

# Welcome to today's CHBA Net Zero Webinar!

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# Housekeeping

- **This webinar is being recorded.** CHBA Members can access the Net Zero webinar archive (recording + slide deck) at [www.chba.ca/NZwebinars](http://www.chba.ca/NZwebinars).
- **You will be in “listen-only” mode** for the duration of the webinar.
- **After the presentation we will have time for questions. Please use the question section of the dashboard** throughout the webinar and your questions will be relayed to the presenter(s).
- You can **change your screen view** by clicking on the  **View icon** in the top right corner, and by dragging the slider between sections to make the slideshow and webcams smaller/larger.

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## RESIDENTIAL BUILDER EVENTS

Lunch & Learn Seminar available on topics such as:

- Building Net Zero Energy/Net Zero Energy Ready Homes
- High Performance Building Enclosure Systems

## ARCHITECT DESIGN EVENTS

Lunch & Learn Seminar available on topics such as:

- Principles of Acoustics and new ASTC Code Requirements
- Eliminating Thermal Bridges and Online Design Tools
- High Performance Building Envelope Solutions



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# Thank you to our NZC Silver & Bronze Sponsor Members

## SILVER

AEROBARRIER

ALL WEATHER  
WINDOWS

ENBRIDGE

FORTIS BC

MITSUBISHI  
ELECTRIC

Panasonic

Reliance  
home comfort

## BRONZE

BASF  
We create chemistry

BC Hydro

Bluewater Energy  
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Canadian  
Wood  
Council

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MODULAR CONSTRUCTION  
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Hi-Velocity  
Systems

enerQUALITY  
BETTER BUILT HOMES

LP BUILDING  
SOLUTIONS

ROCKWOOL

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Electric

VENMAR





# Our Next Webinar

July 14, 2022 from 10:30-11:30 PT / 1:30-2:30 ET

## Shifting to Net Zero and Net Zero Ready at Scale



**Presented by Brian Cooke, Sales & Marketing Manager, AeroBarrier Canada**

According to the CHBA National 2021 Home Buyer Preference Study, the top 3 overall “Must Have” home features identified by recent homebuyers are 1) high-efficiency windows, 2) energy-efficient appliances, and 3) an overall energy-efficient home. Additionally, 523 Canadian governments have declared a Climate Emergency, representing 99.56% of the population . These governments are now driving climate action, including the reduction of emissions from homes.<sup>1</sup> The industry is now under more pressure to meet these expectations than ever before.

This webinar focuses on how builders can meet these expectations by providing a path to Net Zero/Ready on a production scale without compromising construction schedules or increasing costs. In this webinar we'll discuss:

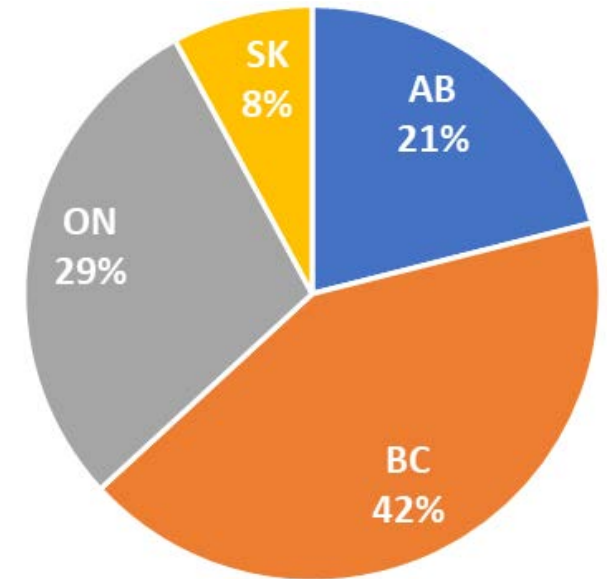
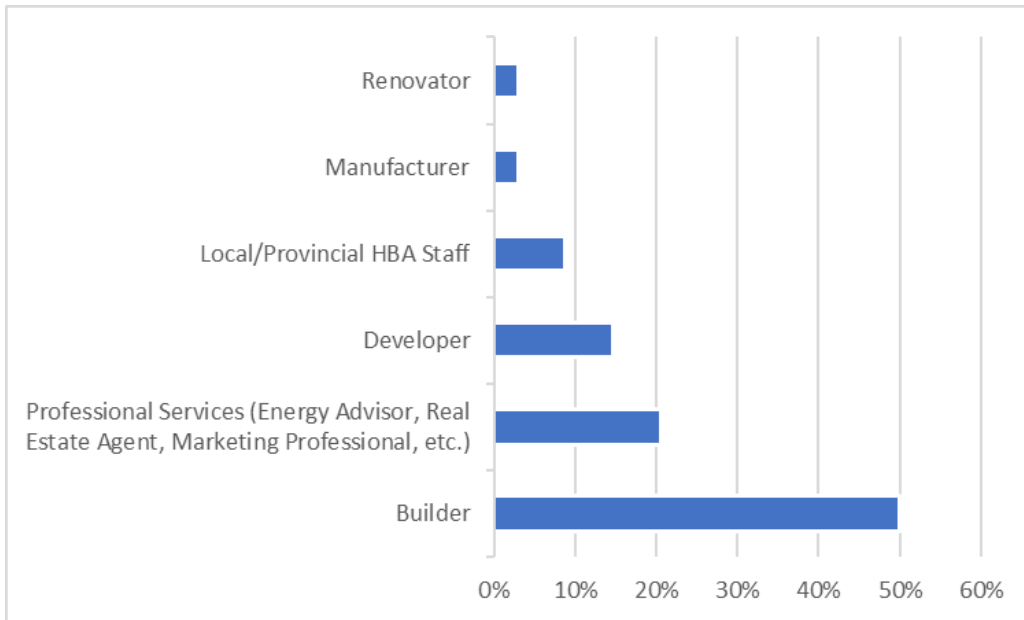
- Differences between Net Zero Ready and the performance of homes currently in the marketplace
- Solutions to air tightness challenges found in the industry
- A deep dive into our learnings from full net zero production sites
- A comparison of AeroBarrier's software results and final blower door test results

**Learn more and register at [chba.ca/NZwebinars](https://chba.ca/NZwebinars)**

<sup>1</sup> Source: <https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens/>



# POLLS



# Today's Webinar

June 16, 2022 from 10:30-11:30 PT / 1:30-2:30 ET

## Healthy Homes: The 'New' Must-Haves for Homeowners



### Presented by:

- **Sonny Pirrotta**, National Sales Manager- HVAC Solutions, Life and Devices Solutions Division, Panasonic Canada Inc.
- **Sarah Margolius**, Business Development Manager, IAQ, Life and Devices Solutions Division, Panasonic Canada Inc.
- **Jack Zhou**, Co-Founder and Managing Partner, A&J Energy Consultants



Indoor air is 2-5x more polluted than outdoor air, which can lead to serious health risks. Since today's high-performance homes let in significantly less fresh air than older, less efficient homes, these health risks are increasing. Which is why the CHBA Net Zero Home Labelling Program requires mechanical ventilation in all the homes. This webinar focuses on how builders can meet homeowner expectations by providing a healthy living environment without compromising other "must-haves." Hear from CHBA Qualified Net Zero Energy Advisor Jack Zhou whose passion for delivering healthy and energy efficient homes is his life's mission.

In this webinar, we'll:

- Bust misconceptions that hold builders back from building homes with the healthiest indoor environment possible.
- Introduce Indoor Air Quality (IAQ) solutions powered by Panasonic's revolutionary new cleaning technologies and award-winning smart controls.
- Demonstrate how Panasonic solutions work together to enhance performance and how they fit into the new CHBA Net Zero Home Labelling Program IAQ Picklist.



Come away from this webinar with:

- Insights on how to powerfully communicate the benefits of IAQ solutions to homeowners.
- An understanding of how your next CHBA Net Zero/Ready Home can meet the new IAQ Picklist requirements.
- Peace of mind knowing that the solutions you install will help homeowners live, feel and breathe well.

Eligible webinar participants will be invited to join Panasonic's Breathe Well Builder or Contractor program. (Builders, developers, renovators, distributors, and contractors are eligible now; details to come if you are an EA.)

