SPACE PAK®

Product Information Guide

Small Duct High Velocity System

Inverter Air-to-Water Heat Pump Hydronic System

SPACE PAK® *Product Guide*

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Inverter Air-to-Water Heat Pump Hydronic System

SPACE PAK® *Preserving Aesthetics and Architectural Integrity*

At Home in Historical Houses and New Construction

SpacePak is the original, small duct cooling/heating solution for older homes not equipped for central air (heated with hot water, steam or electric heat) and new homes featuring hydronic heating systems, including radiant floor heating.

SpacePak's successful track record includes thousands of residential and light commercial installations and opens up opportunities for installations that fall outside of the normal cookie cutter applications. Ease of installation and quiet, efficient operation make SpacePak the number one choice of quality-conscious contractors, homeowners and building owners.

No Major Remodeling, Speeds and Simplifies Installation

SpacePak is designed to be installation friendly. Fan Coil units are small enough to fit in attics, basements, crawl spaces and closets. Conditioned air is distributed through flexible, pre-insulated 2" diameter ductwork (SDHV) that weaves through wall structures and around obstructions. No large, cumbersome ductwork is required, saving time while reducing installation costs and maintaining architectural integrity.

SpacePak is ultra quiet and works through the principle of aspiration. Air in the duct is under 5 to 6 times higher pressure than conventional systems.

J Series Air Handler

Horizontal/Vertical DX Fan Coil Units

Features and Benefits

- J+ Advanced Control with Digital Display
- High Efficiency EC Integrated Motor/Blower Assembly
- Mode Specific Adjustable Speed Control
- 230V Standard Configuration Optional 115V Conversion
- Heat Pump Compatible
- 6-Row Copper/Aluminum Evaporator Coil
- Sweat-Type Refrigerant Connections
- New Industry Leading Corrosion-Resistant Cabinet
- Primary Drain Pan w/Integrated Float Switch
- Anti-Vibration Foam Strips
- Chatleff Thermal Expansion Valve
- Slide Out Blower

Horizontal Fan Coil Unit Dimensions

Model	Height	Width	Length	Ship Wt.
ESP-2430J	14-1/8"	24-1/4"	29-3/8"	105 lbs.
ESP-3642J		33-1/4"		123 lbs.
ESP-4860J		43-1/4"		144 lbs.

Vertical Fan Coil Unit Dimensions

Model	Height	Width	Length	Ship Wt.
ESP-2430JV	33"	24"	16-1/8"	135 lbs.
ESP-3642JV		33"		170 lbs.
ESP-4860JV		43"		210 lbs.

Specifications

Model	Nominal System Capacity		Std. CFM @ 1.2" W.C.	F.L. Amps (115V/230V)	Motor HP	Connections	
	Nom. Tons	Cool MBH*				Suction Line	Liquid Line
ESP-2430J/V	2	24	440	5.6/2.8	3/4	7/8"	3/8"
	2-1/2	30	550				
ESP-3642J/V	3	36	660	7.6/3.8	3/4	7/8"	3/8"
	3-1/2	42	850				
ESP-4860J/V	4	48	880	10.6/5.3	3/4	7/8"	3/8"
	5	60	1150				

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Humidity Removal

30% Better Humidity Removal than Conventional Air Conditioning

ASHRAE Psychrometric Chart No. 1
Normal Temperature
Barometric Pressure
29.921 Inches of Mercury
Sea Level

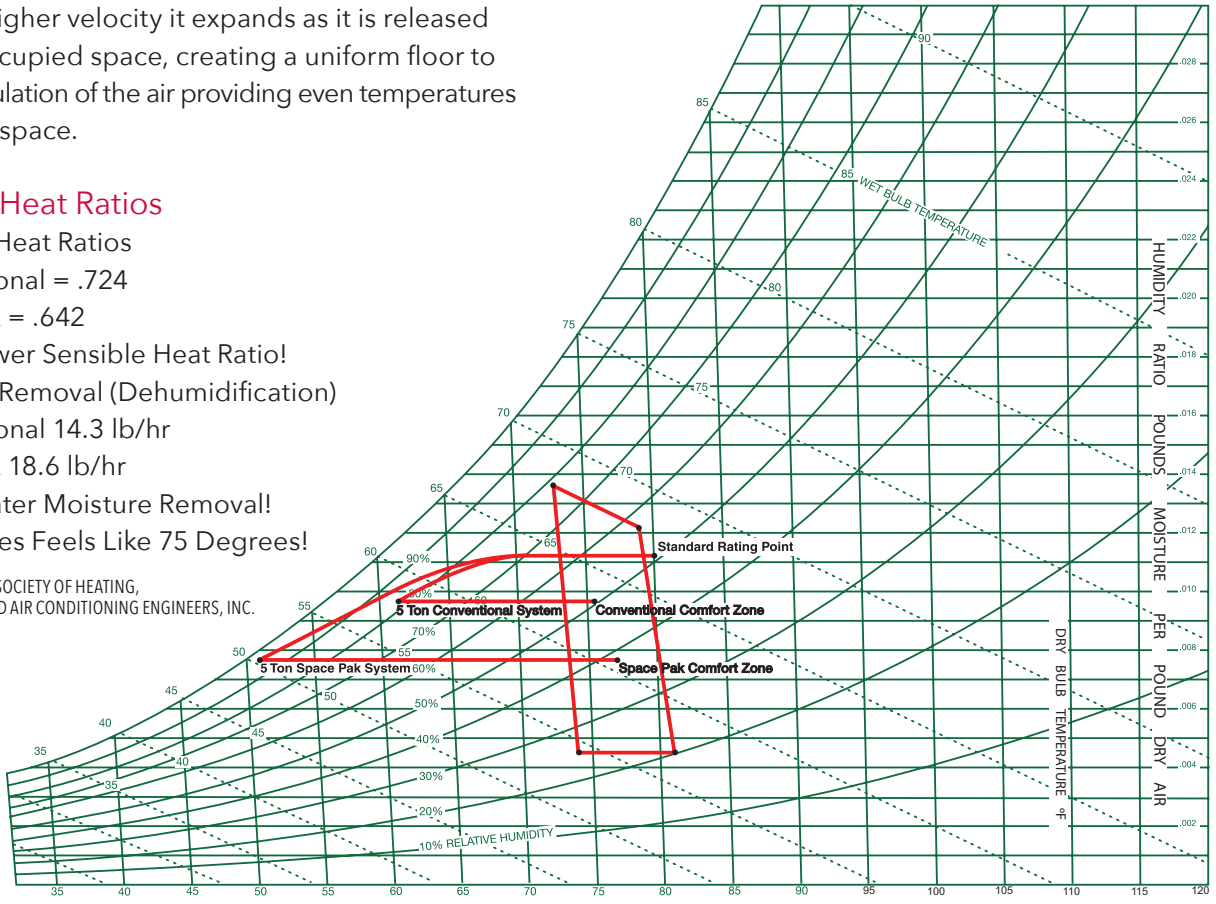
SpacePak fan coil units move approximately half the air (250 CFM vs 400 CFM per ton of cooling) than a traditional system at higher pressure. SpacePak coils are a more robust 6 row design allowing for a greater temperature drop (24° - 28°) versus a competitors (15° - 20°), resulting in more moisture (humidity) removal. The drier air allows SpacePak systems to be set at higher temperatures with no sacrifice in comfort while saving substantial energy.

