

The Unico System®

PRODUCT CATALOG

Residential & Commercial Systems



HOW TO BUY

At Unico we understand you have a choice in how you make purchasing decisions, and how you like to do business! For this reason, we provide multiple convenient ways to purchase our products.

Wholesale HVAC distributors have the option to buy directly from the Unico website or through email to our Unico order desk. Unico has wholesale distributor partnerships throughout North America that can help contractors select, purchase and pick-up Unico products.

Many contractors have long standing relationships with Unico distributors, and as a Unico contractor they can purchase the product through their local distributor or purchase direct via the Unico website. Often the decision is influenced by inventory and lead times. Trade professionals can also use the Unico e-commerce site to select, price and save Unico projects.

End users have the option of working with their local Unico contractor / installer or purchasing via the Unico website. An end user should be aware that local regulations and ordinances often require a licensed installer and local codes be adhered to during installation. Unico Preferred Contractors (UPCs) are trained and licensed to size and install Unico products. As an end user, if you are considering adding Unico to your home, we are here to help you select a UPC and walk you through the designing and purchasing process.

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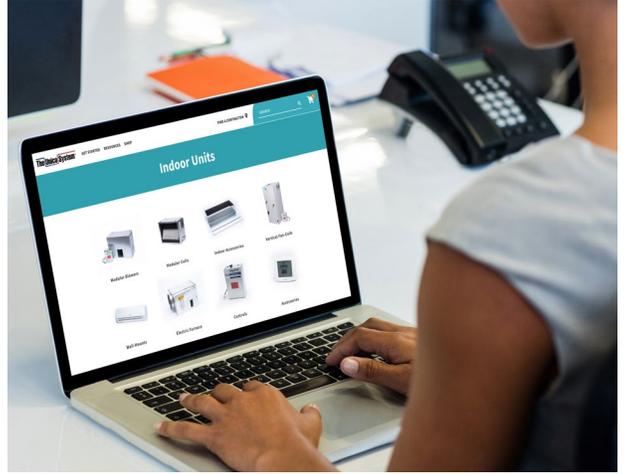
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ABOUT UNICO



ABOUT UNICO, INC.

Unico is the perfect example of a great American success story, and what vision and determination can achieve when coupled with the right environment and culture. Over 35 years ago, Joe and Sharon Intagliata had a successful HVAC contractor business. They had the drive, entrepreneurial spirit, and commitment to their customer base. Due to that dedication, they developed a better mousetrap in the Small-Duct / High Velocity HVAC category by founding Unico in the spring of 1985.

Joe and Sharon — along with their 5 sons and now the 3rd generation of family members- evolved their contracting business into a family-owned engineering, manufacturing, and distribution business, which is the business known today as Unico Incorporated. Unico is recognized as the leader in the Small-Duct / High Velocity segment of the HVAC marketplace.

Why a Small-Duct, **HIGH VELOCITY HVAC SYSTEM?**

Whether you need a complete system zoned or superior whole house comfort, the Unico HVAC System is designed to *fit your lifestyle* as well as your home or business needs.

The Unico System is the leader in the Small-Duct / High Velocity (SDHV) HVAC technology, removing the need for bulky and costly ductwork and unsightly indoor split system units mounted on the wall. The Unico System® technology lends itself well to new construction design, remodel, and renovation needs.

The typical Unico System often requires about 1/3rd the space of a traditional HVAC system and does not compromise in cooling or heating requirements. Because The Unico System® utilizes state of the art 2-inch and 2.5-inch attenuator and aluminum tubing it can be designed to fit in your home while delivering superior comfort and virtually sound-free ventilation and air movement.

The Unico System[®] is the Leader **IN SMALL-DUCT, HIGH VELOCITY HVAC**

Why Unico?

The Unico System has been installed in more than 500,000 homes in the U.S and numerous other countries. Manufacturing products in the USA out of a 125,000 square foot facility in Arnold, MO a suburb of St. Louis, MO, the facility includes 15,000 square feet of offices and a 4,000 square foot testing lab which was built in part with a \$2 million dollar grant from the U.S. Department of Energy (DOE).

The Unico System is known for its energy efficiency and Unico is a training partner with DOE on its Zero Energy Ready Home program. This program recognizes homes that are so energy efficient that a renewable energy system such as solar or geothermal can offset all or most of its annual energy consumption. Unico's system design also lends itself to the High Efficiency / Low Load Home standards and for this reason, Unico is often specified by architects and designers when meeting the demands of the HERS ratings of the International Energy Conservation Code (IECC).

More than 2,500 Preferred Unico Contractors nationwide are authorized to install The Unico System[®] in custom, new homes as well as historic homes and buildings. Installers regularly attend thorough in-person and on-line training sessions in order to help solve any design or construction challenge to deliver the best possible heating and air conditioning solutions. The Unico System[®] is recognized by architectural and historic preservation groups for its ability to be installed in older homes - as well as new residential construction - without disruptive soffits and dropped ceilings. The small-diameter, flexible ducting can weave between walls, below floors and above ceilings, quietly delivering heating and cooling through small round or slotted room outlets.

The Unico System also includes high efficiency heating and cooling alternatives for tight spaces and hard-to-reach locations as needed.

Don't Compromise
YOUR HOME'S DESIGN

The Unico System[®] is a high-efficiency cooling and heating system that can be discreetly retrofitted into historical homes or designed into your custom home without the need for extensive remodeling or intrusive ductwork.

OUR COMMITMENT TO YOU

QUALITY Through product innovation and commitment to ISO standards, Unico continues to deliver category leading products and services both to the trade and end user communities. Our commitment to being ISO 9001 compliant raises levels of quality, safety, efficiency, and interchangeability. This translates to our products and services meeting consumers' demanding expectations.

PERFORMANCE The Unico System® is efficient and innovative by design. It maintains better duct efficiency due to less leakage. "Head-to-toe" drafts are minimized, and the overall noise decibel level is whisper quiet. The air from our system is delivered quietly and seamlessly. The supply tubing is designed to be as efficient as possible and also minimizes sound, bringing decibel levels to the equivalent of a soft whisper. This is due to the nylon inner core and insulation which absorb the sound created from the air.

The high discharge velocity of 1,000-2,000 fpm mixes the air through aspiration for better overall comfort. The air handler is also designed to isolate noise and vibration. Each module, including the blower and coil, of our system is insulated with closed cell, sound deadening insulation which ensures that the unit remains quiet. While you'll feel the comfort our system provides, you'll hardly notice it's running.

TRAINING Contractor knowledge and experience are critical to The Unico System operating at the highest level for years to come. We make it easy to learn about The Unico System®, offering three types of training programs: Online Training, Field Training, or In-Factory Training.

INNOVATION Unico's innovations are known to ease installation challenges providing years of dependability and worry-free use in applications ranging from new home construction to the retrofitting of historic national landmarks. Unico's design and product innovations are trusted by renowned architects and designers when specifying SDHV system for their unique project needs.

CUSTOMER SUPPORT

At Unico we pride ourselves in providing great customer care, we staff our customer care center with seasoned representatives whose sole purpose is to ensure your success as a Unico customer. Some of the mission critical services we can assist you with are: setting up an account, editing your customer profile, checking inventory, order or shipping status. We help you support your daily business needs and make you successful with your Unico installation.

We understand individuals require various forms of communication to support their busy schedules so we offer email, chat, and direct call in numbers for your convenience.

TECHNICAL SUPPORT

With more than 70 years of industry experience, our Technical Support team can help guide installers through hard-to-tackle projects, offering part numbers, pricing, part match-ups, and any other technical inquiries one might have. The technical support team also helps contractors troubleshoot an installation and process warranty claims.

DESIGN SERVICES

Unico can help design HVAC projects and will lay out the ductwork, outlets, equipment location, and provide a material list, at NO CHARGE! Unico can receive plans in Auto-Cad, PDF, J PEG, and hard copy.

Credibility



UNICO ADVANTAGES



QUIET PERFORMANCE

Our system is delivered quietly and seamlessly. When installed properly our ECM motor technology allows us to “tune” system noise levels and air flow to a gentle whoosh. Each air handler is lined with closed cell, sound deadening insulation which isolates noise and vibrations. You'll feel the comfort our system provides and hardly notice it's running.

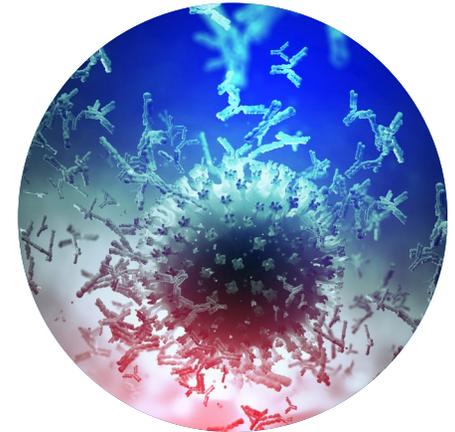


INDOOR AIR QUALITY (IAQ)

Unico was the first SDHV manufacturer to offer a total Indoor Air Quality Solution featuring UV light. Being a central air system, our system includes the ability for air filtration, disinfection, and ventilation. Additionally, The Unico System goes further with compatibility to MERV 7 through MERV 13 filters, providing an easy means to add UV light, and by integrating ventilation programming within its blower control.

