solutions designed to resist mold, moisture, and long-term damage.
- By combining basement finishing with our whole-home approach, we ensure the lower level of the home supports overall air quality rather than contributing to moisture, odors, or contaminants.



BEFORE



AFTER

# Putting It All Together

- **Healthy Homes are at the center of everything we do.**
- By integrating HVAC, insulation, air sealing, plumbing, electrical work, and healthy home solutions, we are able to create a clear and complete pathway for homeowners.
- This whole-home perspective is why we also offer services such as basement waterproofing, gutters, water guards, clean space basement and crawl space encapsulation, and more. These components may seem unrelated, but they play a critical role in managing moisture, preventing water intrusion, and protecting the home's structure, all of which directly impact indoor air quality and long-term performance.

# Putting It All Together

- Heat pumps are installed as part of this complete solution rather than as a stand-alone product.
- By addressing insulation, air sealing, moisture control, and ventilation first, we ensure that the heat pump performs at its highest potential and delivers maximum comfort and efficiency.
- Every step, whether it is fixing drainage issues, controlling humidity, sealing air leaks, or purifying the air, supports the next, creating a **unified pathway toward a healthier, more comfortable home.**

# Operational Efficiency

- By keeping our services in-house and reducing reliance on subcontractors, we are able to maintain consistent quality across every project.
- This approach allows us to complete work more quickly and reliably, while performance-based incentives help our team stay engaged and motivated. As a result, both our efficiency and our customer satisfaction improve significantly.
- All of this ties back to our mission of creating **customers for life!**



# Our Mission: Customers for Life

- We answer our phones live, with an in-house team available 24/7/365.
- We support over 10,000 active maintenance agreements.
- Our yard signs, strong community presence, and consistent reputation help reinforce trust and brand recognition.
- We actively encourage feedback and maintain a strong online presence with Google reviews.
- We continue to add services and strengthen our whole-home approach because it delivers the best long-term results for our customers.

**Everything ties back to our mission: delivering complete home solutions and creating customers for life!**



Phelps 2334 Reviews, 4.9 ★ Rating

Ithaca 2241 Reviews, 4.9 ★ Rating

Syracuse 877 Reviews, 4.9 ★ Rating

Rochester 839 Reviews, 5.0 ★ Rating

Halco Basement Systems 114 Reviews, 5.0 ★ Rating





# QUESTIONS & DISCUSSION



# THANK YOU!

**CONNECT WITH ME:**

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Locations in Phelps, Ithaca, Syracuse, and Rochester!