A simple adjustment of 2° in the thermostat setting from 70° to 72° can result in up to 15% savings on annual cooling costs.

SpacePak systems eliminate hot and cold spots through the process of aspiration. The air exits the pressurized duct at a higher velocity it expands as it is released into the occupied space, creating a uniform floor to ceiling circulation of the air providing even temperatures across the space.

Sensible Heat Ratios

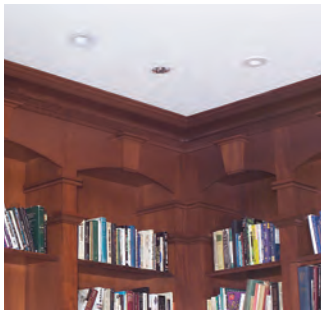
- Sensible Heat Ratios
- Conventional = .724
- SpacePak = .642
- 11.5% Lower Sensible Heat Ratio!
- Moisture Removal (Dehumidification)
- Conventional 14.3 lb/hr
- SpacePak 18.6 lb/hr
- 30% Greater Moisture Removal!
- 77 Degrees Feels Like 75 Degrees!



NOTE: All temperature measures listed are Fahrenheit.

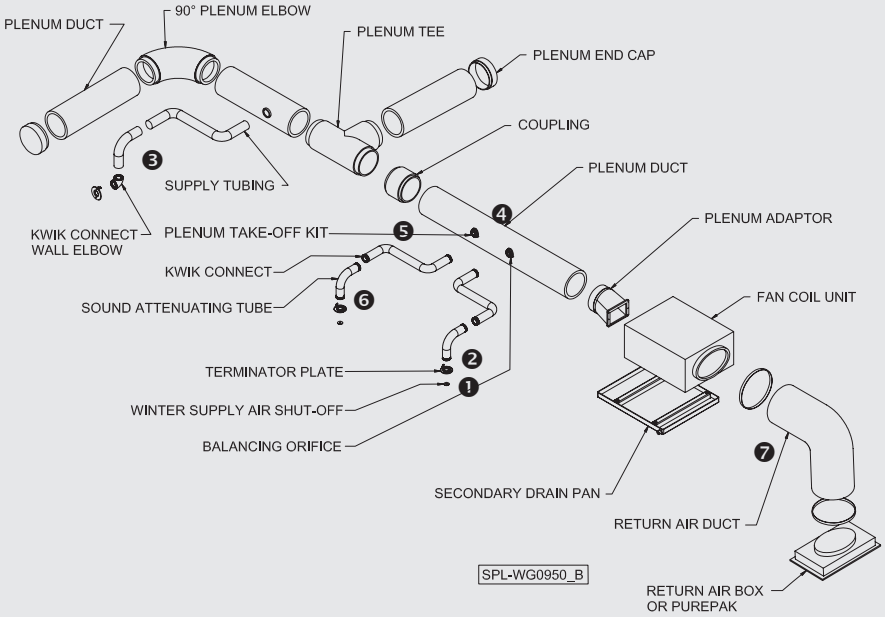
Typical Installation

Easy to Install System



The SpacePak system has been designed to reduce installation time and cost for installing contractors. Small diameter, flexible tubing weaves around construction obstacles and eliminates the need for large, cumbersome ductwork and major structural renovations. Fittings simply snap securely into place with no tools required. The typical installation diagram and guidelines listed below provide a quick reference to ensure successful installation and operation of the system. More detailed and comprehensive information is available on our website at **www.spacepak.com**.

Click or Scan for Installer Training Videos



1. **Outlets –** The most important rule of thumb when installing a SpacePak system is having the proper number of outlets. Six (6) to Seven (7) outlets per ton are recommended for optimal 35-40 CFM airflow from each outlet under normal conditions to maximize aspiration.
2. **Outlet Placement –** Outlets should be placed in the room where they will create the least disturbance (floors, ceilings, walls) and not infringe upon inhabitants with turbulent air. Traffic patterns, drapes and bed placement are all factors to consider.
3. **Supply Duct –** Ideally, all runs should be as equal in length as possible. Keep the 2" duct length between 9 ft. and 30 ft. for best performance. The longer the run, the lower the CFM capacity. See performance chart in IOM.
4. **Main Trunk/Plenum –** Maximize use of the main trunkline in order to minimize the lengths of 2" duct. It will allow for an easier installation and better performing, balanced system if 2" duct lines are minimized.
5. **Locating Take-Offs –** Distribute takeoffs as evenly as possible along the main trunkline – no closer than 6" away from one another. This will assure better balanced airflow.
6. **Sound Attenuators –** The last 3 ft. of every run should use a fully-fabricated SpacePak sound attenuator to reduce outlet air sound.
7. **Return Air Duct –** Minimize potential fan noise and maximize performance of this acoustically lined duct by incorporating a 90-degree bend between the air handler and return grille.