The use of ultraviolet light coupled with the air circulation characteristics of a Unico System make it the perfect IAQ solution for your home and business HVAC applications.

The balance of the Unico System, has many IAQ benefits including the ability to reduce airborne odors, toxic chemical vapors, germs, mold, and bacteria.



ZONING

The Unico System® can be designed to be a whole home or business solution, or it can be zoned. Zoned systems are often used in a specific part of the home to meet a unique application or design feature. When in need of a zone solution, use Unico for all your design needs!





LITTLE OR NO REMODELING



The Unico System® fits where other conventional systems cannot—with little or no remodeling required! The modular air handlers and coils can be easily installed into attics, crawlspaces, and closets.

The flexible small tubes can route through existing ceiling, floor, or wall cavities, eliminating the need for unsightly and noisy metal ductwork. Unico installation means less mess, less dust, and quicker installation time!



DRAFT-FREE, EVEN TEMPERATURES



Traditional systems "dump" the air into the room, causing drafts and uneven temperatures throughout different parts of the room. Through an air principle called aspiration, The Unico System® air enters a room and creates a gentle suction around itself, drawing the room air into its stream of air and evenly mixing the air in the room. Aspiration creates an even, draft-free environment with less than a 2° differential between wall-to-wall and floor-to-ceiling and provides 30% greater moisture removal. This means you can have your thermostat set higher than you typically, would saving you money.



TOTAL OPERATING COST



All of the advantages stated above lead to lower annual fuel costs for many applications, such as low load homes and other hard-to-condition homes. For example, the greater dehumidification reduces the cost and the need to run a separate dehumidifier in a low load home.

**Florida Solar Energy equated a 14-seer small-duct system having less total energy use than a 20-seer traditional ducted unit.*

KEY FEATURES

TECHNOLOGY THAT IS BETTER FOR THE ENVIRONMENT

If you're building the home of the future today, The Unico System® is the primary choice for your energy efficient heating and cooling needs. Visionary builders and savvy homeowners who want the very best in green, energy saving technology are requesting The Unico System® for their state-of-the-art forward-thinking home designs. Here's Why:

LOW LEAKAGE STANDARDS

Conventional duct systems suffer from air leakage of between 20% and 50%. When installed properly with joints sealed during installation, The Unico System® meets or exceeds the parameters set forth for Low Leakage Standard claims. That means all of the air - and comfort - your system is generating is being delivered to warm or cool your home and not being lost to the environment.

THERMAL LOSS - MULTIPLE R VALUE OPTIONS

The small diameter of our plenum and flexible ductwork ensures that thermal losses are smaller than conventional ductwork, which has a much larger surface area. In addition, we offer our ductwork in multiple R-values to save customers money and comply with the various code requirements across the US.

COMPATIBLE WITH INVERTER TECHNOLOGY

Inverter technology matched inside and out, means that your system is programmed to use only the energy it absolutely requires to deliver the heating or cooling you need now. On a mild day, you may only need a portion of your system's total capacity to make you comfortable. The Unico System® is compatible with inverter technology and it is designed and engineered to match your comfort needs all while optimizing energy efficiency.

FIT, FORM AND FINISH

Our products fit into a tighter space and seamlessly integrate with energy efficient construction. They bring the highest level of insulation, air filtration, and use the most efficient inverters on the market today. End users experience lower humidity, more even room temperatures, and draft-free operation. The Unico System® has achieved accolades and recommendations from designers and installers for its design flexibility and overall efficiency.

COMPATIBLE WITH HIGH EFFICIENCY HOMES

The Unico System® is repeatedly used in homes and projects where LEED, HERS and Net Zero Classifications are called upon to meet. Several of our United States government historical homes and projects on the national registry recognize this product's unique efficiency by selecting it as the product choice for its prestigious DOE Challenge Homes.

DEDICATION TO ADVANCING DESIGNS

Our company has a dedicated group of professionals supporting the design and sale of our products. Let one of our professionals introduce you to the product with a live 15 minute webinar on The Unico System, or feel free to send us the electronic plan of your project and our design professionals will do a free heating / cooling calculation and design for you.



LOCAL UNICO REPRESENTATIVES

Unico has a network of technical rep agencies throughout the country who can provide in-field technical support, training, contractor support, and much more.

Find your local expert by visiting:
www.unicosystem.com/your-local-expert/

TRAINING

The Unico headquarters and manufacturing facility is located near St. Louis, Missouri, as is our operational training facility. Since 1985, we have trained HVAC professionals on the advantages of the Unico Small-Duct System. Being an HVAC professional is a true commitment to excellence and staying up-to-date with the latest product improvements and industry trends can be a daunting challenge. That is why we set up “our state of the art” Unico University as a one-stop shop for all things Unico, providing HVAC contractors with the resources and training necessary to properly apply and install Unico.

Unico University offers three different training methods for installing contractors to choose from: Online Training, Field Training or In-Factory Training. Sign up today at:
www.unicosystem.com/training



WANT TO TAKE YOUR BUSINESS TO A HIGHER LEVEL?



Unico's UPC program provides an upgraded warranty, a website listing on the Unico website contractor finder, inclusion into our lead generation program, advertising materials, and so much more!

To find out how to become a UPC, visit
www.unicosystem.com/upc

TRADITIONAL HOMES

How to apply The Unico System®

Supply Tubing

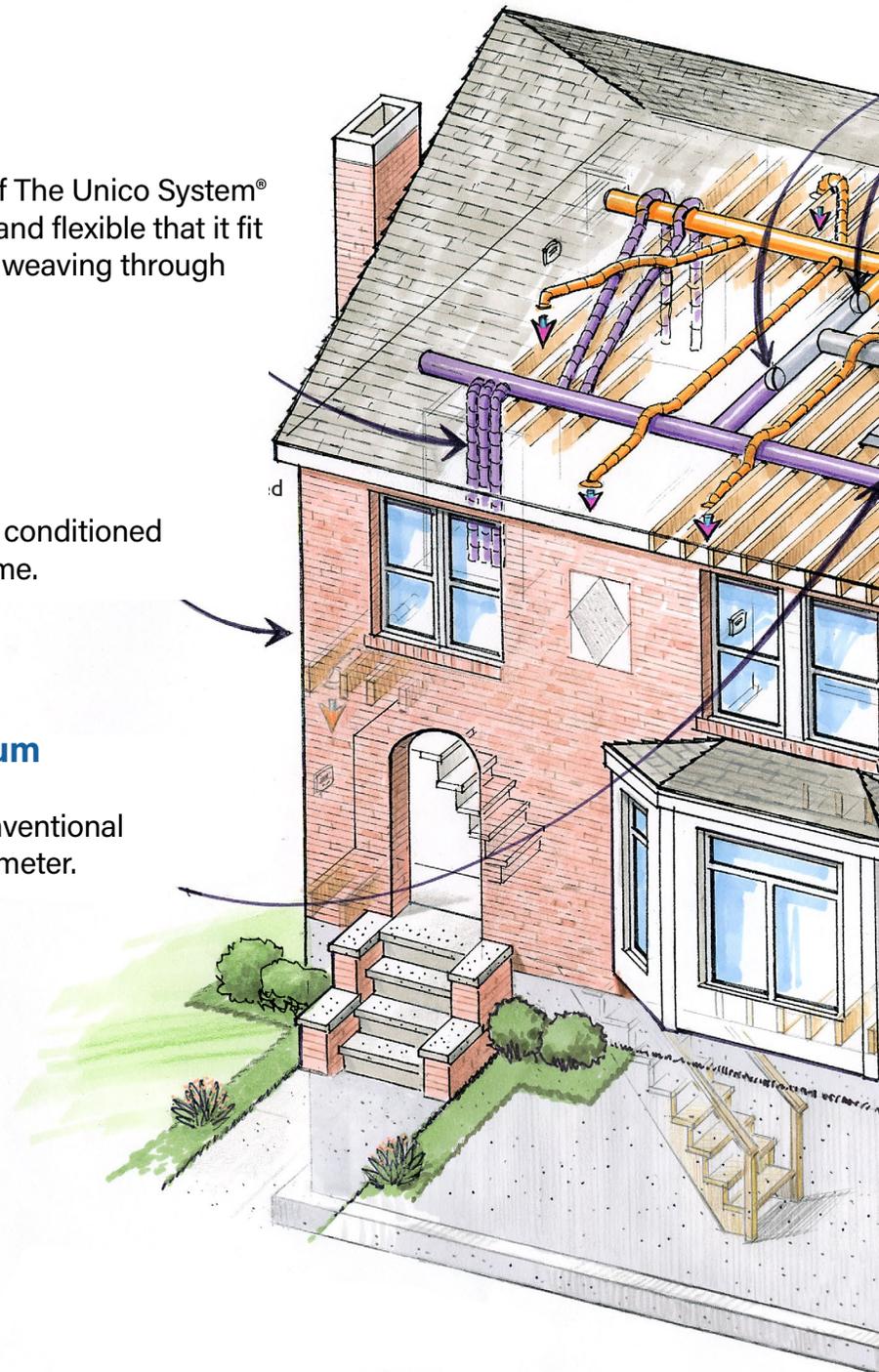
The 3½" outer diameter of The Unico System® supply tubing is so small and flexible that it fits right into existing homes, weaving through ceiling, walls, and floors.