**Members will be able to access the recording & slide deck at [chba.ca/NZwebinars](https://chba.ca/NZwebinars)**

# Healthy Homes: The 'New' Must Haves for Homebuilders

A special invitation to Net Zero Council Builders





# Panasonic: Your Trusted Partner



**Sonny Pirrotta**  
National Sales Manager  
Indoor Air Quality



**Sarah Margolius**  
Business Development Manager  
Indoor Air Quality



# Panasonic





# A & J Energy Consultants: Your Trusted Advisor



**Jack Zhou**

Managing Partner  
Registered Energy Advisor  
Quality Assurance Specialist




**A&J Energy Consultants**

*"your success is our success"*



## Agenda

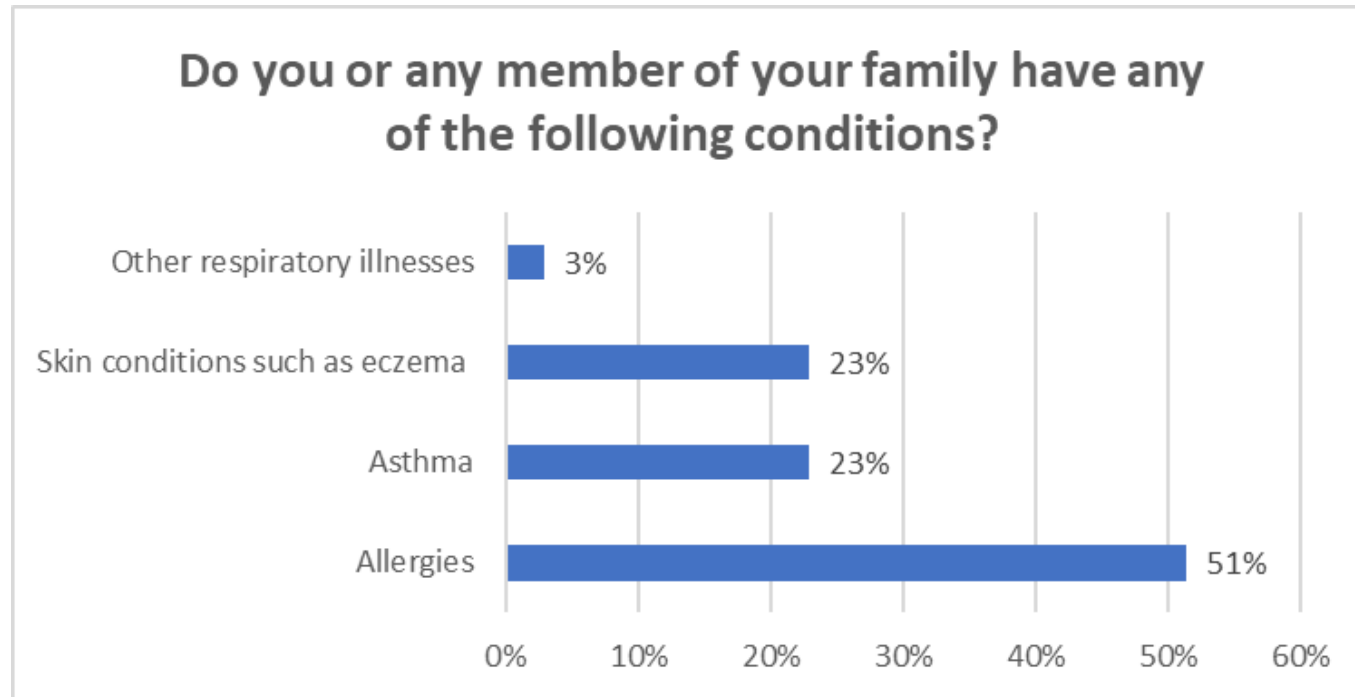
1. How Panasonic helps you meet and exceed expectations & standards
  2. How to leverage Panasonic's Breathe Well Complete IAQ Solutions
  3. Take action on IAQ: next steps in Partnership
- 

## Poll Question

**Do you or any member of your family have any of the following conditions:**

1. Asthma
2. Allergies
3. Skin Conditions such as eczema
4. Other respiratory illnesses

# POLLS

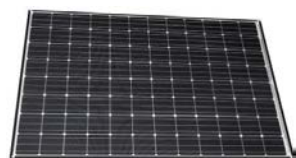


## LDS Housing Businesses

### Energy Solutions



EverVolt C & I



Solar



EverVolt

### IAQ

#### Heating & Air Conditioning



Indoor and Outdoor Unit



Air Purification



Smart Controls

#### Ventilation



Vent Fans



ERVs

### Housing & Interiors



IH Kitchen Appliance



Kitchen Hood



Microwave



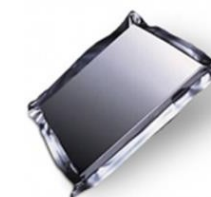
Interior Doors



Refrigerator



Storage & Organization Solutions



Vacuum Insulated Panels



# VENTILATION AND INDOOR AIR QUALITY



## WHAT IS VENTILATION?

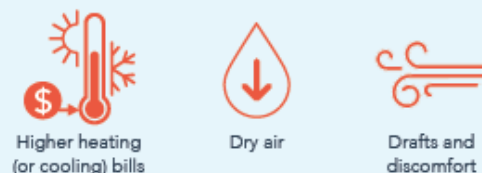


**Ventilation** is the movement of air into or out of homes. It can be used to improve indoor air quality by removing pollutants from the home and by bringing in fresh air.

### SIGNS THAT VENTILATION IS TOO LOW



### SIGNS THAT VENTILATION IS TOO HIGH



### USING VENTILATION TO IMPROVE INDOOR AIR QUALITY

- Opening windows
- Using bathroom fan
- Setting your mechanical ventilation system to a higher setting or letting it run longer
- Installing a fresh air duct into your forced-air furnace
- Using your HRV or an ERV
- Using your furnace fan or, if necessary, a separate fan to distribute air
- Using your range hood on the highest setting while cooking

For more information on **Ventilation**, please visit [www.canada.ca/en/health-canada/services/air-quality.html](http://www.canada.ca/en/health-canada/services/air-quality.html) or contact us at: [hc.air.sc@canada.ca](mailto:hc.air.sc@canada.ca)

# MAINTAIN AND IMPROVE INDOOR AIR QUALITY

Healthycanadians.gc.ca/IndoorAir  
HC.air.SC@canada.ca

Make sure your **chimney** is not blocked and that it is **cleaned** once a year so pollutants are vented outside.

Install at least one CSA-approved **carbon monoxide (CO)** alarm close to bedrooms.

Reduce the use of **candles and incense** as they increase particle levels indoors.

Make sure you **ventilate** when using paints or varnishes. Some emit **volatile organic compounds (VOCs)**.

Do not smoke indoors. **Cigarettes** emit many chemicals including **carbon monoxide (CO)**, **particles** and **formaldehyde**.

Make sure **carpets** are **vacuumed** regularly or remove them as they trap dust, dust mites, particles, and allergens. Clean hard floors regularly using a damp mop to efficiently remove particles.

Make sure the interface between your **attached garage** and your home is properly sealed. Pollutants can migrate from your garage to your living space.

If possible, do not store gasoline and other chemicals in your garage.

**Avoid idling** your car, snowblower, lawnmower, power generator or any gas-powered equipment in the garage, even if the door is open.

**Radon** is a radioactive gas that can get into your home and accumulate to high levels. Take action to **measure** and **lower** the radon level in your home to reduce your risk of **lung cancer**.

Make sure your **furnace** is well-maintained to prevent **carbon monoxide (CO)** accumulation. Change the filter regularly.

After a flood, make sure everything is cleaned and dried quickly and properly to prevent **mould** growth.

**Opening windows** may increase ventilation in your home. Check the outdoor air quality conditions in your region before opening windows.

Make sure your **roof, foundation, and walls** do not leak.

Use the **exhaust fan** in the bathroom when showering or bathing to reduce humidity and prevent mould growth.

Promptly **fix any leak** to avoid mould. Clean up any **visible mould**.

Use your **range hood** to reduce your exposure to pollutants from your gas stove such as **nitrogen dioxide (NO<sub>2</sub>)** and humidity from cooking activities.

If not properly installed, maintained or used, **fireplaces** may emit **carbon monoxide (CO)**, **particles**, and other pollutants.

Never use a **charcoal grill, hibachi, barbecue or camping stove** inside your home or garage, as they produce particles and carbon monoxide (CO).