Click or Scan for Tips and Tricks Book

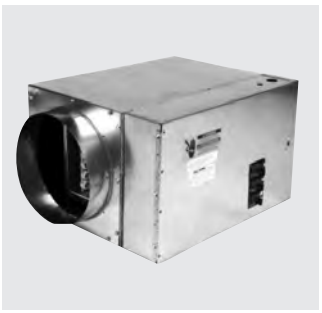
Heating Options

Model EEH Electric Duct Heater

SpacePak's Duct Heaters are designed for easy installation and reliability. They are specifically engineered not to exceed safe operating temperatures. These heaters can provide a great economical heating source and are available in a variety of configurations.

Features and Benefits

- 2 to 20 Nominal kW Output
- Direct Mount to Horizontal and Vertical Air Handlers
- Single or Dual Power Supply
- Internal Safeties
- Internal Staging Controls
- Simple Wiring
- Simple On/Off Light Indicator

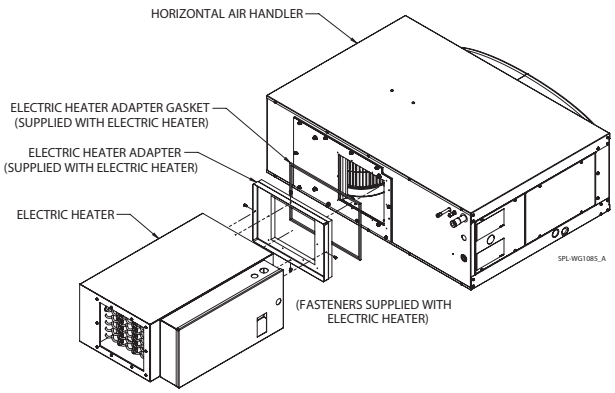


Specifications

	Model	EEH-020	EEH-050	EEH-075	EEH-100	EEH-150	EEH-200
Performance	Nominal Output (kw)	2	5	7.5	10	15	20
	Nominal Output (BTU's)	6,830	17,076	25,614	34,152	51,228	68,304
	Min Airflow (CFM)*	100	200	300	500	600	800
Dimensions	L x W x H (inches) Incl Electrical Panel	26 x 19 x 10.5				28 x 19 x 10.5	
	Shipping (L x W x H inches)	29 x 23 x 13.25				31 x 23 x 13.25	
	Shipping Weight (lbs)	37		38		46	47
Electrical***	Power Supply (volts/ph/hz)	240/1/60					
	Control Volts (VDC)	24					
	Heater Amps (Ckt #1)**	8.3	20	30	40	20	40
	Heater Amps (Ckt #2)**	N/A				40	40
	Min Wire Gauge Dual (AWG)	N/A				#8 / #6	#6/#6
	Min Wire Gauge Single (AWG)	#10	#8	#6	#6	#4	#2
	Stages	1				2	
Air Handler Applicable	ESP/WCSP 2430 J (H & V)	YES	YES	YES	YES	NO	NO
	ESP/WCSP 3642 J (H & V)					YES	
	ESP/WCSP 4860 J (H & V)						YES

*Based upon 70°F entering air and discharge not to exceed 160°F
**@ 240VAC
***To achieve FLA value, air handler amp rating (found on data plate) needs to be added.

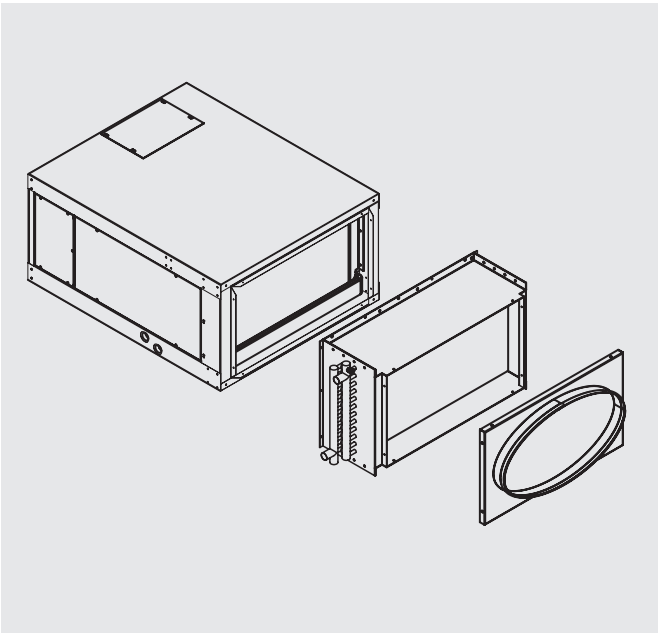
Typical Heater Installation



Heating Options

Model WPAK Hydronic Coil

WPAK Hydronic heating coil is designed for use with SpacePak fan coil units in conjunction with a boiler or other hot water heating supply equipment. Easily mount to the inlet of the fan coil unit. Use the chart below to match the proper hydronic coil with the SpacePak fan coil unit.



Water Pressure Drop (in feet @ 180°)

GPM	AC-WPAK-60	AC-WPAK-90	AC-WPAK-120
2	0.4	0.4	0.5
4	1.4	1.6	1.7
6	3.0	3.3	3.7
8	5.2	5.7	6.3
10	7.9	8.7	9.6

Heating Capacity MBH

CAUTION:
Areas shaded in **RED** can exceed 160°F leaving air temperature. To prevent injury or damage, do not install floor outlets when the system is operating in this range.