The Unico System®

Fits anywhere and brings conditioned comfort to your entire home.

Compact Main Plenum

Just a third the size of conventional ducting — 7", 9", or 10" diameter.



Zone Dampers

Individual rooms can always be zoned with The Unico System®.

Unico Air Handler

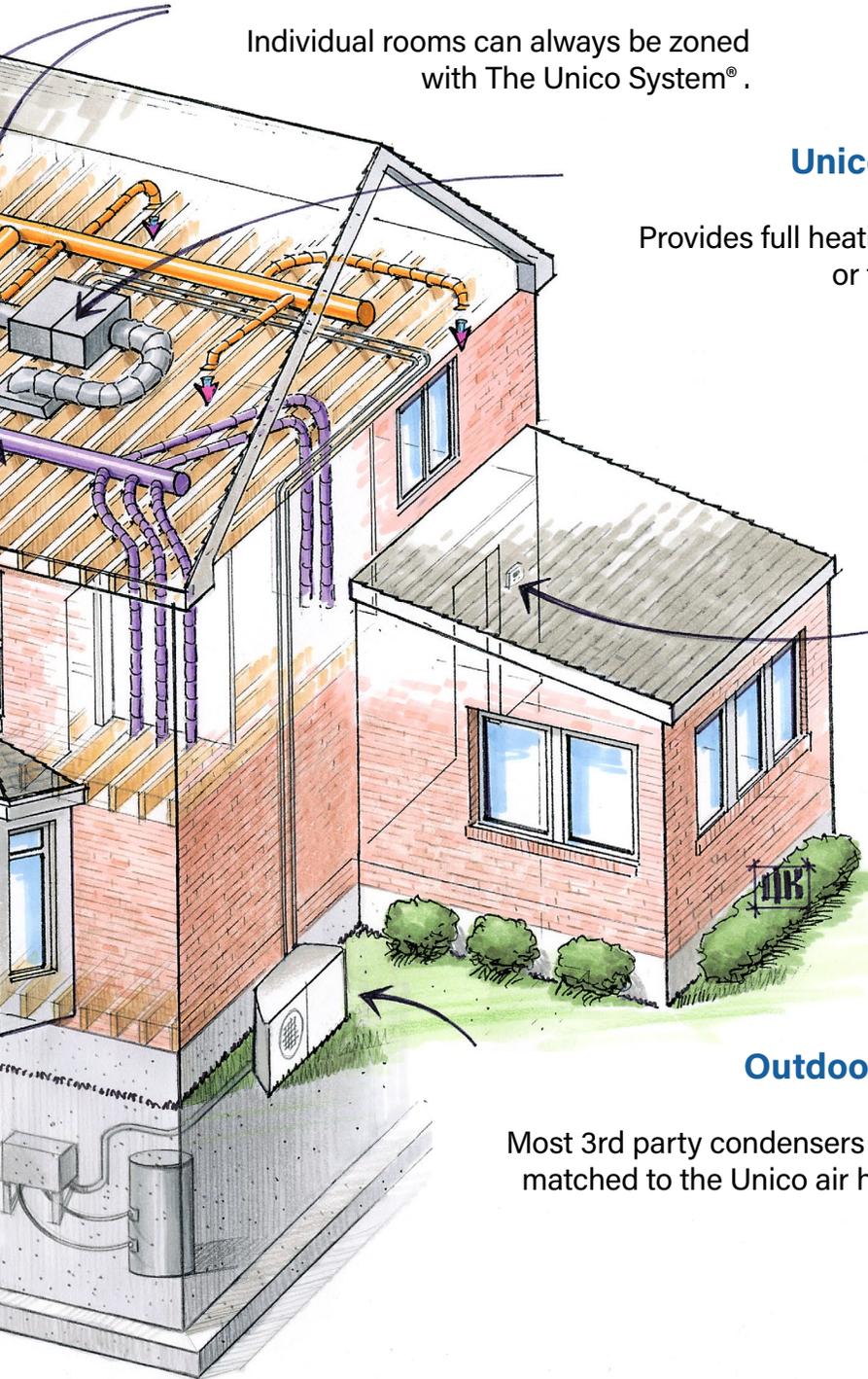
Provides full heating and cooling for the entire house.

Thermostat

Fully compatible with 3rd party thermostats.

Outdoor Unit

Most 3rd party condensers can be matched to the Unico air handler.

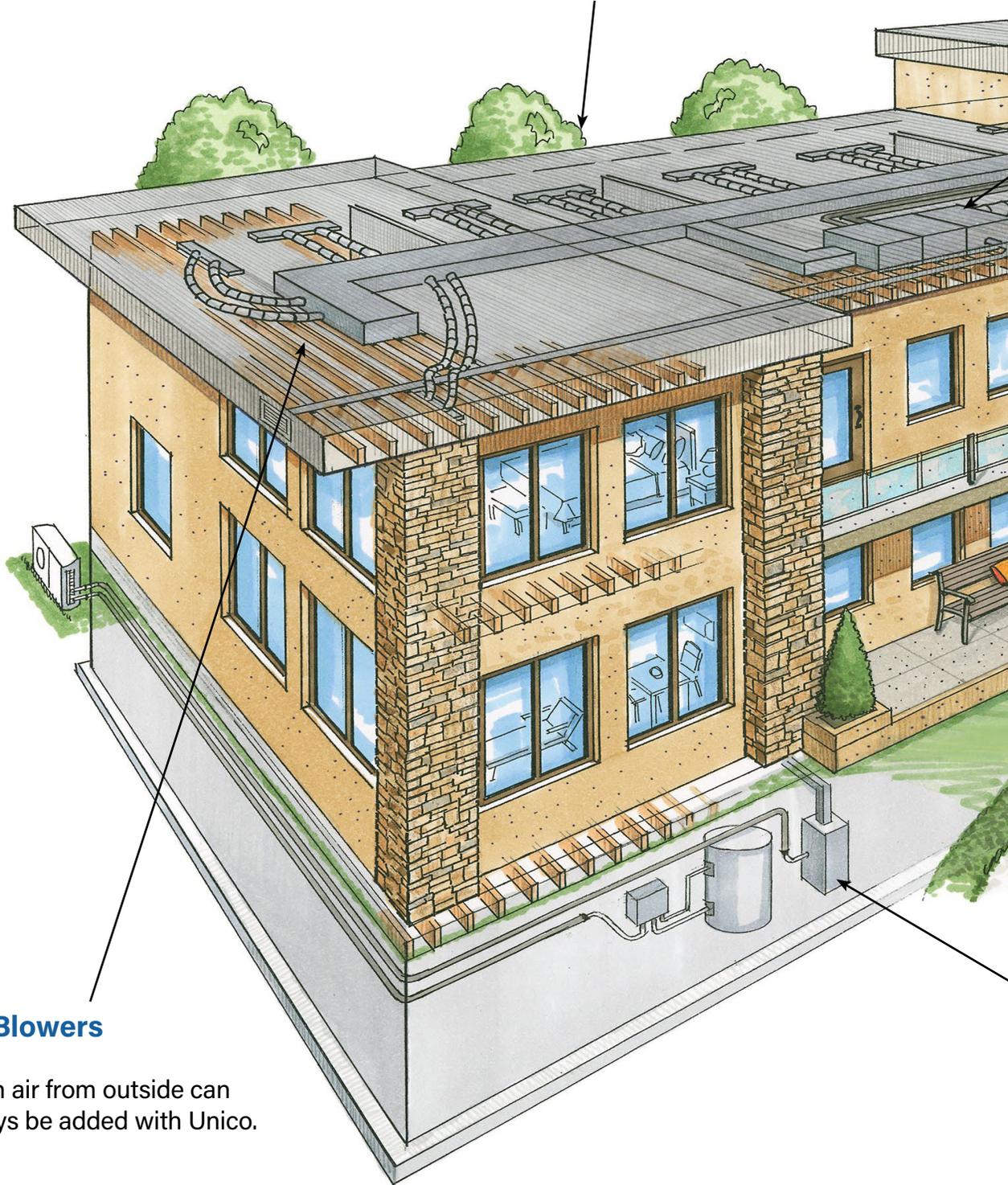


CUSTOM HOMES

How to apply The Unico System®

Zoning

You can zone The Unico System® with some 3rd party zoning systems.