**Off-gassing** from furniture and floors can emit **volatile organic compounds (VOCs)** such as **formaldehyde**. Increasing ventilation may help decrease indoor concentrations.

Make sure your **dryer exhaust** is vented to the outside and make sure it is not blocked.

Make sure you use **cleaning products** properly. Some of them may emit high levels of **volatile organic compounds (VOCs)**.

# Panasonic products provide new value to homeowners and homebuilders

**Panasonic**

Airtight houses built today let in significantly less fresh air than those in the past

People spend more time indoors than ever before – up to 90% indoors, at home

Indoor air can be 2-5x more polluted than outdoor air

Poor IAQ can lead to significant health risks including death







## IAQ Survey Insights

Industry consistently **underestimates the importance of healthy environments to homebuyers**

When presented with some key facts, **purchase intent on IAQ solutions skyrocketed**

HVAC has a big role to play with residents as well as municipalities – part of new best practice for ventilation and you are future-proofing your business and houses





# IAQ Survey Insights

After being educated about the risks of poor IAQ, **97% of homeowners indicated they're more likely to invest in indoor air quality solutions**

Home-owners	Post-exposure purchase intent	
	HEPA filtration [+17 pts]	43%
	Room air purifiers [+9 pts]	38%
	Whole-home air purifiers [+14 pts]	36%
	High-performance HVAC systems [+7 pts]	34%
	Humidifiers [+11 pts]	34%
	Smart air monitors [+12 pts]	33%
	Dehumidifiers [+6 pts]	32%
	High-performance ventilation fans [+8 pts]	28%

Likelihood for building professionals to recommend a group of IAQ technologies, on average, increased +13 points from 49% to 62%, post-exposure

**Panasonic**



# breathe well

The Only Complete Air Quality Solution™

## An IAQ Strategy: Clean, Comfort & Fresh



**Ventilation Fans – Whisper Series**



**Swidget Smart Devices**



**Intelli-Balance ERVs**



**WhisperAir Repair™  
spot air purifier (nanoe X)**



**ClimaPure™ XE series  
Cold Climate Heat Pump (nanoe X)**



**Cold Climate Air  
Handler (Heat Pump)**



## Select Solutions that Work!

- ✓ Marketing appeal to customers
- ✓ Products are easy to use
- ✓ Homeowners will feel proud
- ✓ Staff can sell it
- ✓ Installation & Warranty Support
- ✓ Clear regulatory environment
- ✓ Widely available & easy builder processes
- ✓ Assistance with the sticker price / demonstration homes



**APPROVED**  
**PRODUCTS**



Breathe Well Campaign Assets



AN EXCLUSIVE PARTNER OF  
breathe well  
The Only Complete Air Quality Solution™



DURING INSTALLATION



AFTER INSTALLATION





# Don't Just Breathe, Breathe Well

We can take things for granted sometimes. Like breathing. It's just something our body does on its own. We don't choose the air we breathe, we just breathe.

At Panasonic, we believe you do have the choice to Breathe Well.

We breathe around 20,000 times per day. Many of our breaths are unnoticed, some are special. But what they all have in common is they fuel, comfort and energize us, making each and every one vital – not only to survival, but to our quality of life.

Panasonic's air conditioning, air purification, environmental comfort and ventilation expertise ensures our homes and workplaces have the freshest, cleanest air possible, free of harmful substances so that only the healthiest air remains.

So choose to Breathe Well knowing that with each breath you take – including every breath of delight, every breath of surprise, every breath of relief and every breath of excitement – you'll not only be breathing well, but living well.

**Breathe Well. The Only Complete Air Quality Solution™ by Panasonic**

# Indoor Air Quality Campaign

## Don't just breathe, Breathe Well


Featuring nanoeX™ Technology  
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Clean  
Comfort  
Fresh

**LIVING WELL MEANS  
BREATHING WELL.**  
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CLEAN



## Enjoy every breath.


Life deserves clean air,  
purified and circulated  
to keep you and your  
family healthy and safe.

**AIR PURIFICATION AND  
CIRCULATION SOLUTIONS**  
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## Indoor Air Quality Campaign

**COMFORT**



**Live fully, every day.**

Live life comfortably and to the fullest with a Breathe Well HVAC system.

**TEMPERATURE AND HUMIDITY SOLUTIONS**  
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**FRESH**



**Feel energized.**

Breathe confidently knowing your air is well ventilated without bacteria and viruses.

**VENTILATION SOLUTIONS**  
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# Ventilation Fans



## SKU # (FV07VBA1)

- Cost effective ENERGY STAR® spot ventilation
- Two-speed selector (70/90 CFM)
- Housing and motor sold separately



## Better



## SKU # (FV-0510VS1) + LED

- Lowest profile ENERGY STAR® rated ventilation fan
- ECM motor & SmartFlow™
- Pick-A-Flow™ (50, 80 or 100 CFM)



## Best



## SKU # (FV-0511VK2) + LED

- ECM motor & SmartFlow™
- Pick-A-Flow (50-80-110 CFM)
- Flex-Z Fast bracket for trouble-free installation
- Motion & Moisture Sensor
- Plug 'N Play™ modules
- Choose up to three extra features
  - Multi speed timer
  - Motion
  - Condensation





## ERV Lineup

**Panasonic**

**WhisperComfort®**  
VENTILATION FAN



**Intelli-Balance™**  
100



**Intelli-Balance™**  
200



## New Intelli-Balance 200 CFM ERV

# Intelli-Balance 200™



### Key Features

- Static pressure 0.4" @ 200CFM
- 80% Sensible Recovery Efficiency (SRE)
- Air volume setting: 60-80-100-120-140-160-180-200 CFM
- Employ ASHRAE 62.2 (CFM/Minutes) control
- Includes static pressure access ports with balancing instructions on the ERV
- Maintain stable relative humidity (Mold, Bacteria) for improved indoor air quality

### Filter Options

## Good

### MERV8 Filter



## Better

### MERV13 Filter



## Best

### HEPA Filter



# 200 CFM ERV Controls

## Good Panasonic



### FV-SSW20VEC1 Wall Control

- Boost with timer
- 20/40/60 ASHRAE timer
- Change Balance / Exhaust / Supply based on CFM selected
- Filter reset indication

## Better



### Flexible manual or smart control.

#### Basic Features:

- Switch Only – Designed for Panasonic
- 20, 40 & 60 Minute Timer Insert
- Stand alone or controlled with smart phone app

# Panasonic

## Best



### Swidget Healthy Home Ecosystem.

#### Additional Features:

- Switch Only – Designed for Panasonic
- IAQ / WIFI Module
- With WIFI Control
- With WIFI, Temperature/Humidity Sensor
- With WIFI, Temperature/Humidity/Motion Sensor
- With WIFI, Motion Sensor
- 20, 40 & 60 Minute Timer Insert
- Stand alone or controlled with smart phone app

## Panasonic ERV Efficiency

Manufacturer	Panasonic	LifeBreath	Fantech
Model	FV-20VEC1	170ERVD	SER260D
Motor	2-DC	2-AC	1-AC
Speed	8	4	3
Static pressure (inches w.g)	0.4	0.4	0.4
Net Supply Airflow (CFM)	200	161	239
Noise (sones)	1.5 (TBD)	N/A	N/A
Power Consumption (Watts)	20W@64CFM	142W@Hi speed	About 275@Hi speed
Efficacy (CFM/W)	3.2CFM/W		0.87CFM/W
Sensible Recovery Efficiency (%) @ 0°C	80%@64CFM	75%@65CFM	73%@165CFM(1.7°C)
Power Consumption (Watts)	20W@64CFM	N/A	163
Sensible Recovery Efficiency (%) @ -25°C (heating)	66%@64CFM	58%@68CFM	N/A
Power Consumption (Watts)	TBD	N/A	N/A
Total Recovery Efficiency (%) @ 35°C (cooling)	75%@64CFM	48%@64CFM	61%@165CFM
Power Consumption (Watts)	25W		163
Filter	MERV13	Washable	4-Washable
Filter (optional)	MERV8 & HEPA	N/A	N/A
Body Size (not include adapters)	729x784x488	476x854x381	521x708x641
Housing	Powder painting	20gauge Pre-painted steel	20gauge powder painting
Weight	43kg	25.8kg (product)	38kg (product)
Energy Star Canada	Yes	No	No
Warranty (years)	Motor: 6 Core: 3	Parts: 5 Core: 5	Motor: 7 Core/Parts: 5