Model AC-WPAK-60 for ESP 2430

	Entering Water Temperature °F				
GPM	120	140	160	180	200
2	20.5	30.0	39.1	48.1	57.2
4	25.2	35.6	46.1	56.6	67.1
6	26.6	37.4	48.3	59.2	70.2
8	27.2	38.2	49.3	60.4	71.6
10	27.5	38.7	49.9	61.1	72.3

At 550 CFM and 70°F Entering Air Temperature*

Model AC-WPAK-90 for ESP 3642

	Entering Water Temperature °F				
GPM	120	140	160	180	200
2	28.8	39.2	51.6	63.4	75.2
4	36.0	50.8	65.7	80.8	95.8
6	39.0	54.9	70.9	87.0	103.1
8	40.4	56.8	73.3	89.9	106.5
10	41.2	57.9	74.7	91.5	108.4

At 850 CFM and 70°F Entering Air Temperature*

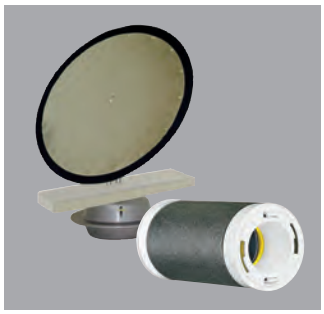
Model AC-WPAK-120 for ESP 4860

	Entering Water Temperature °F				
GPM	120	140	160	180	200
2	31.7	46.2	61.2	75.1	89.0
4	45.6	64.2	83.0	102.0	120.9
6	50.6	71.2	92.0	112.9	133.8
8	53.1	74.7	96.4	118.2	140.1
10	54.6	76.7	98.9	121.2	143.6

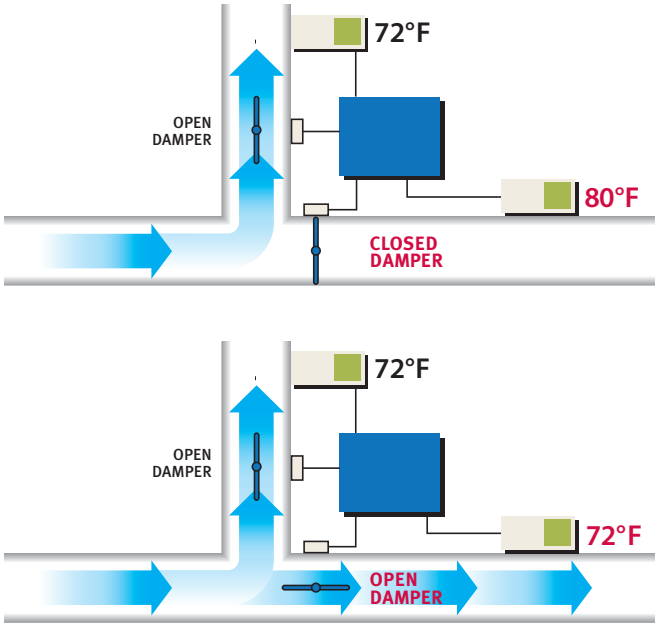
At 1150 CFM and 70°F Entering Air Temperature*
*To calculate Leaving Air Temperature (LAT) use the following formula: LAT=[BTUH/(1.08XCFM)] +70

ZonePak

Damper System



The ZonePak Difference



ZonePak's control panel interacts with up to three different thermostats to direct conditioned air from the fan coil unit to whichever zone needs it. The use of branch dampers, with or without plenum dampers, offers even more flexibility.

ZonePak – A unique air-driven damper system – allows for the effortless installation of up to three custom comfort zones working off three independent thermostats. The addition of zoning to the SpacePak system gives installing professionals a tremendous opportunity to offer even more precise comfort to a large segment of the demanding residential and commercial market. ZonePak addresses the unique comfort needs of historical buildings, architecturally challenging structures and anywhere radiant, steam or hot water heat is installed. By delivering conditioned air only where it's wanted, when it's wanted, the needs of all occupants are met while energy costs are reduced.

Benefits of Zoning*

- Greater Occupant Comfort
- Allows for Decreases in System Capacity Demand
- Increased Installation Flexibility
- Reduced Energy Consumption

Standard Features

- 2 or 3 Zones with One Fan Coil Unit
- Controls Integrate with Any Secondary Heat Source
- Reliable Operation Provided by Air-Driven Dampers
- Simple 24 Volt Wiring
- Quiet Operation
- Pre-Programmed Controls
- Convenient Packaged Systems

The all new SpacePak J+ advanced control makes zoning even easier by slowing the blower down or speeding up depending on Zone demands and targeted static pressure.

*ZonePak to only be used when system utilizes a staged or inverter type condenser.

PurePak

Recessed Air Cleaner

Most families don't realize that, according to the EPA, indoor air is on average 7-10 times more polluted than outdoor air, even if you live in a city. Harmful airborne particles and chemicals including odors, VOCs, molds, bacteria, allergens, fine dust, smoke, and pollen have been linked to a number of health problems such as allergies, asthma, fatigue, respiratory ailments, flu and other maladies.

The PurePak system is the key to cleaner, healthier air. Unlike typical ionic air cleaners and electrostatic precipitators, PurePak does not create ozone, lose efficiency as media loads, or require large, noisy fans to overcome airflow restrictions of dense media.

Features and Benefits

- Protects you and your family from airborne allergens, bacteria, molds, pollen, smoke, fine dust particles and VOCs
- 97% capture efficiency of contaminants down to .3 microns
- Safe, patented operation does not create ozone
- Easy, low-cost maintenance
- 5-year powerhead warranty

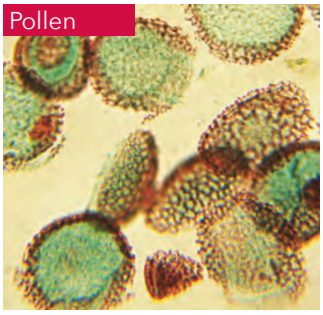
Keeps Homes Cleaner, Healthier and Fresher

PurePak turns your SpacePak system into a wholehouse air cleaner, quickly and economically. PurePak does not create charged particles that cling to grounded or charged surfaces such as TV screens.