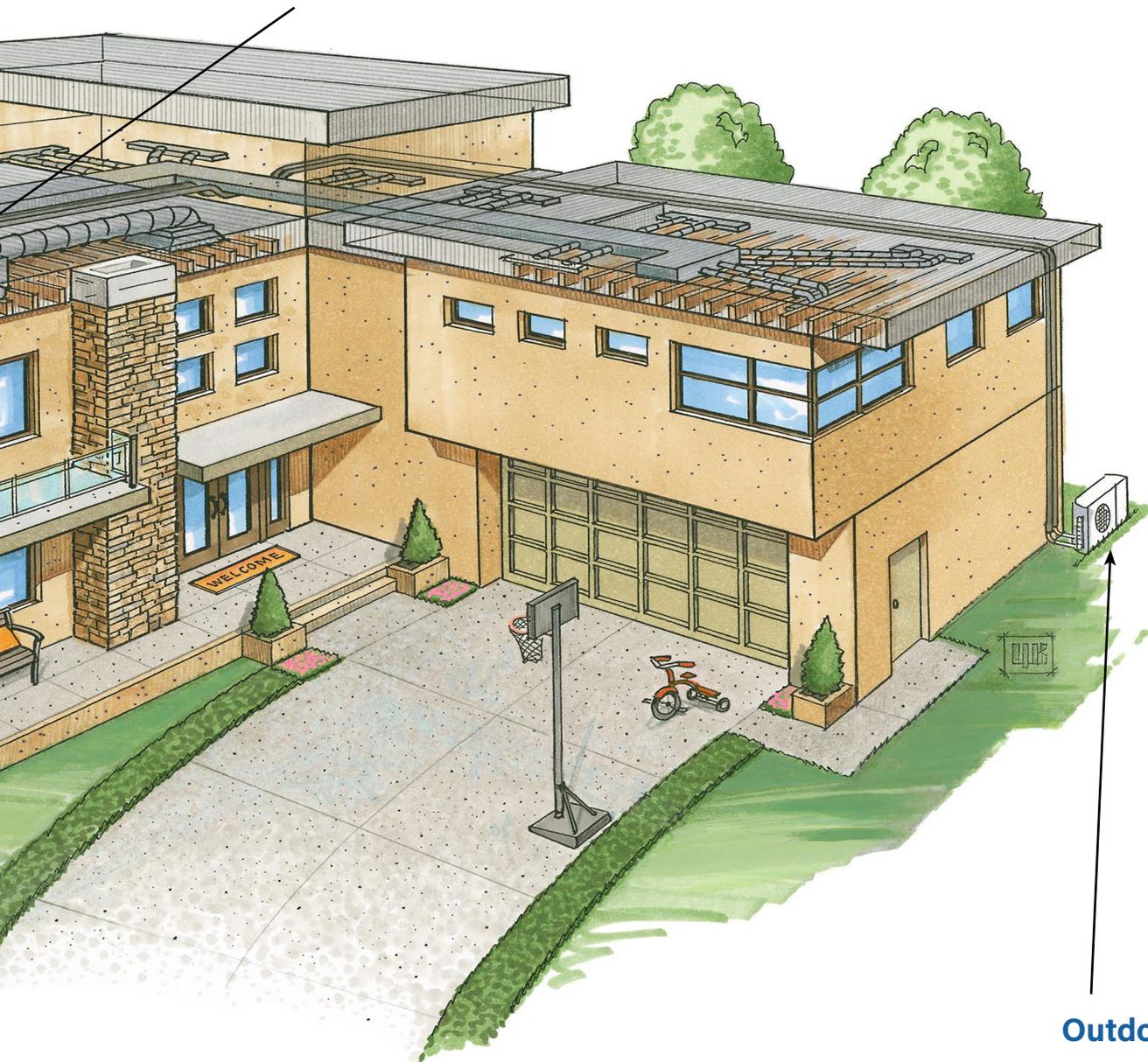


EC Blowers

Fresh air from outside can always be added with Unico.

Unico Air Handler

The Unico horizontal air handler can fit in tight spaces.



Outdoor Unit

Vertical Air Handler Unit

Our vertical air handler fits into a 24" by 24" space, perfect for a tight mechanical room. We offer heating and cooling options for Unico air handlers.

Most 3rd party condensers can be matched to the Unico air handler.

INSTALLATION GUIDE

Follow these simple rules when designing a Unico System:

This instruction is a summary of the basic rules and applies to most applications.

For applications outside the scope of this guide refer to the detailed design rules in the installation and design bulletins on our website.

DUCT DESIGN

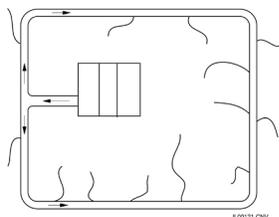
Outlets

- **6 Per Ton** (1.7 per kW). The minimum number of 2-inch (50 mm) outlets is six outlets per nominal ton. This is based on 240 CFM per nominal ton and 40 CFM per outlet. The number of outlets depends on amount of air required and the desired sound level (based on the maximum outlet airflow). To make quieter, use more outlets, switch to the 2.5-inch (63 mm) outlets, or reduce the airflow (but never below 200 CFM per nominal ton [27 L/s per kW]).
- **250 CFM per nominal ton.** The Unico System® is rated with 250 CFM per nominal ton [33 L/s per kW] for air conditioning applications and 275 CFM per ton [36 L/s per kW] for heat pumps. The minimum airflow for proper operation is 200 CFM per ton [27 L/s per kW]. Chilled and hot water coils are not rated at a specific airflow; refer to Bulletin 20-20.3.
- **20% Rule.** A 2.5-inch (63 mm) outlet delivers 20% more air or is 20% quieter. Your choice.
- **10% Rule*.** For supply ducts longer than 10 feet (3 meter), the air is reduced in that run by 10% for every 5 feet over 10 (every 1.5 meter over 3 meters). For example, a 30 foot [9 meter] run is 60% of an outlet that is 10 foot [3 m] yielding a reduction of 40% (30-10=20, 20÷5=4, 4×10=40%). Refer to Bulletin 20-54 for more information.
- **Consider Traffic Pattern.** Place outlets out of traffic pattern. A corner, 5-inch [127 mm] from each wall, is a good location, or along walls, or in soffits blowing horizontally. Consider floor outlets (with screens) for units located in basement. Slotted outlets can be used for high wall locations or in ceilings where there is insufficient room for bending tubing.
- **Allow for Aspiration.** Locate outlets so the air stream does not impinge on any objects or people — at least 3 feet [1 m] away. Use outlet deflectors and outlet balancing orifices sparingly as they disrupt the aspiration.
- **Minimize Length, Minimize Restriction.** Keep the supply tubing length as close to 10 feet [3 m] as possible and never less than 6 feet [1.8 meters]. Use the fewest number of bends as possible. Maximize the radius of any bends making sure the bend in the sound attenuator tubing near the outlet is at least 6-inch [152 mm] inside radius.

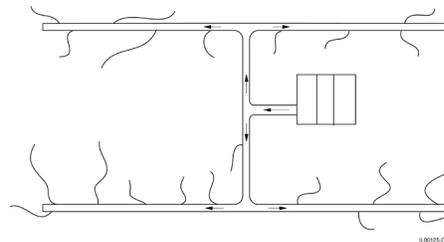
Plenum

- **Maximize Length, Minimize Restriction.** Run main trunk (plenum) as long as possible; it is better to lengthen the plenum if you can shorten even two supply tubing runs. Use full flow tees with turning vanes (when applicable) and full flow elbows. The maximum total plenum length is 150 ft [45 m]; consider the first tee equal to 30 ft [9 m] and elbows equal to 15 ft [4.6 m]. Refer to Bulletin 40-40 for more detail.
- **Use a Plenum Tee.** (Best Method). Use a plenum tee at least 24 inches [610 mm] off unit. For the 4860 unit, use 10-inch [254 mm] diameter with a reducer tee; then use 9-inch [229 mm] both directions. For the 3036 and 3642 unit, use 9-inch [229 mm] then 7-inch [178 mm] both directions. For the 1218 and 2430, use 7-inch [178 mm] throughout.

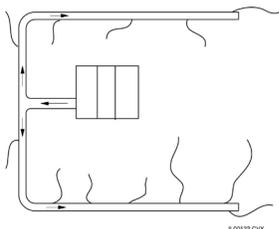
**PERIMETER
LOOP (BEST)**



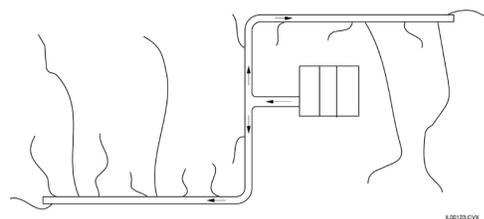
**H-PATTERN
(BETTER)**



**HORSESHOE
(GOOD)**

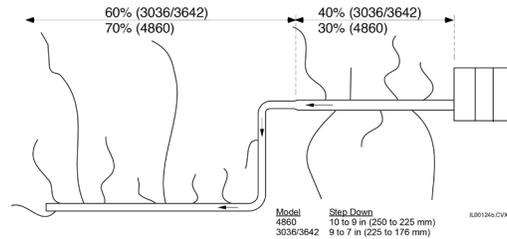


**DOGLEG
(GOOD)**



- **60/40 Rule.** When using a tee split the flow as close to 50/50 as possible — no more than 60/40. Always use a turning vane.

- **Shotgun Pattern.** For the 4860 unit, use 10-inch [254 mm] duct for the first 30 percent; then reduce to 9-inch [229 mm]. For the 3036 and 3642 unit, use 9-inch [229 mm] for the first 40 percent; then reduce to 7-inch [178 mm]. For the 1218 and 2430 unit, use 7-inch [178 mm] throughout. Do not reduce the duct size if plenum is longer than 100 ft [30 m].