## Intelli-balance 100 CFM ERV

**Intelli-Balance™  
100**



### Filter Options

### Key Features

- Two revolutionary DC motors with Smart Flow™ technology ensure optimum CFM output
- 81% Sensible Recovery Efficiency (SRE)
- Pick-A-Flow Airflow Selector (50-100cfm) (supply & exhaust)
- Boost function – select high speed regardless of run mode.
- Employ ASHRAE 62.2 (CFM/Minutes) control
- Includes static pressure access ports with balancing instructions on the ERV
- Maintain stable relative humidity (Mold, Bacteria) for improved indoor air quality

### Good

#### MERV8 Filter



### Better

#### MERV13 Filter



# 100 CFM ERV Controls

**Panasonic**

**Good**



## EI400 Series Wall Switch

- Digital Auto-off in-wall timer
- True 3-way control using a standard mechanical remote switch
- CR2 lithium battery provides a minimum of 2 years of operation without AC power
- No neutral required
- User settings stored in non-volatile memory
- Low battery indicator
- ADA Compliant
- User-selectable advance

**Better**



## Flexible manual or smart control.

### Basic Features:

- Switch Only – Designed for Panasonic
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**Best**



## Swidget Healthy Home Ecosystem.

### Additional Features:


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- With WIFI, Motion Sensor
- 20, 40 & 60 Minute Timer Insert
- Stand alone or controlled with smart phone app

## Cold Climate ERV for North Markham NZ Homes

### Competitive Cross Reference



Manufacturer	Panasonic	Panasonic	Venmar	Venmar	Aldes	Fantech
Model	FV-10VEC2	FV-10VE2	K7 ERV	S10 ERVPlus	E130-HR	VER 100
Installation	Ceiling or wall	Ceiling or wall	Mech. Room	Ceiling	Ceiling	Mech. Room
Net Supply @ 0.4 W/G (CFM)	96	101	70	101	110	122
Max Rated Sensible Recovery Efficiency(%) at 32° F	81% @ 53 cfm	79% @ 54 cfm	66% @ 35 cfm	67% @ 48 cfm	69% @ 50 cfm	63% @ 50 cfm
Sensible Recovery Efficiency (%) at -13° F	64%	N/A	56%	61%	58%	N/A
Total Recovery Efficiency (%) at 95° F	65% @ 48 cfm	73% @ 52 cfm	50%	54%	49%	51%
Net Airflow at Max Rated SRE	53	54	35	48	50	50
Power Consumption (Watts) at Max Rated SRE	24	20	34	40	86	50
Efficacy (CFM/W)	2.21	2.70	1.03	1.20	0.58	1.00
Recovery Core Material	Cross-flow Polymerized Paper	Cross-flow Polymerized Paper	Cross-flow Polymerized Paper	Cross-flow Aluminum Polymerized Paper	High-Latent-Transfer Enthalpy	"Water Vapor Transport Durable Polymer Membrane"
Duct Diameter (inches)	round 4" & 6"	round 4" & 6"	Round 4"	round 5"	round 5"	5" oval
ENERGY STAR Canada	Yes	N/A - use FV10VEC1	No	Yes	No	No
Defrost Cycle (Exhaust or Recirculating)	Recirculate	Exhaust	Recirculate @ -5°C	Recirculate	Recirculate @ -10°C	Exhaust
Filter	MERV 8 or 13	MERV 8 or 13	Washable Foam 30 ppi (pores per inch)	Washable Foam 20 ppi MERV 7 optional, but not tested	Washable Foam 20 ppi (pores per inch)	Washable Electrostatic Panel
Pressurization Capability	Positive, Negative or Balanced	Positive, Negative or Balanced	Balanced	Balanced	Balanced	Balanced
Warranty (years)	Motor 6 / Parts 3	Motor 6 / Parts 3	5	5	Parts: 5 / Core: 2	Core 5/Motor 7/Parts 5
						**AHRI 1060 Standard**
						Not HVI certified



# Panasonic



**SWDGET**  
POWER TO LIVE SMART

## A Smart Approach to a Healthier Environment

Our synergies make your assets smarter, healthier, and more valuable.



Empower your home for  
Health and Wellness



# Swidget Smart Devices



**Panasonic**



AS SEEN ON  
**HOLMES**  
FAMILY RESCUE



## What Makes Swidget Future Proof?

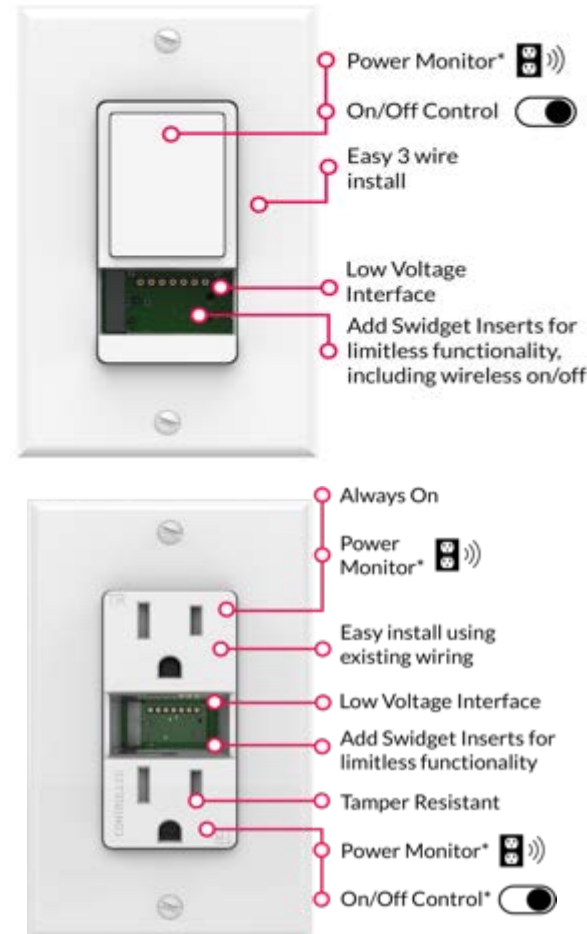
### FUTURE PROOF

- Swidget Separates the wired **POWER** components from the modular **CONTROL** Components

### WHAT DOES THIS MEAN?

- Everything that is **not likely to change**, is housed in the **POWER** or wired component.
- Everything that is **subject to change** with the advancement of **technology**, is housed in the modular **CONTROL** component.
- The control module insert is required to make your Swidget device SMART.

### POWER COMPONENTS



### CONTROL COMPONENTS



## Pre-Programmed Control Insert Modules



When installed in to a 20-40-60 Control switch, the Control Insert Modules are pre-programmed:

### MOTION

- IF motion is detected turn ON
- IF vacancy is detected for 5 minutes, turn OFF

### HUMIDITY

- IF humidity increases 15% above self adjusting relative humidity average, turn ON
- IF humidity returns to within 15% of self adjusted relative humidity average for 5 minutes, turn OFF

### INDOOR AIR QUALITY

- IF IAQ drops to moderate, turn ON
- IF IAQ improves to good for 5 minutes, turn OFF



## Control Insert Module Rules



### MOTION

- If room is OCCUPIED for a duration of X MINUTES, turn ERV BOOST ON
- If room is UNOCCUPIED for a duration of X MINUTES, turn ERV BOOST OFF

### HUMIDITY

- If humidity EXCEEDS X% for a duration of X MINUTES, turn ERV BOOST ON
- If humidity FALLS BELOW X% for a duration of X MINUTES, turn ERV BOOST OFF

### TEMPERATURE

- If temperature EXCEEDS X°C for a duration of X MINUTES, turn ERV BOOST ON
- If temperature FALLS BELOW X°C for a duration of X MINUTES, turn ERV BOOST OFF

### INDOOR AIR QUALITY

- If IAQ index EXCEEDS X, turn ERV BOOST ON
- If IAQ index FALLS BELOW X, turn ERV BOOST OFF