Dimensional Data

Model	Outside Dimensions		Inside Dimensions		System Size
	Length	Width	Length	Width	
AC-RBC-2	27-5/8"	16-5/8"	25-3/8"	14-5/16"	2430
AC-RBC-3	32-5/8"		30-3/8"		3642
AC-RBC-5	38-5/8"		36-3/8"		4860

Up to 98% of airborne particles are 1 micron in size or smaller. These are the most damaging to the lungs. The PurePak system effectively rids the air of these particles.



PurePak eliminates these harmful particles as well as other chemicals and VOCs from the air you breathe.

SmartSeal

System Duct

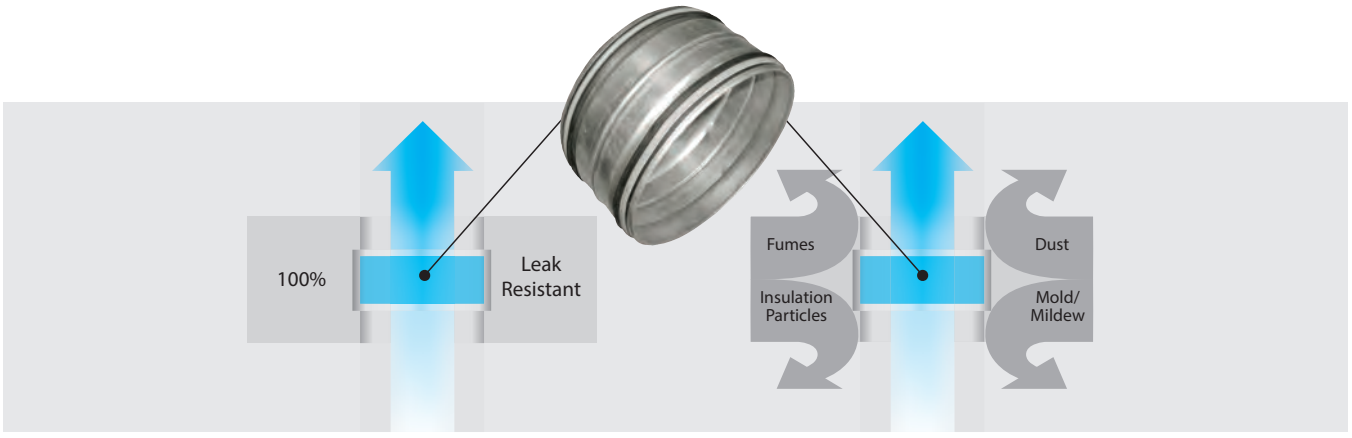
SmartSeal, SpacePak's spiral metal duct system (9" ID) provides homeowners and commercial building owners increased energy efficiency and improved indoor air quality.

The unique slip-fit joint seal of the SmartSeal utilizes patent pending technology and installs without the use of special tools or messy sealants. SmartSeal is 100% leak resistant to 10" W.C. and all duct lengths and fittings come standard with R8 insulating sleeves.

SmartSeals' factory installed gaskets are included on all fittings and couplings and are built for easy and quick installation when compared to most conventional duct systems.

Features and Benefits

- Approved to SMACNA Duct Construction Standards and Leakage Class 3
- 100% Leak Resistant (to 10" W.C.)
- Fittings & Couplings Have Factory Installed Gasket
- Operating Temperature Range -20°F to 212°F
- Gasket is on Leading Edge of Fittings, Allowing Substantial Space for Screw Insertion
- Recyclable Material
- Contains up to 58% Recycled Materials
- Eligible for LEED Points
- Significantly Reduced Installation Time
- SmartSeal Spiral Duct Lengths are 26 gauge Galvanized Steel
- SmartSeal Fittings are 24 gauge Galvanized Steel
- Fittings & Couplings Have Hemmed Edge for Strength, Rigidity, and Maintaining Tolerances
- Smoke & Flame Spread Rating is 0/0 (in accordance with ASTM E-84-91A)



System Accessories

Outlets - Blend with Any Décor

SpacePak offers the widest variety of Outlets and Covers to blend with any décor. From finished aluminum and brass to natural wood grain. Wood outlets are pre-assembled with SpacePak Kwik Connects for easier installation.

Linear Slot Outlet

Linear slot outlet is designed for installation in both new construction and retrofit applications. The fully integrated outlet requires no additional mounting hardware and is supplied with a trim plate that boasts a slim profile less than 1/8".

Rough-In Bracket

Serves as a reference point for sheetrock outlet locations during the framing portion of new construction.

BasePak Secondary Drain Pans For Horizontal Fan Coil Units

SpacePak has designed a series of secondary drain pans specifically sized for use with all horizontal fan coil units. Exclusive built-in supports raise the unit off the bottom of the drain pan. Installed with threaded rod, the unique pan construction fully supports the fan coil unit. For use with all ESP or WCSP series coil units.

Kwik Connect Wall Elbow

Kwik Connect wall elbows simply snap into place for fast, easy installation in 2 x 4 construction.

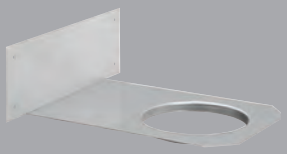
Kwik Connect Extension

Designed for installations using wall thicknesses above 1/2".