- **70/30 Rule.** Turn the tee 90° to make a side branch with no more than 30 percent of the air. Do not use a turning vane
- **24-inch (610 mm) Rule.** Use at least 24-inch [610 mm] of straight plenum before any fitting, such as an elbow, tee, or takeoff. Avoid elbows directly off units.
- **Space Takeoffs Evenly.** Maintain distance between takeoffs as evenly as possible. Space the takeoffs at least 6-inch [152 mm] from each other and 12-inch [305 mm] from end cap.

SOUND

- **Sound Attenuators.** Always use at least 3 feet [1 m] of the Unico supplied sound attenuator supply tubing (UPC-26TC) at the end of each run. For runs up to 12 feet [3658 mm], you may use the sound attenuator for the entire run. For greater lengths, use the aluminum core supply tubing (UPC-25T) with a 3 foot [1 m] sound attenuator at the end.
- **35 CFM per outlet.** Outlet sound is based on the amount of air from the outlet. The recommended airflow for good noise attenuation from a 2-inch (50 mm) outlet is a maximum of 35 CFM [16.5 L/s]. Use this number, adjusted for duct length, plenum static pressure, duct size, and balancing orifices, to fine-tune number of outlets. Refer to Bulletin 20-54 for more detail.
- **Return Air Duct Attenuation.** Use the Unico acoustical Return Air Duct (UPC-04), fiberglass duct-board, or sheet metal with acoustical duct liner.
- **Isolation.** Isolate the air handler with foam rubber strips under the unit. Either hang the unit from the structure using angle iron framework under unit (do not hang directly with hooks in the cabinet) or set on a platform.

PIPING

- **Secondary Drain Pan.** Always use a secondary drain pan wherever overflow of condensate can cause water damage. Do not trap secondary drain line or connect to primary drainpipe. Place secondary drain line exit so that it is apparent when being used. For example, pipe the drain line so it drips on an outdoor windowsill and causes splashing to be noticed.
- **Primary Drain.** Always trap primary drain line and run drain line per local plumbing codes.
- **Refrigerant Lines.** Follow outdoor section manufacturer's instructions for running refrigerant lines. Size and trap per their instructions.

STARTUP – DO THIS BEFORE BOXING-IN THE DUCT WORK

- **Check for Full Flow.** Inspect each outlet for full flow (except where balancing orifices are used or for long branch ducts); it should be approx. 35 CFM [17 L/s] per outlet. Investigate for blockage or kinks if flow is insufficient.
- **Check Outlet Airflow.** Check the airflow at each outlet with a Turbometer centered over the outlet. Add up the airflow for all outlets – it should not differ by +/- 5% from the design airflow.
- **Check Blower Airflow.** For units with single speed motors, measure the amperage and voltage of the motor, then use the amperage table shipped with each air handler to determine the blower output. For variable speed motors, count the blinks to determine airflow. Compare the blower airflow and the outlet airflow. If the outlet airflow is significantly less than the blower airflow, check for system air leaks.
- **Check Static Pressure (optional).** Measure the external static pressure in plenum 2 feet [610 mm] from unit and before any fitting. Static pressure above 1.5 inches of water [0.37 kPa] may indicate restrictive plenum or not enough outlets.
- **Check Refrigerant Charge.** Charge unit per outdoor manufacturer's instructions and Unico's Installation instructions. For best results use the sub-cooling method during the cooling cycle. Heat pumps should be checked in both heating and cooling.

*See the 10% Rule Chart for outlet capacities on page 21

OUTLET CAPACITIES* 10% RULE

The table shown is for quick reference and can be applied as a rule of thumb. For more accurate air flow rates versus duct length, see bulletin 20-54 on our website.

(10% reduction for every 5 ft. over 10 ft.)

English Units

Length, ft.	2-inch Duct	2 1/2-inch duct	Equivalent Full Outlet
	Air Flow, CFM	Air Flow, CFM	
10	35	45	1.00
11	34	44	0.98
12	34	43	0.96
13	33	42	0.94
14	32	41	0.92
15	32	41	0.90
16	31	40	0.88
17	30	39	0.86
18	29	38	0.84
19	29	37	0.82
20	28	36	0.80
21	27	35	0.78
22	27	34	0.76
23	26	33	0.74
24	25	32	0.72
25	25	32	0.70
26	24	31	0.68
27	23	30	0.66
28	22	29	0.64
29	22	28	0.62
30	21	27	0.60
31	20	26	0.58
32	20	25	0.56
33	19	24	0.54
34	18	23	0.52
35	18	23	0.50

*Based on 1.3 inches of water [0.32 kPa] plenum static pressure

Bulletin 30-02 / July 2011

HOW TO CHOOSE A UNICO SYSTEM

1218 SELECTION GUIDE - *Follow this simple 6 Step Guide to creating a Unico System*



STEP ONE:

Choosing a Blower Module

- 3-speed motor 1/3 HP 1700 RPM, 240V ST2
- EC Variable Speed Motor. 120V/208/230 EC2



STEP TWO:

Choosing a Coil Module

Coil Module

TXV Coil (Can be used with any heat pump or air-conditioning condensing unit) Item Code "E"

Chilled Water Coil: Item Code "C"

Hot Water Coil: Item Code "H"

Example: If we want a 3-speed blower motor with only a TXV coil this would be code: M1218BL2-ST2 + M1218CL1-E



STEP THREE:

Choosing Return Air Components

Most Unico System installations only require one (1) central return. There are three components of the return air:

The Return Air Box and Filter Grille

The Return Air Adapter

The Return Air Duct

- Return Air Box: The Return Air Box consists of a filter grille and box, with "Q" bands for easy installation: UPC-01-1218
- Return Air Duct: This consists of ten-foot-long return air duct made out of a sound attenuating material that is 12 inches inside diameter: UPC-04-1218
- Return Air Adapter for Cooling or Heating Module: This is a rectangular to elliptical connector that is fastened to the return air side of the air handler: UPC-104-1218
- Return Air Adapter for Heating or Cooling Module: This includes a filter rack which fastens to the return air side of the air handler: UPC-105-1218



STEP FOUR:

Choosing Accessories

- Secondary Drain Pan: Designed to catch an emergency overflow from the primary drain pan. A must if installing the air handler in a horizontal position: UPC-94
- Starting Collar: This piece is used to attach the plenum to the blower module of the air handler: UPC-61-1218 (Round Duct) or UPC-62-1218 (Square Duct)



STEP FIVE:

Choosing Supply Air

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (1) Supply outlet with Toggles and screws and (1) take-off, curved flange: UPC-89TM-1

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (6) Supply outlets with Toggles and screws and (6) take-offs, curved flange: UPC-89TM-6

Twist-Fit System (1) Single Sound Attenuator Tubing with couplings attached, 2" ID x 12'L, R-3.3 (12 ft. per box): UPC-26TC-1

Twist-Fit System (6) Six Sound Attenuator Tubes with couplings attached, 2" ID x 12'L, R-3.3 (72 ft. per box): UPC-26TC-6

A **MINIMUM** of six (6) outlets per ton are needed



STEP SIX:

Choosing an Outdoor Unit

IF USING THE TXV COIL (either for air-conditioning or heat pump), use any major third-party equipment manufacturer. To check the ratings go to www.ahridirectory.org, then go to "Air-Conditioning". You can select your match-up by going to "Outside Unit" of your choice, then "Indoor Unit" of Unico. If there is no match-up, please call our Technical Support department at 1-800-527-0896 to check the specifications.

Example Parts List*

We have a customer who wants a **one and one-half ton heat pump with a hot water coil**. The air handler is installed horizontally, using the variable speed motor and no supply runs are more than twelve feet. Here is an example material list.

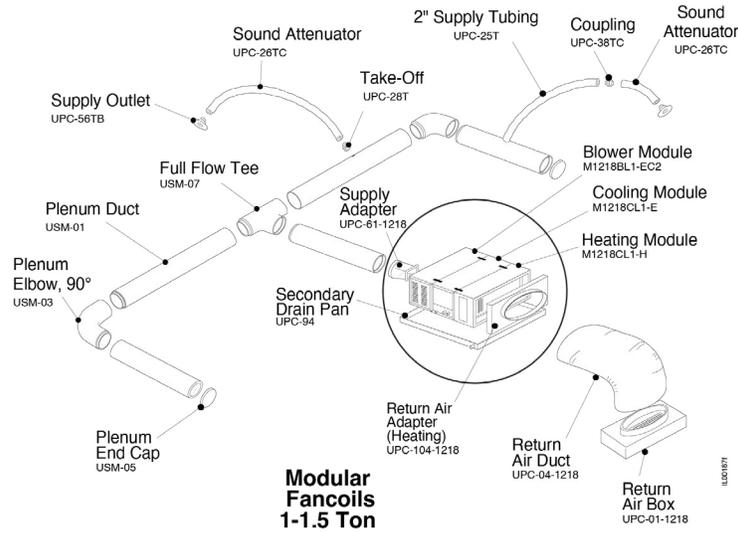
If Using a TXV Coil:

Qty	Part Number	Description
1	M1218BL1-EC2	Blower Module S.M.A.R.T. Control with Variable Speed EC Motor, 120/208230V
1	M1218CL1-E	Refrigerant Coil Module
1	M1218CL1-H	Hot Water Coil Module
1	UPC-01-1218	Return Air Box with filter and grille, 14" x 20"
1	UPC-104-1218	Return Air Adapter for 12" duct
1	UPC-04-1218	Return Air Duct, 12" D X 10 feet
1	UPC-94	Secondary Drain Pan
1	UPC-89TM-6	TFS Install Kit, Round Metal plenum
3	UPC-89TM-1	TFS Install Kit, Round Metal plenum
1	UPC-26TC-6	Sound Attenuator Tubing with couplings attached, Twist-Fit System 2" ID x 12'L, R-3.3
3	UPC-26TC-1	Sound Attenuator Tubing with couplings attached, Twist-Fit System 2" ID x 12'L, R-3.3
1		3rd Party Condensing Unit

You will need all accessories as with any other A/C System such as Disconnect Box, Thermostat, Tape, Line Set, Etc.