## Swidget Devices and Inserts



15A Outlet



20A Outlet



20-40-60 Control  
Switch



Auxiliary Control  
Switch



On/Off Switch



Dimmer Switch



Temp/Humi/  
Motion Sensor



Temp/Humi  
Sensor



Motion Sensor



Air Quality  
Sensor



Environmental\*



Security\*



Video Camera\*



Power Out Light



Guide Light



USB Charger



Power Control



Aromatherapy\*



Sound Monitor\*























Wi-Fi Mesh\*

\* Control inserts in development

## Swidget Control Highlights



								
	Control	USB Charger	Guide Light	Power Out Light	Temperature and Humidity Sensor	Motion Sensor	Temperature, Humidity, and Motion Sensor	Air Quality Sensor
 Wi-Fi or Z-Wave Options	✓	✓	✓	✓	✓	✓	✓	✓
 Smart Dimmers & Lighting	✓	✓	✓	✓	✓	✓	✓	✓
 Controllable Outlets	✓	✓	✓	✓	✓	✓	✓	✓
 Control from anywhere	✓	✓	✓	✓	✓	✓	✓	✓
 Lamp Control	✓	✓	✓	✓	✓	✓	✓	✓
 Energy Monitoring/Savings	✓	✓	✓	✓	✓	✓	✓	✓
 Schedules and Automations	✓	✓	✓	✓	✓	✓	✓	✓
 Works with Alexa	✓	✓	✓	✓	✓	✓	✓	✓
 Works with Google Assistant	✓	✓	✓	✓	✓	✓	✓	✓
 Safety & Security Function			✓	✓		✓	✓	
 Bathroom Protection					✓	✓	✓	✓
 Health & Wellness					✓		✓	✓

# Builder Package Options

## IAQ Smart Solution - Basic

*Pre-programmed, no automation necessary*

20/40/60 Fan Control



Motion Sensor

20/40/60 Fan Control



Temp/Humi/  
Motion Sensor

Aux Switch ERV On/Off



Power Control

20/40/60 ERV Boost



Air Quality  
Sensor

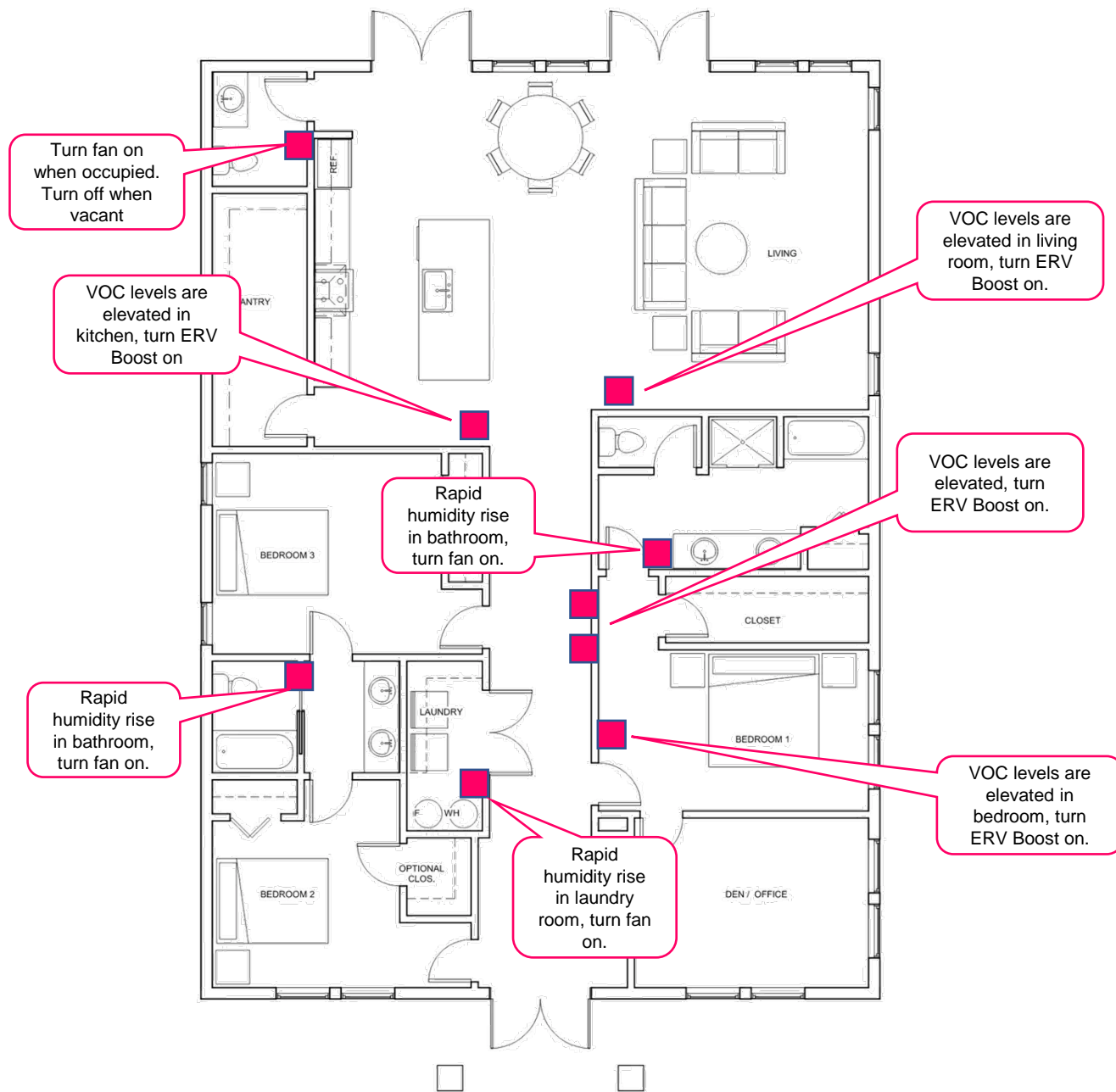
## IAQ Smart Solution - Premium

Dimmer Switch



Air Quality  
Sensor

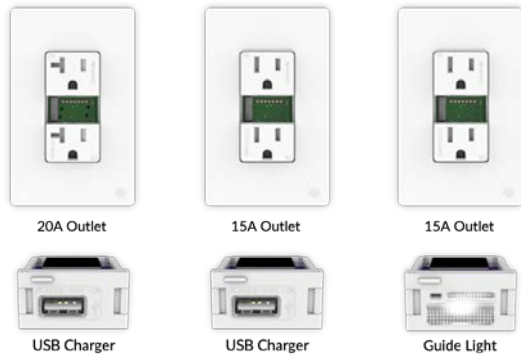
- Schedule lights to turn on at sunset.
- Dim lights to 10% at 9PM.
- Turn lights off at midnight.
- Communicate VOC levels to activate ERV boost in real-time.