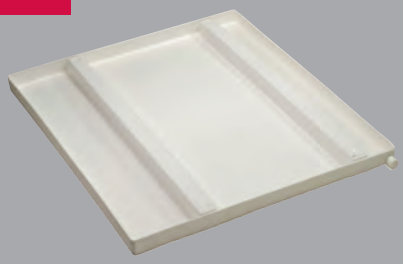
Round Outlets

Linear Slot Outlet

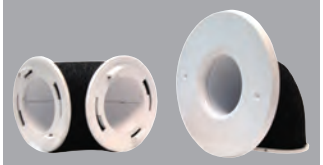
Rough-In Bracket



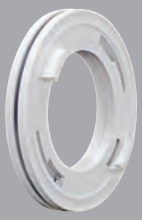
BasePak



Kwik Connect Wall Elbow



Kwik Connect Extension



SPACE PAK
solstice®
HEAT PUMPS

Conserving Energy and Environmental Integrity

Environmentally Friendly Heating & Cooling with Inverter Air-to-Water Heat Pumps & Hydronic Fan Coils

Carbon Free Hydronic Comfort

Any heating expert will tell you that low-temperature hydronic radiant floor heating is the "gold standard" of comfort and efficiency. Instead of using a fossil fueled boiler as its heat source, you can cut out carbon by using an air-to-water heat pump.

Click or Scan to Watch our Recent Video

Solstice air-to-water heat pumps serve as an ultra-efficient, all-electric energy source able to provide both heating and cooling for residential and light commercial settings, without the use of fossil fuels.

Solstice air-to-water heat pumps provide a promising solution for both new and existing hydronic applications that are aiming to reduce energy consumption, energy costs, and environmental impact.

- The physics that make water ideal for conveying heat also make it ideal for cooling.
- All the advantages of a hydronic (water) distribution system without the use of fossil fuels.
- Energy savings up to 47% greater than a typical high efficiency natural gas condensing boiler.
- Up to 70% less electricity use than electric baseboard.
- In comparison to geothermal, installation costs are significantly less, and comparable operating efficiencies are achieved.
- 30% more efficient than traditional air-source heat pumps.
- In comparison to traditional DX (refrigeration based) systems, it's both safer and more efficient to pump water than refrigerant through a living space.

Solstice Heat Pumps
Industry Leading Air-to-Water Technology

- High efficiency hydronic heat pumps that supply low temperature water for heating & chilled water for cooling
- Combines the performance of modern air-source heat pump technology with the unsurpassed comfort of hydronics
- Thousands of installations across the US and Cananda
- Industry proven Solstice technology
- Eligible for rebates

Extended warranty for SpacePak Certified Contractors:

- Industry leading 10-year compressor warranty
- 5-year parts warranty

Solstice Inverter Monobloc

Air-to-Water Heat Pump

Utilizing industry proven Solstice technology, the Solstice Inverter Monobloc (SIM) air-to-water heat pump is a self-contained unit design that keeps all refrigerant conveniently located outside the occupied space.

Features and Benefits

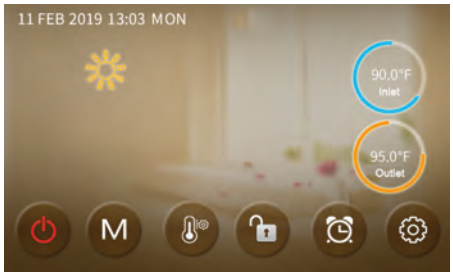
- Supplies Low Temperature Water for Heating & Chilled Water for Cooling
- Reliable Mitsubishi Inverter Compressor
- Available in 3 and 5 ton Models
- Monobloc Design (No On-Site Refrigerant Charging)
- Low Ambient Cooling
- Domestic Hot Water Offset
- Freeze Protection
- Low Amp Draw with Ultra Quiet Operation
- Eligible for Rebates

Specifications

Model	Units	SIM-036	SIM-060
Heating Capacity*	BTU/h	13,191 - 38,755	25,413 - 70,666
Cooling Capacity**	BTU/h	12,704 - 34,423	17,884 - 59,523
Heating Efficiency*	COP	5.01 - 4.04	4.67 - 3.69
Cooling Efficiency**	EER	11.74 - 11.26	11.26 - 10.75
Cooling Efficiency***	IPLV	12.2	12.1
Maximum Running Current	A	18	21
Compressor Rating Load	A	9.7	19
Locked Rotor Current	A	35	20
Fan Motor Rating Current	A	0.8	2x0.8
Minimum Circuit Ampacity	A	20	26
Max Fuse/Circuit Breaker/Overload Device	A	30	40
Power Supply		230/1ph/60hz	
Compressor Quantity		1	
Compressor Type		Rotary	
Fan Quantity		1	
Fan Power Input	W	200	750
Max Fan Speed	RPM	750	58
Sound Power Level	dB(A)	54	10
Water Pressure Drop at Rated Flow	PSI/ft W.C.	6/13.8	10/23
Water Connection	inch	1	1 1/4
Rated Water Flow	GPM	7	13
Unit Net Dimensions (L/W/H)	inch	38.6 x 18.3 x 35.4	39 x 13 x 52
Unit Net Shipping Dimensions(L/W/H)	inch	40.9 x 19.3 x 36.2	42 x 18 x 53
Net Weight	lb.	242.5	326
Shipping Weight	lb.	271	368

Test Condition (AHRI 550/590)
*Heating:
Ambient Temperature:(DB/WB): 45°F/43°F
Supply Water Temperature, 95°F, Return, 86°F

**Cooling :
Ambient Temperature, 86°F
Supply Water Temperature, 50°F, Return, 59°F
*** IPLV is the recognized measurement for Integrated Part Load Values in accordance with AHRI 550/590.



User friendly touch screen control allows for control outside by the unit or inside in the mechanical room.

Solstice Inverter Split

Air-to-Water Heat Pump

Utilizing industry proven Solstice technology, the Solstice Inverter Split (SIS) air-to-water heat pump is a split system unit design that provides installers with the flexibility to reduce the use of glycol in the hydronic loop.