**Used for example only.* Unico air handlers match up with the outdoor units of all manufacturers. Call Unico Technical Support for all match-ups.

TYPICAL SYSTEM SHEETS



1 Ton Estimated Material List

Qty.	Part Number	Description
1	M1218BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M1218CL1-E	Module, Refrigerant Coil (6 Row) (HP)
1	UPC-61-1218	Adapter, Supply, M1218
1	UPC-94	Drain Pan, Secondary, M1218
1	UPC-104-1218	Adapter, Return Air, M1218
1	UPC-04-1218	Return Air Duct, 12" x 10'L
1	UPC-01-1218	Filter, Grille/Return Box, 14x20
1	UPC-89TM-6	TFS Install Kit, Round Metal plenum, Includes 6 Supply outlet, w/Toggles and screws, 6 take-offs, curved flange
1	UPC-38TC-W-6*	TFS, Coupling, 2" Duct, 12 Connectors, makes 6 couplings - For white outlet face plates
1	UPC-26TC-6	Sound Attenuator Tubing, TFS, Couplings Attached 2" ID x 12'L, R-3.3 (72 ft. per box)

1.5 Ton Estimated Material List

Qty.	Part Number	Description
1	M1218BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M1218CL1-E	Module, Refrigerant Coil (6 Row)-(HP)
1	UPC-61-1218	Adapter, Supply, M1218
1	UPC-94	Drain Pan, Secondary, M1218
1	UPC-104-1218	Adapter, Return Air, M1218
1	UPC-04-1218	Return Air Duct, 12" x 10'L
1	UPC-01-1218	Filter, Grille/Return Box, 14x20
1	UPC-89TM-6	TFS Install Kit, Round Metal plenum, Includes 6 Supply outlet, w/Toggles and screws, 6 take-offs, curved flange
1	UPC-38TC-W-6*	TFS, Coupling, 2" Duct, 12 Connectors, makes 6 couplings - For white outlet face plates
1	UPC-26TC-6	Sound Attenuator Tubing, TFS, Couplings Attached 2" ID x 12'L, R-3.3 (72 ft. per box)
3	UPC-89TM-1	TFS Install Kit, Round Metal plenum, Includes 1 Supply outlet, w/Toggles and screws, 1 take-off, curved flange
3	UPC-38TC-W-1*	TFS, Coupling, 2" Duct, 2 Connectors, makes 1 coupling - For white outlet face plates
3	UPC-26TC-1	Sound Attenuator Tubing, TFS, Couplings Attached 2" ID x 12'L, R-3.3, single length (12 ft. per box)

Each material list assumes the minimum of six 12' runs per ton.

*Couplings only required if splicing tube

HOW TO CHOOSE A UNICO SYSTEM

2430 SELECTION GUIDE - *Follow this simple 7 Step Guide to creating a Unico System*



STEP ONE:

Choosing a Blower Module

Choose one, all modules are compatible with any major condensing unit/heat pump manufacturer

- Single Speed Motor: Single Speed, 1750 RPM, PSC blower: M2430BL2-ST2
- Variable Speed Motor: Variable speed EC motor, 120/208/230 (which can use default settings or be programmed with a laptop computer): M2430BL1-EC2



STEP TWO:

Choosing a Coil Module

Choose one, this is the cooling module, although it can be used for heating with the use of a heat pump compatible with any major condensing unit/heat pump manufacturer

- Air Conditioning Coil 4-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the evaporator coil from freezing: M2430CL1-B
- Heat Pump Coil 6-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the coil from freezing: M2430CL1-E



STEP THREE:

Choosing your Return Air Components

Most Unico System installations only require one (1) central return. There are three components of the return air:

The Return Air Box and Filter Grille

The Return Air Adapter

The Return Air Duct

- Return Air Box: The Return Air Box consists of a filter grille and box, with "Q" bands for easy installation: UPC-01-2430
- Return Air Duct: This consists of ten-foot-long return air duct made out of a sound attenuating material that is 14 inches inside diameter: UPC-04-2430
- Return Air Adapter for Cooling Module: This is a rectangular to elliptical connector that is fastened to the cooling coil module with self-tapping metal screws: UPC-59-2430
- Return Air Adapter for Heating Module: This is a latching adapter that clips to the hot water heating module, the other end then attaches with the "Q" bands included in the return air box: UPC-104-2430
- Multiple Return Air Box: This item attaches to the cooling module or hot water module with the suitcase latches and flanges as other modules. It includes a filter that is easily accessible from either end: M2430R1



STEP FOUR:

Choosing Accessories

- Secondary Drain Pan: Designed to catch an emergency overflow from the primary drain pan. A must if installing the air handler in a horizontal position: UPC-20B (two modules) or UPC-20C (three modules)
- Starting Collar: This piece is used to attach the plenum to the blower module of the air handler: UPC-61-2430 (Round Duct) or UPC-62-2430 (Square Duct)
- Vertical Stand: This stand has a filter rack and space for a hot water coil. It also contains a spacer and fill plate to be placed between the blower module and coil module: M2430V2

**STEP FIVE:****Choosing Supply Air**

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (1) Supply outlet with Toggles and screws and (1) take-off, curved flange: UPC-89TM-1

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (6) Supply outlets with Toggles and screws and (6) take-offs, curved flange: UPC-89TM-6

Twist-Fit System (1) Single Sound Attenuator Tubing with couplings attached, 2" ID x 12'L, R-3.3 (12 ft. per box): UPC-26TC-1

Twist-Fit System (6) Six Sound Attenuator Tubes with couplings attached, 2" ID x 12'L, R-3.3 (72 ft. per box): UPC-26TC-6

A **MINIMUM** of six (6) outlets per ton are needed

**STEP SIX:****Choosing an Outdoor Unit**

IF USING THE TXV COIL (either for air-conditioning or heat pump), use any major third-party equipment manufacturer. To check the ratings go to www.ahridirectory.org, then go to "Air-Conditioning". You can select your match-up by going to "Outside Unit" of your choice, then "Indoor Unit" of Unico. If there is no match-up, please call our Technical Support department at 1-800-527-0896 to check the specifications.

**STEP SEVEN:****Consider an Alternative Air Handler**

Vertical Air Handler: This is a one-piece, painted unit that contains the variable speed blower motor, cooling coil and a space for an optional hot water heating coil. It is a fast and easy alternative to using the Vertical Stand: V2430

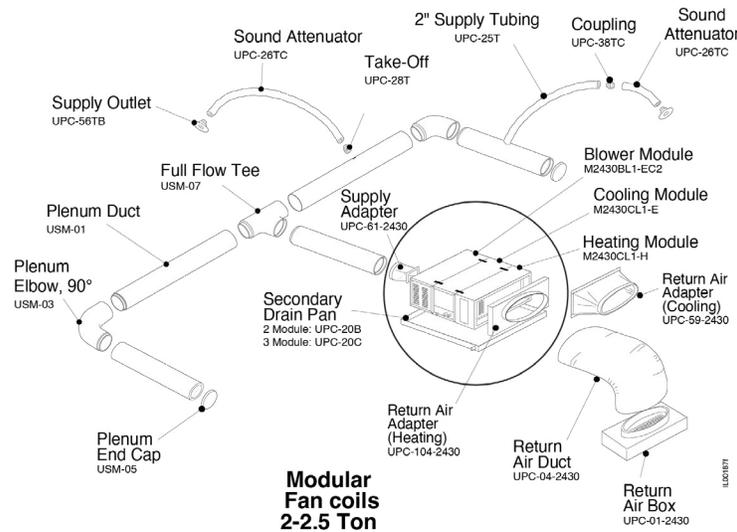
Example Parts List*

We have a customer who wants a **two-ton air conditioner**. The air handler is installed horizontally, using the variable speed motor and no supply runs are more than twelve feet. Here is an example material list.