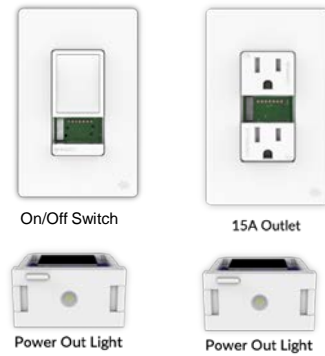


# Builder Package Options

## Convenience Options



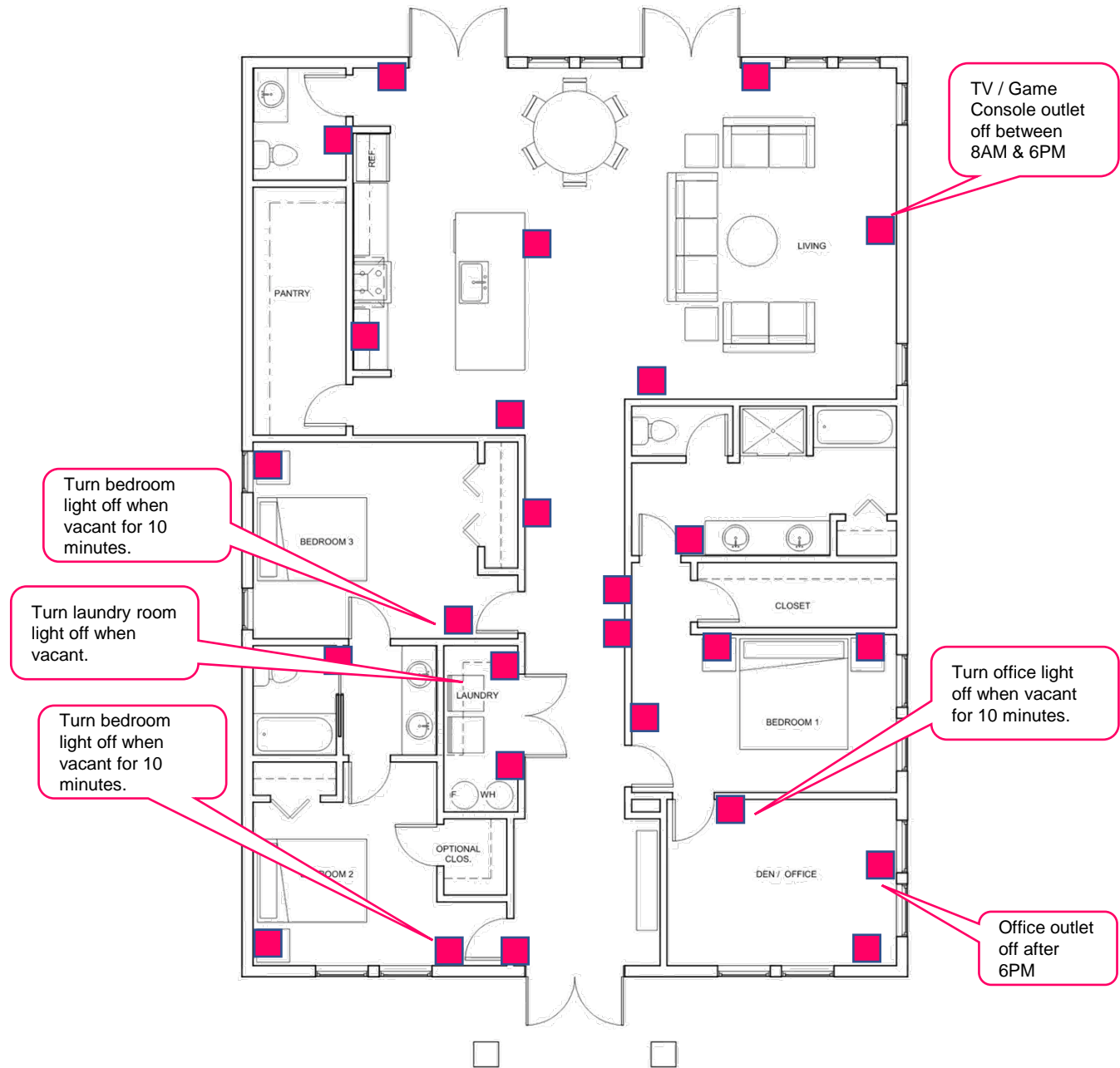
## Safety Options



## Energy Saving Options



- Create Rules to turn lights off
- Set Schedules to eliminate vampire power



# Builder Package MSRP Pricing

## IAQ Smart Solution - Basic

*Pre-programmed, no automation necessary*

### 6 Devices / 6 Inserts

- 5 - 20/40/60 Control Switches
- 1 - Auxiliary Control Switch
- 3 - Temp/Humi/Motion Inserts
- 1 - Control Motion Insert
- 1 - Basic Control Insert
- 1 - IAQ Insert

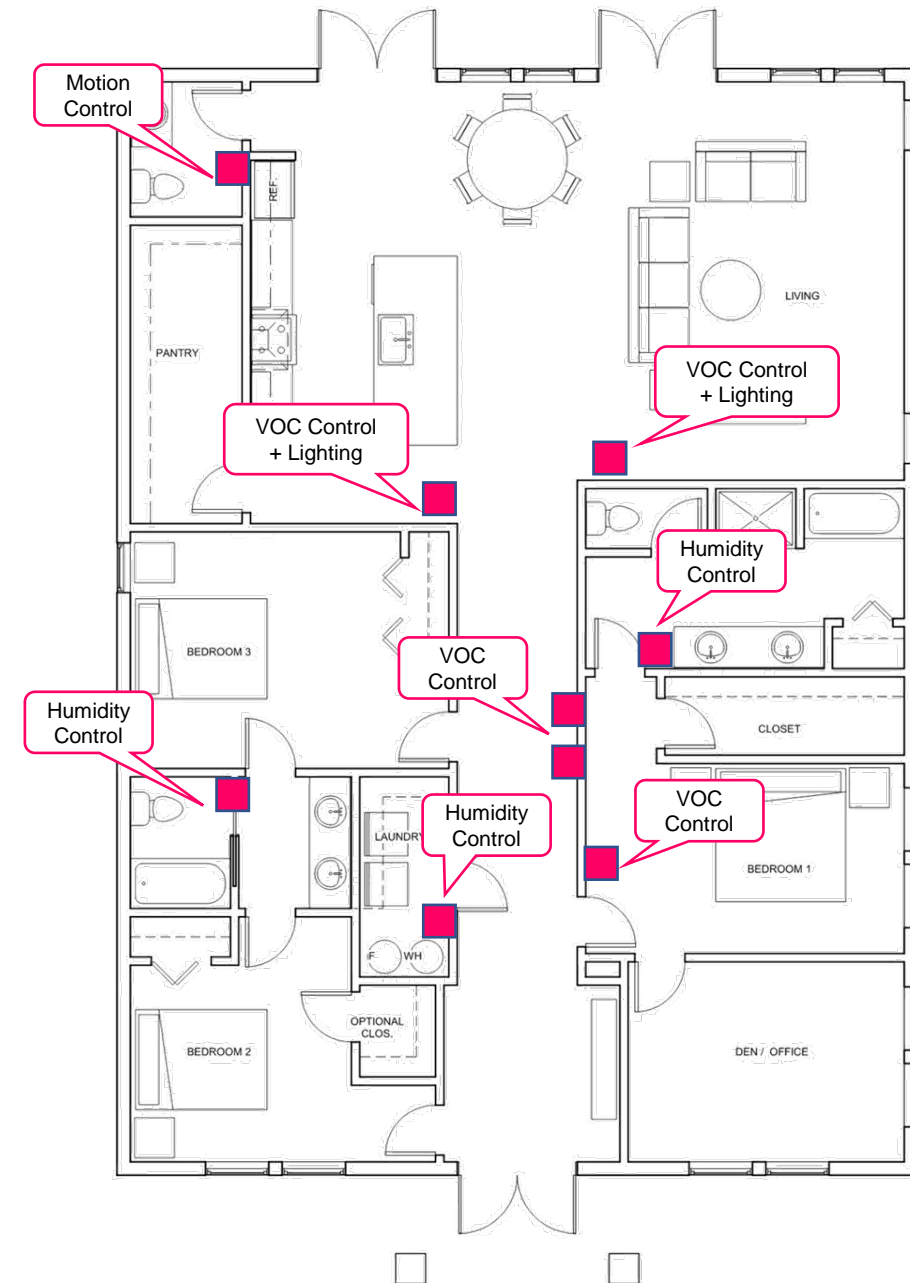
**\$806.88 MSRP**

## IAQ Smart Solution - Premium

### 3 Devices / 3 Inserts

- 3 - Dimmer Switches
- 3 - IAQ Inserts

**\$506.94 MSRP**



# Builder Package MSRP Pricing

## Convenience Options

### 8 Devices / 8 Inserts

- 2 - 20 Amp Outlets
- 6 - 15 Amp Outlets
- 7 - USB Control Inserts
- 1 - Guide Light Insert

**\$901.84 MSRP**

## Energy Saving Options

### 6 Devices / 6 Inserts

- 4 - On/Off Switches
- 2 - 15 Amp Outlets
- 4 - Motion Control Inserts
- 2 - Control Inserts