Features and Benefits

- Supplies Low Temperature Water for Heating & Chilled Water For Cooling
- Reliable Panasonic EVI Inverter Compressor
- Available in 5 ton Model
- Extreme Low Ambient Heating Performance Down to -20°F
- SIS System Includes both Indoor and Outdoor Units, Refrigerant Line Set (35'), and Control Wire (50')
- Freeze Protection
- Low Amp Draw with Ultra Quiet Operation
- DC Driven Fan Motors & EC Modulating Fans
- Eligible for Rebates

Units use inverter driven compressors with EVI technology for superior performance efficiency at temperatures as low as -20°F.

EC controlled modulating fan motors combined with high efficiency blade profile ensure quiet end efficient operation while exchanging energy with the outdoor air.

Specifications

	Units	Outdoor	Indoor
Heating Capacity Range*	Btu/Hr	20,473-71,574	
Heating Efficiency*	COP	Up To 3.09	
Heating Capacity Range**	Btu/Hr	14,777-47,315	
Heating Efficiency**	COP	Up to 2.15	
Cooling Capacity Range***	Tons	2.5-5.2	
Cooling Efficiency***	EER	12.5	
Cooling Efficiency****	IPLV	17.14	
Water Temp Range (reads on supply)	Deg F	41-140	
Compressor Frequency	Hz	30-90	
Power Supply	V/Ph/Hz	230/1/60	
MCA	Amps	40	15
MOPD	Amps	50	15
Refrigerant		R410A	
Refrigeration Connection		3/8 & 5/8 Flare	
Compressor		Panasonic Inverter-Drive EVI Scroll	N/A
Water Connection	N.P.T.	N/A	1"
Pressure drop (12 G.P.M)	P.S.I/ft W.C.	N/A	10.7/24.7
Fan Motor (Modulating)		EC Controlled	N/A
Noise Level (@3meters)	dbA	50	38
Net Weight	Lbs	293	132
Shipping Weight	Lbs	337	158
Net Dimensions (L/W/H)	Inches	35x15x55	17x14x30
Shipping Dimension (L/W/H)	Inches	37x17x55	33x21x17
Operating Ambient Temp	Deg F	-20-110	

*Water out- 120°F, Ambient- 47°F, G.P.M-12
**Water out- 120°F, Ambient- 17°F, G.P.M-12
***Water out- 45°F, Ambient (DB/WB)@- 95°F/86°F, G.P.M-12

****IPLV is the recognized measurement of efficiency for Integrated Part Load Values in accordance with AHRI 550/590. Ambient temp = 95°F. Delivered Water = 44°F (8.5GPM)
All data based on pure water

J Series Hydronic Air Handler

Horizontal/Vertical Hydronic Fan Coil Units

Features and Benefits

- J+ Advanced Control with digital display
- High Efficiency EC Integrated Motor/Blower Assembly
- 230V Standard Configuration Optional 115V Conversion
- 6-Row Copper/Aluminum Evaporator Coil
- Industry Leading Corrosion Resistant Cabinet
- Primary Drain Pan w/Integrated Float Switch
- Anti-Vibration Foam Strips
- Condensate Trap
- Slide out Blower
- 24 V 50/60hz Transformer
- Sweat-Type Connections

Horizontal Fan Coil Unit Dimensions

Model	Height	Width	Length	Ship Wt.
WCSP-2430J	14-1/8"	24-1/4"	29-3/8"	105 lbs.
WCSP-3642J		33-1/4"		123 lbs.
WCSP-4860J		43-1/4"		144 lbs.

Vertical Fan Coil Unit Dimensions

Model	Height	Width	Length	Ship Wt.
WCSP-2430JV	34"	24"	16-1/8"	108 lbs.
WCSP-3642JV		33"		130 lbs.
WCSP-4860JV		43"		152 lbs.

Specifications

Model	Nominal System Capacity		Std. CFM @ 1.2" W.C.	F.L. Amps (115V/230V)	Motor HP	Connections (CTS)	
	Nom. Tons	Cool MBH*				Water In Line	Water Out Line
WCSP-2430J/V	2	24	440	5.6/2.8	3/4	7/8"	7/8"
	2-1/2	30	550				
WCSP-3642J/V	3	36	660	7.6/4	3/4	7/8"	7/8"
	3-1/2	42	850				
WCSP-4860J/V	4	48	880	10.6/5.4	3/4	7/8"	7/8"
	5	60	1150				

* Capacities based on 45°F entering water temperature at 5 G.P.M.

Intertek

HighWall Fan Coil Low Temperature

Hydronic Heating and Cooling

HighWall fan coils are the perfect indoor complement to our Solstice heat pumps. HighWall fan coils provide optimum heating and cooling in one classic design. HighWall fan coils are designed for higher volume flow for primary heating in colder climates.

All HighWall fan coils feature high efficiency EC motors with step-less speed modulation which operate from 50-70% more efficient than traditional on/off motors.

Features and Benefits

- Heating / Cooling Operation
- Hydronic Based - No Refrigerant
- High Efficiency EC Motor with Step-Less Speed Modulation
- Auto-Swing Damper for Uniform Air Distribution
- Whisper Quiet Operation (33-58 dB)
- Stainless Steel Flexible Hose Connections
- LED Display / Remote Control
- Equipped with Condensate Drip Pans for Use in Chilled-Water Cooling Applications
- Can Operate with Water Temperatures as Low as 120°F for Heating and as High as 50°F for Cooling
- 8,100 - 25,700 BTU/hr Heating Capacity
- 7,300 - 13,100 BTU/hr Cooling Capacity
- **5-Year Warranty for Certified Contractors**

Specifications

Model	Output (BTU/hr)						Dimensional Data			Ship Wt. (lbs)
	Heating			Cooling						
	Entering Water Temperature									
	120°F	140°F	160°F*	45°F	47°F	50°F	Length	Width	Height	
HW-06-ECM	8123	11331	14266	7300	6416	5085	34-7/16"	8-2/3"	11-13/16"	28
HW-15-ECM	11843	16553	20853	10614	9420	7475				30
HW-18-ECM	14641	20444	25734	13106	11638	9249				32

* 160°F is max water temp. Applying higher can cause damage to unit.