Qty	Part Number	Description
1	M2430BL1-EC2	2 to 2 ½ Ton Variable Speed Blower for 120/208/230V power
1	M2430CL1-B	2 to 2 ½ Ton Refrigerant Coil (4 Row) for A/C
1	UPC-01-2430	Return Air Box with Grille and Filter
1	UPC-04-2430	Return Air Duct, R 4,2 14"D x 10 feet
1	UPC-59-2430	Return Air Adapter
1	UPC-20B	Secondary Drain Pan
1	UPC-61-2430	Starting collar for round duct
2	UPC-89TM-6	TFS Install Kit, round metal plenum
2	UPC-26TC-6	Sound Attenuator tubing with couplings attached, Twist-Fit System 2" ID x 12'L, R-3.3
1		3rd Party Condensing Unit

You will need all accessories as with any other A/C System such as Disconnect Box, Thermostat, Tape, Line Set, Etc.

**Used for example only.* Unico air handlers match up with the outdoor units of all manufacturers. Call Unico Technical Support for all match-up.



2 Ton Estimated Material List

Qty.	Part Number	Description
1	M2430BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M2430CL1-E	Module, H-coil, R-410A TXV, 2.5T Refrigerant Coil (6 Row) (HP)
1	M2430CL1-H	Module, Coil, Hot water, 2.5T
1	UPC-61-2430	Adapter, Supply, 2430
1	UPC-20C	Drain Pan, Secondary, 3 Module, 2430
1	UPC-104-2430	Adapter, Return Air, Heat or Vertical Module 2430
1	UPC-04-2430	Return Air Duct, 14" x 10'L
1	UPC-01-2430	Filter, Grille/Return Box, 14" x 25"
2	UPC-89TM-6	TFS Install Kit, Round metal plenum, Includes 6 supply outlet, w/toggles and screws, 6 take-offs, curved flange
2	UPC-38TC-W-6*	TFS, Coupling, 2" Duct, 12 connectors, makes 6 couplings - For white outlet face plates
2	UPC-26TC-6	Sound Attenuator tubing, TFS, couplings attached 2" ID x 12'L, R-3.3 (72 ft. per box)

2.5 Ton Estimated Material List using 2430

Qty.	Part Number	Description
1	M2430BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M2430CL1-E	Module, H-coil, R-410A TXV, 2.5T Refrigerant Coil (6 Row) (HP)
1	M2430CL1-H	Module, Coil, Hot water, 2.5T
1	UPC-61-2430	Adapter, Supply, 2430
1	UPC-20C	Drain Pan, Secondary, 3 Module, 2430
1	UPC-104-2430	Adapter, Return Air, Heat or Vertical Module 2430
1	UPC-04-2430	Return Air Duct, 14" x 10'L
1	UPC-01-2430	Filter, Grille/Return Box, 14" x 25"
2	UPC-89TM-6	TFS Install Kit, Round Metal plenum, Includes 6 supply outlet, w/toggles and screws, 6 take-offs, curved flange
2	UPC-38TC-W-6*	TFS, Coupling, 2" Duct, 12 Connectors, makes 6 couplings - For white outlet face plates
2	UPC-26TC-6	Sound Attenuator Tubing, TFS, Couplings Attached 2" ID x 12'L, R-3.3 (72 ft. per box)
3	UPC-89TM-1	TFS Install Kit, Round Metal plenum, Includes 1 supply outlet, w/toggles and screws, 1 take-off, curved flange
3	UPC-38TC-W-1*	TFS, Coupling, 2" Duct, 2 connectors, makes 1 coupling - For white outlet face plates
3	UPC-26TC-1	Sound Attenuator Tubing, TFS, couplings Attached 2" ID x 12'L, R-3.3, single length (12 ft. per box)

Each material list assumes the minimum of six 12' runs per ton.

*Couplings only required if splicing tube

HOW TO CHOOSE A UNICO SYSTEM

3036 SELECTION GUIDE - Follow this simple 7 Step Guide to creating a Unico System



STEP ONE:

Choosing a Blower Module

Choose one, all modules are compatible with any major condensing unit/heat pump manufacturer

- Single Speed Motor: Single Speed, 1750 RPM, PSC blower: M3036BL2-ST2
- Variable Speed Motor: Variable speed EC motor, 120/208/230V (which can use default settings or be programmed with a laptop computer): M3036BL1-EC2



STEP TWO:

Choosing a Coil Module

Choose one, this is the cooling module, although it can be used for heating with the use of a heat pump compatible with any major condensing unit/heat pump manufacturer

- Air Conditioning Coil 4-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the evaporator coil from freezing and liquid refrigerant from slugging the compressor: M3036CL1-B
- Heat Pump Coil 6-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the liquid refrigerant from slugging the compressor and the coil from freezing: M3036CL1-E



STEP THREE:

Choosing your Return Air Components

Most Unico System installations only require one (1) central return. There are three components of the return air:

The Return Air Box and Filter Grille

The Return Air Adapter

The Return Air Duct

- Return Air Box: The Return Air Box consists of a filter grille and box, with "Q" bands for easy installation: UPC-01-3036
- Return Air Duct: This consists of ten-foot-long return air duct made out of a sound attenuating material that is 16 inches inside diameter: UPC-04-3036
- Return Air Adapter for Cooling Module: This is a rectangular to elliptical connector that is fastened to the cooling coil module with self-tapping metal screws: UPC-59-3036
- Return Air Adapter for Heating Module: This is a latching adapter that clips to the hot water heating module, the other end then attaches with the "Q" bands included in the return air box: UPC-104-3036
- Multiple Return Air Box: This item attaches to the cooling module or hot water module with the suitcase latches and flanges as other modules. It includes a filter that is easily accessible from either end: M3036R1



STEP FOUR

Choosing Accessories

- Secondary Drain Pan: Designed to catch an emergency overflow from the primary drain pan. A must if installing the air handler in a horizontal position: UPC-27B (two modules) UPC-27C (three modules)
- Starting Collar: This piece is used to attach the plenum to the blower module of the air handler: UPC-61-3036 (Round Duct) or UPC-62-3036 (Square Duct)
- Vertical Stand: This stand has a filter rack and space for a hot water coil. It also contains a spacer and fill plate to be placed between the blower module and coil module: M3036V2

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STEP FIVE:

Choosing Supply Air

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (1) Supply outlet with Toggles and screws and (1) take-off, curved flange: UPC-89TM-1

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (6) Supply outlets with Toggles and screws and (6) take-offs, curved flange: UPC-89TM-6

Twist-Fit System (1) Single Sound Attenuator Tubing with couplings attached, 2" ID x 12'L, R-3.3 (12 ft. per box): UPC-26TC-1

Twist-Fit System (6) Six Sound Attenuator Tubes with couplings attached, 2" ID x 12'L, R-3.3 (72 ft. per box): UPC-26TC-6

A **MINIMUM** of six (6) outlets per ton are needed

6

STEP SIX:

Choosing an Outdoor Unit

IF USING THE TXV COIL (either for air-conditioning or heat pump), use any major third-party equipment manufacturer. To check the ratings go to www.ahridirectory.org, then go to "Air-Conditioning". You can select your match-up by going to "Outside Unit" of your choice, then "Indoor Unit" of Unico. If there is no match-up, please call our Technical Support department at 1-800-527-0896 to check the specifications.

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STEP SEVEN:

Consider an Alternative Air Handler

Vertical Air Handler: This is a one-piece, painted unit that contains the variable speed blower motor, cooling coil and a space for an optional hot water heating coil. It is a fast and easy alternative to using the Vertical Stand: V3036

Example Parts List*

We have a customer who wants a **three-ton air conditioner**. The air handler is installed horizontally, using the variable speed motor and no supply runs are more than twelve feet. Here is an example material list

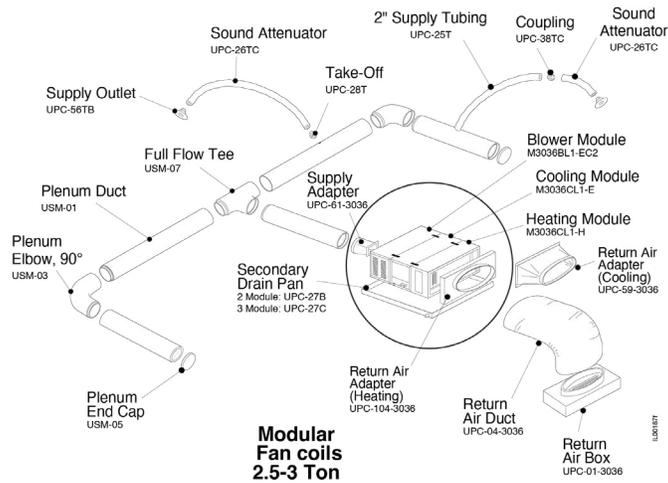
Qty	Part Number	Description
1	M3036BL1-EC2	2 ½ to 3 Ton Variable Speed Blower for 120/208/230V
1	M3036CL1-B	2 ½ to 3 Ton Refrigerant Coil (4 Row) for A/C
1	UPC-01-3036	Return Air Box with Grille and Filter
1	UPC-04-3036	Return Air Duct, R 4.2 16"D x 10 feet
1	UPC-59-3036	Return Air Adapter
1	UPC-27B	Secondary Drain Pan
1	UPC-61-3036	Starting Collar for Round Duct
3	UPC-89TM-6	TFS Install Kit, Round Metal plenum
3	UPC-26TC-6	Sound Attenuator Tubing with couplings attached, Twist-Fit System 2" ID x 12'L, R-3.3
1		3rd Party Condensing Unit

You will need all accessories as with any other A/C System such as Disconnect Box, Thermostat, Tape, Line Set, Etc.