**\$517.92 MSRP**

## Safety Options

### 3 Devices / 3 Inserts

- 2 - On/Off Switches
- 1 - 15 Amp Outlet
- 3 - Power Out Control Insert

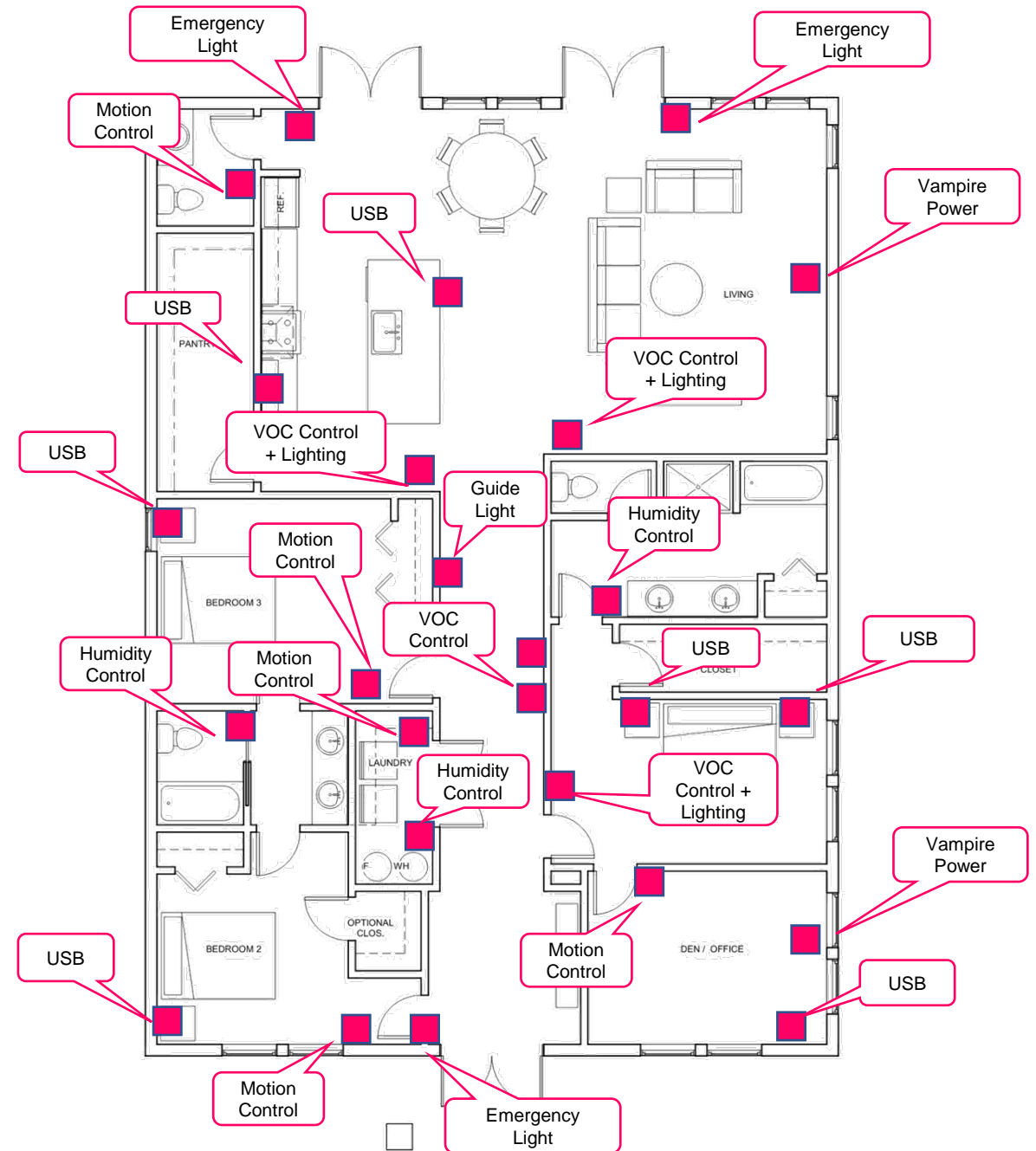
**\$392.94 MSRP**

## All Options

### 26 Devices / 26 Inserts

- IAQ Basic - Pre-Programmed
- IAQ Premium
- Convenience
- Safety
- Energy Savings

**\$3,126.52 MSRP**



## Additional Swidget Capabilities

### Notification

Freezer power has exceeded 100W for 15 minutes.

### Schedule

Turn on outside lights 15 minutes before sunset.  
Turn off 30 minutes before sunrise.

### Rule

Kitchen rangehood has exceeded 40W. Turn ERV Boost on.

### Notification

You've lost connection to your Wi-Fi network.

### Notification when you're not home

Occupancy detected at front entrance.

### Rule

If temperature drops below 15°C for 5 minutes, turn on space heater.

### Notification

Your refrigerator lost power for 2 hours.

### Rule

Turn on front entrance lights when occupancy detected after sunset.

### Notification

Sump pump has been on for 10 minutes.

### Rule

Turn curling iron off when power consumption exceeds 50W for 30 minutes.



### Empower your home to Live Smart

24hrs a day, 365 days a year, you can rest assured that a home equipped with Swidget Smart Controls will Monitor, Assess, & Optimize your environment.



# WhisperAir Repair™ Spot Air Purification



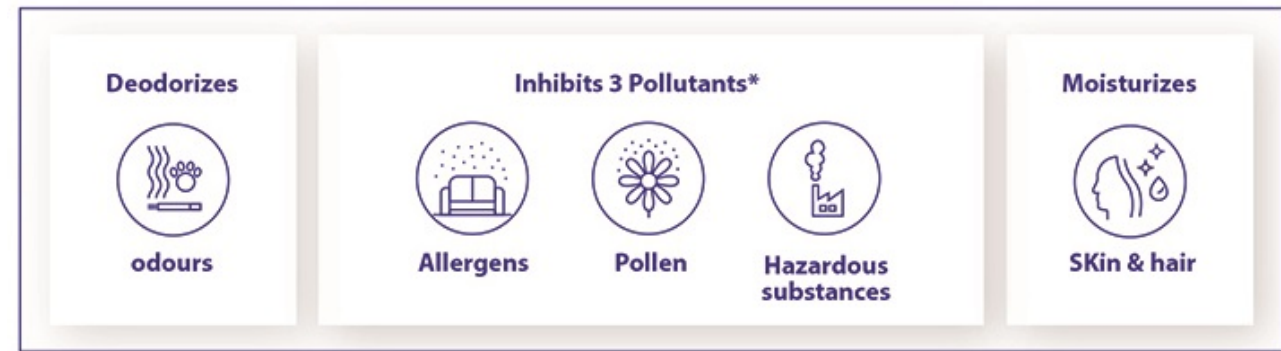
## What is WhisperAir Repair™?

- Advanced air purification
- Ceiling mounted spot purification device
- Creates 4.8 Trillion OH radicals per second
- Breaks down harmful substances
- Effectively removes unwanted smells
- Results in a fresher, cleaner indoor environment
- Utilizes patented, **nanoe™ X technology** to purify contaminated air

**WhisperAir Repair™**  
PURIFIED BY **nanoe™ X**



### 5 effects of nanoe™ X air purification technology

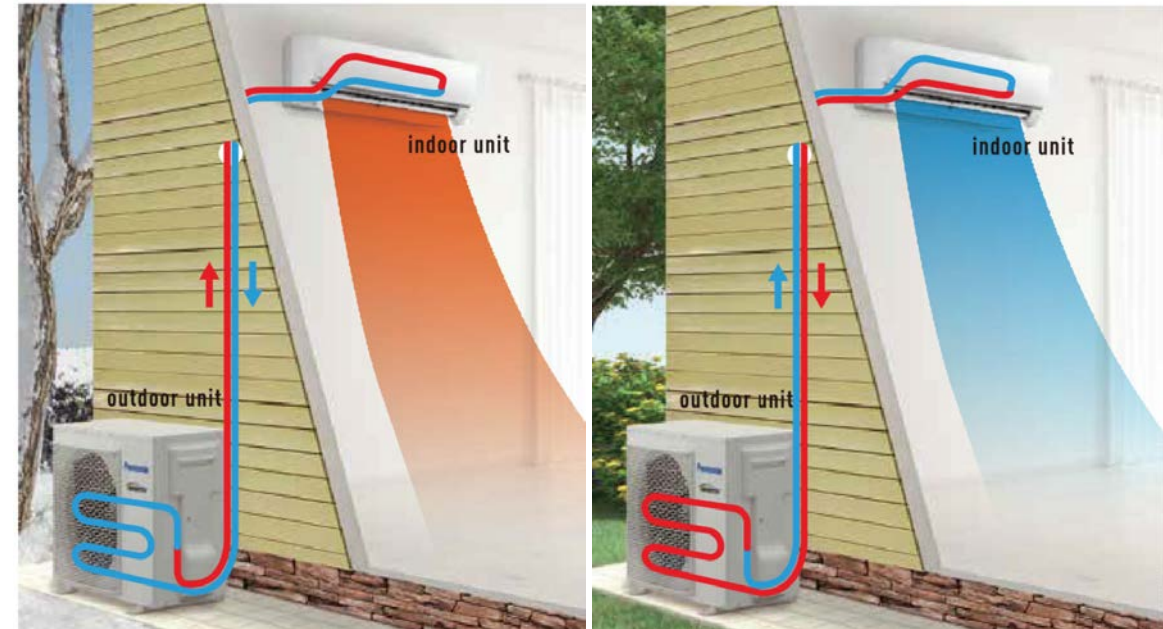


## Panasonic Heating & Air Conditioning

Panasonic's new cold climate ClimaPure™ XE high-performance ductless mini-split system with built-in air and surface purification technology, nanoe™ X, sets a new standard for your comfort.