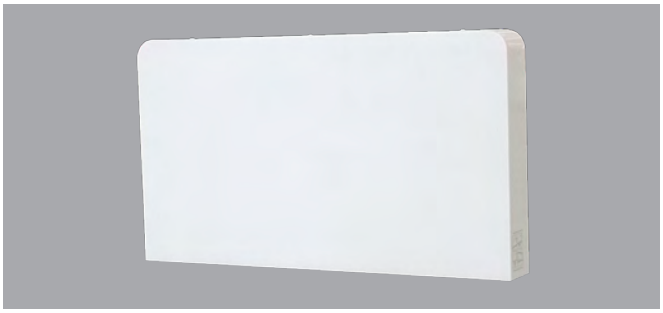
Intertek

ThinWall Fan Coil Low Temperature

Hydronic Heating and Cooling

ThinWall fan coils are the ultra-sleek alternative to HighWall fan coils or can be used in conjunction with a HighWall unit for optimum flexibility.

Perfectly conditioned air is quietly distributed through a cross-flow blower configuration with integrated air-guiding technology. ThinWall units offer versatility for both heating and cooling while operating up to 30% more efficient than traditional emitters.



Features and Benefits

- Heating / Cooling Operation
- Hydronic Based - No Refrigerant
- Tempered Glass Front with Touch Screen Display
- Whisper Quiet, Modern Space-Saving Design
- Cross-Flow Blower Configuration with Integrated Airguiding Technology
- ECM Blower
- Remote Control
- Equipped with Condensate Drip Pans for Use in Chilled-Water Cooling Applications
- Can Operate with Water Temperatures as Low as 120°F for Heating and as High as 50°F for Cooling
- 8,700 - 32,000 BTU/hr Heating Capacity
- 3,400 - 14,800 BTU/hr Cooling Capacity
- 5-Year Warranty for Certified Contractors

Specifications

Model	Output (BTU/hr)						Dimensional Data			Ship Wt. (lbs)
	Heating			Cooling						
	Entering Water Temperature									
	120°F	140°F	160°F*	45°F	48°F	50°F	Length	Width	Height	
HTW-87	4600	6936	8700	3400	2846	2505	28"	5-1/4"	24-1/4"	41
HTW-135	8500	10710	13500	6500	5442	4789	35.25"			52
HTW-196	11400	15606	19600	8500	7116	6262	43"			60
HTW-246	14600	20114	24600	11900	9963	8767	51"			69
HTW-320	17800	26010	32000	14800	12391	10904	59"			79

* 160°F is max water temp. Applying higher can cause damage to unit.

Intertek

Buffer Tanks

Specifications

Model		BT13-H	BT26-H	BT40-H	BT80-H
Height	Inches	29-1/6	45	60	64-1/8
Diameter	Inches	18-1/2	18-1/2	18-1/2	23-5/8
Capacity	US Gal.	13	26	40	80
Max Water Flow	GPM	36	36	36	48
Ship Weight	lbs.	40	84	104	130
Empty Weight	lbs.	38	77	97	125
Full Weight	lbs.	148	304	446	805
Min Circuit Ampacity	Amps	15	30	30	30

Hydronic buffer tanks are used as both hydraulic separators and hydronic buffer tanks.

As a hydraulic separator, buffer tanks separate the energy source loop (heat pump/boiler) from the hydronic flow in the distribution system (air handlers/ emitters). Hydraulic separation is used primarily in systems where flow rates from the source to the distribution vary or with applications utilizing variable speed pumps. The heating or cooling source can be hydraulically decoupled from the distribution system.

Buffer tank's are used as hydronic buffer tanks in systems having several low BTU cooling or heating loads calling at different times or systems operating below the design load condition.

Features and Benefits

- For Hot and Chilled Water
- Encouraged for Most Systems Using SpacePak Solstice Heat Pumps
- Offered in 13, 26, 40, and 80 Gallon Capacities
- Inner Tank 304 Stainless, Outer Galvanized Steel Jacket
- Polyurethane Resin Foam with R12 Insulation Valve
- Four-Port Open Tank Design
- Electric Elements Standard
- **Standard 10-Year Warranty**

Intertek

SSIC
Control

The SpacePak SSIC System Interface Control takes inputs from up to five air handlers and outputs the system signals to the chiller, boiler and heat pump. Air Handlers receive their calls from their respective thermostats and outputs a heating or cooling call to the SSIC. Based on these demands, the SSIC determines how to operate the system.

Standard Features

- Outdoor Air Temperature Sensor
- Water Temperature Sensor
- Buffer Tank Sensor

Training & Sales Support

SpacePak Offers Factory Authorized Trainings for Certification on:

- Small Duct High Velocity Equipment
- Air-to-Water Heat Pump & Hydronic Equipment

Certification Training Methods:

- Online Webinar Training
- Local Field Training
- Corporate Headquarter Factory Training

Benefits of Becoming a SpacePak Certified Contractor:

- Local Leads
- Listed on SpacePak Website
- Pre-Sale Application Support and Load Calculations
- Marketing Support
- Extended Warranty

Extended Warranty for SpacePak Certified Contractors as Follows:

- **Inverter Air-to-Water Heat Pumps**
  Five (5) year parts and a ten (10) year compressor warranty
- **Small Duct High Velocity, Hydronic Fan Coils and Associated Equipment**
  Five (5) year parts warranty
- **Buffer Tanks**
  Ten (10) year warranty

To Be Eligible for Extended Warranties:

- Project/equipment must be registered via the Product Registration portal on the SpacePak website.
- Installation must have been performed by a SpacePak Certified Contractor in good standing at the time of installation.

For inquiries regarding training sessions, sales, and product support contact your local SpacePak Manufacturer's Representative!

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