### Residential Heat Pumps

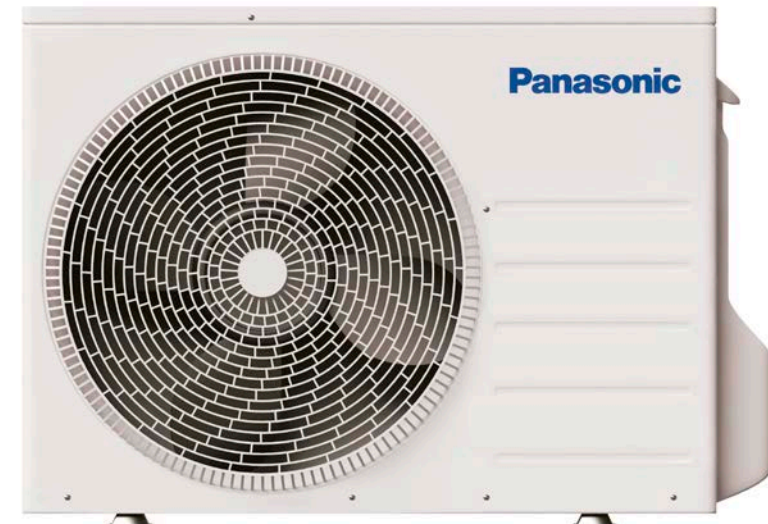
- Industry-exclusive purification system helps inhibit odors, allergens, and viruses 24/7
- Operates at temperatures as low as -30°C
- Outdoor units range in nominal size from 0.75-Ton to 4.5-Ton
- For homes up to ~4,500sqft (depending on heat load calculations)
- Versatile combination options for indoor units (ranging from 0.5-Ton to 5-Ton)



# New ClimaPure™ XE Series

- New **nanoe X** air and surface purification technology
- **Cold climate** operation (**NEEP Tier II** Level Performance)
- Built-in Wi-Fi with **Panasonic Comfort Cloud** smartphone application

ClimaPure™ **XE**



**NEW**

Model			XE9WKUA	XE12WKUA	XE15WKUA	XE18WKUA	XE24WKUA
Cooling	95°F	BTU/h	8700	11500	14700	17200	24000
Heating	47°F	BTU/h	10900	12000	17200	20400	28800
SEER			28.20	24.60	21.10	21.00	20.00
EER			16.1	14.15	12.55	13.2	10.9
HSPF Region IV			14.50	13.00	12.00	12.00	10.60
Energy Star			Yes	Yes	Yes	Yes	N/A
NEEP Tier level			Tier II	Tier II	Tier II	Tier II	NA
Low Ambient Heat Operation			-15°F	-15°F	-15°F	-15°F	-15°F
Base Pan Heater			Included	Included	Included	Included	Included
Auxiliary Heater Connection Kit			Optional	Optional	Optional	Optional	Optional
Built-in Wi-Fi / Panasonic Control App			Included	Included	Included	Included	Included



## Multi-Zone ASHP Outdoor Units



### 2 Zone (1.5 Ton) CU-2E18SBU-5



Cooling Capacity: 16,700 (7,200 - 20,000) Btu/hr.  
Heating Capacity: 20,200 (7,200 - 24,600) Btu/hr.  
SEER Non-Ducted 19.0 / Ducted 19.0  
EER Non-Ducted 12.55 / Ducted 12.55  
HSPF Non-Ducted 9.5 / Ducted 9.0  
Min/Max capacity 11,000 - 21,800 Btu/hr.



### 2-4 Zones (2 Ton) CU-4E24RBU-5



(Non-Ducted)



Cooling Capacity: 24,000 (10,200 - 31,400) Btu/hr.  
Heating Capacity: 37,800 (14,300 - 48,500) Btu/hr.  
SEER Non-Ducted 22.0 / Ducted 19.0  
EER Non-Ducted 12.55 / Ducted 10.85  
HSPF Non-Ducted 9.5 / Ducted 9.0  
Min/Max capacity 15,300 - 30,600 Btu/hr.



### 2-3 Zone (1.5 Ton) CU-3E19RBU-5



(Non-Ducted)



Cooling Capacity: 19,000 (6,100 - 24,800) Btu/hr.  
Heating Capacity: 26,000 (5,500 - 28,400) Btu/hr.  
SEER Non-Ducted 22.0 / Ducted 18.5  
EER Non-Ducted 12.55 / Ducted 10.85  
HSPF Non-Ducted 10.5 / Ducted 9.0  
Min/Max capacity 15,300 - 30,600 Btu/hr.



### 2-5 Zones (3 Ton) CU-5E36QBU-5



Cooling Capacity: 36,000 (9,900 - 39,000) Btu/hr.  
Heating Capacity: 37,800 (11,600 - 49,500) Btu/hr.  
SEER Non-Ducted 18.5 / Ducted 16.5  
EER Non-Ducted 9.6 / Ducted 8.3  
HSPF Non-Ducted 10.0 / Ducted 9.5  
Min/Max capacity 15,300 - 59,500 Btu/hr.




# Coming Fall 2022!

## Panasonic Ducted Multi-Positional, Cold-Climate Air Handler Solution!



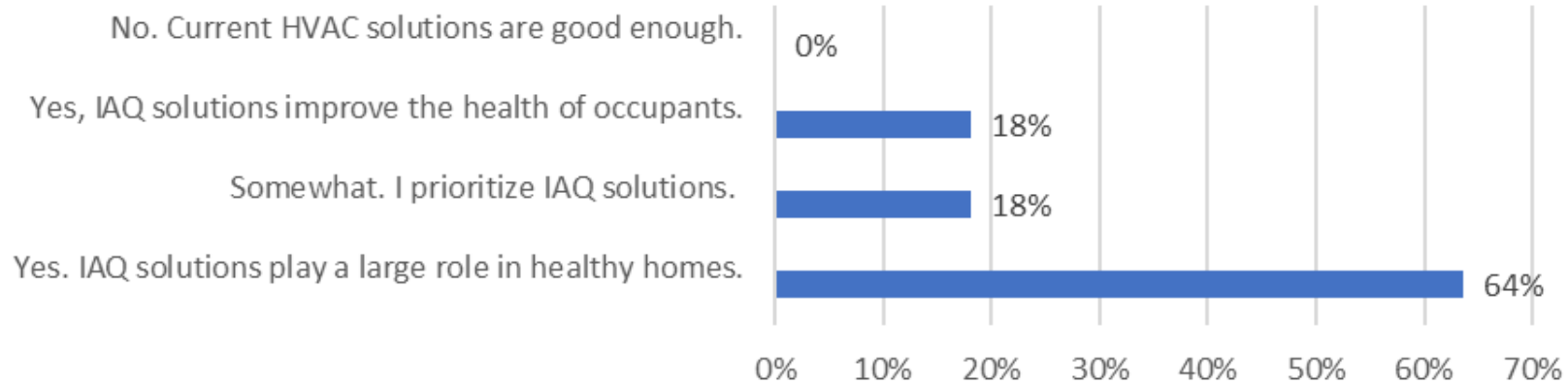
## Poll Question

**As a result of this presentation, do you think about Indoor Air Quality differently? Click all that apply.**

1. Yes. IAQ solutions play a large role in healthy homes.
  2. Yes, IAQ solutions improve the health of occupants.
  3. Somewhat. I prioritize IAQ solutions.
  4. No. Current HVAC solutions are good enough.
- 
- 
- 

# POLLS

**As a result of this presentation,  
do you think about Indoor Air Quality differently?**





## Next Steps

We gladly invite you to:

- Partake in a virtual demo of Swidget
- Tour our Breathe Well showroom (in-person) and see the technologies in action
- Register to become a Breathe Well Builder Partner!



Thank You & Stay In Touch!

**Panasonic**



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