**Used for example only.*

Unico air handlers match up with the outdoor units of all manufacturers. Call Unico Technical Support for all match-ups.

TYPICAL SYSTEM SHEETS



2.5 Ton Estimated Material List using 3036

Qty	Part Number	Description
1	M3036BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M3036CL1-E	Module, Refrigerant Coil (6 Row) (HP)
1	M3036CL1-H	Module, Coil, Hot water, 2.5-3.0T
1	UPC-61-3036	Adapter, Supply, 3036
1	UPC-27C	Drain Pan, Secondary, 3 Module, 3036
1	UPC-104-3036	Adapter, Return Air, Heat or Vertical Module 3036
1	UPC-04-3036	Return Air Duct, 16" x 10'L
1	UPC-01-3036	Filter, Grille/Return Box, 14" x 30"
2	UPC-89TM-6	TFS Install Kit, Round Metal plenum, Includes 6 supply outlet, w/toggles and screws, 6 take-offs, curved flange
2	UPC-38TC-W-6*	TFS, Coupling, 2" Duct, 12 Connectors, makes 6 couplings - For white outlet face plates
2	UPC-26TC-6	Sound Attenuator Tubing, TFS, couplings Attached 2" ID x 12'L, R-3.3 (72 ft. per box)
3	UPC-89TM-1	TFS Install Kit, Round Metal plenum, Includes 1 Supply outlet, w/Toggles and screws, 1 take-off, curved flange
3	UPC-38TC-W-1*	TFS, Coupling, 2" Duct, 2 Connectors, makes 1 coupling - For white outlet face plates
3	UPC-26TC-1	Sound Attenuator Tubing, TFS, Couplings Attached 2" ID x 12'L, R-3.3, single length (12 ft. per box)

3 Ton Estimated Material List using 3036

Qty	Part Number	Description
1	M3036BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M3036CL1-E	Module, Refrigerant Coil (6 Row) (HP)
1	M3036CL1-H	Module, Coil, Hot water, 2.5-3.0T
1	UPC-61-3036	Adapter, Supply, 3036
1	UPC-27C	Drain Pan, Secondary, 3 Module, 3036
1	UPC-104-3036	Adapter, Return Air, Heat or Vertical Module 3036
1	UPC-04-3036	Return Air Duct, 16" x 10'L
1	UPC-01-3036	Filter, Grille/Return Box, 14" x 30"
3	UPC-89TM-6	TFS Install Kit, Round Metal plenum, Includes 6 supply outlet, w/toggles and screws, 6 take-offs, curved flange
3	UPC-38TC-W-6*	TFS, Coupling, 2" Duct, 12 Connectors, makes 6 couplings - For white outlet face plates
3	UPC-26TC-6	Sound Attenuator Tubing, TFS, couplings Attached 2" ID x 12'L, R-3.3 (72 ft. per box)

Each material list assumes the minimum of six 12' runs per ton.

*Couplings only required if splicing tube

HOW TO CHOOSE A UNICO SYSTEM

3642 SELECTION GUIDE - *Follow this simple 7 Step Guide to creating a Unico System*



STEP ONE:
Choosing a Blower Module

Choose one, all modules are compatible with any major condensing unit/heat pump manufacturer

- Single Speed Motor: Single Speed, 1750 RPM, PSC blower: M3642BL2-ST2
- Variable Speed Motor: Variable speed EC motor, 120/208/230 (which can use default settings or be programmed with a laptop computer): M3642BL1-EC2



STEP TWO:
Choosing a Coil Module

Choose one, this is the cooling module, although it can be used for heating with the use of a heat pump compatible with any major condensing unit/heat pump manufacturer

- Air Conditioning Coil 4-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the evaporator coil from freezing and liquid refrigerant from slugging the compressor: M3642CL1-B
- Heat Pump Coil 6-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the coil from freezing: M3642CL1-E



STEP THREE:
Choosing your return air components

Most Unico System installations only require one (1) central return. There are three components of the return air:

The Return Air Box and Filter Grille

The Return Air Adapter

The Return Air Duct

- Return Air Box: The Return Air Box consists of a filter grille and box, with "Q" bands for easy installation: UPC-01-3642
- Return Air Duct: This consists of ten-foot-long return air duct made out of a sound attenuating material that is 18 inches inside diameter: UPC-04-3642
- Return Air Adapter for Cooling Module: This is a rectangular to elliptical connector that is fastened to the cooling coil module with self-tapping metal screws: UPC-59-3642
- Return Air Adapter for Heating Module: This is a latching adapter that clips to the hot water heating module, the other end then attaches with the "Q" bands included in the return air box: UPC-104-3642
- Multiple Return Air Box: This item attaches to the cooling module or hot water module with the suitcase latches and flanges as other modules. It includes a filter that is easily accessible from either end: M3642R1



STEP FOUR
Choosing Accessories

- Secondary Drain Pan: Designed to catch an emergency overflow from the primary drain pan. A must if installing the air handler in a horizontal position: UPC-24B (two modules) UPC-24C (three modules)
- Starting Collar: This piece is used to attach the plenum to the blower module of the air handler: UPC-61-3642 (Round Duct) or UPC-62-3642 (Square Duct)
- Vertical Stand: This stand has a filter rack and space for a hot water coil. It also contains a spacer and fill plate to be placed between the blower module and coil module: M3642V2:

**STEP FIVE:*****Choosing Supply Air***

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (1) Supply outlet with Toggles and screws and (1) take-off, curved flange: UPC-89TM-1

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (6) Supply outlets with Toggles and screws and (6) take-offs, curved flange: UPC-89TM-6

Twist-Fit System (1) Single Sound Attenuator Tubing with couplings attached, 2" ID x 12'L, R-3.3 (12 ft. per box): UPC-26TC-1

Twist-Fit System (6) Six Sound Attenuator Tubes with couplings attached, 2" ID x 12'L, R-3.3 (72 ft. per box): UPC-26TC-6

A **MINIMUM** of six (6) outlets per ton are needed

**STEP SIX:*****Choosing an Outdoor Unit***

IF USING THE TXV COIL (either for air-conditioning or heat pump), use any major third-party equipment manufacturer. To check the ratings go to www.ahridirectory.org, then go to "Air-Conditioning". You can select your match-up by going to "Outside Unit" of your choice, then "Indoor Unit" of Unico. If there is no match-up, please call our Technical Support department at 1-800-527-0896 to check the specifications.

**STEP SEVEN:*****Consider an Alternative Air Handler***

Vertical Air Handler: This is a one-piece, painted unit that contains the variable speed blower motor, cooling coil and a space for an optional hot water heating coil. It is a fast and easy alternative to using the Vertical Stand: V3642

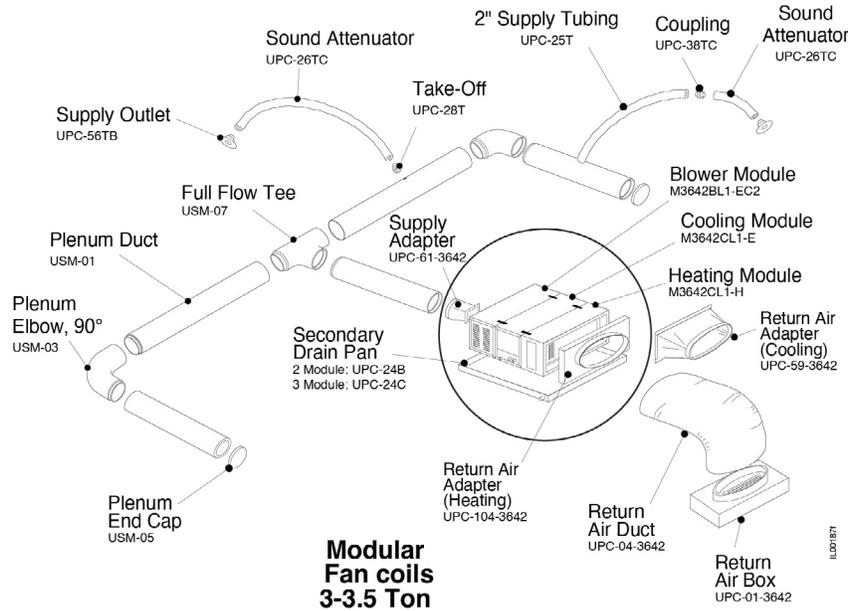
Example Parts List*

We have a customer who wants a **three and one-half ton air conditioner**. The air handler is installed horizontally, using the variable speed motor and no supply runs are more than twelve feet. Here is an example material list

Qty	Part Number	Description
1	M3642BL1-EC2	3 to 3 ½ Ton Variable Speed Blower for 120/208/230V
1	M3642CL1-B	3 to 3 ½ Ton Refrigerant Coil (4 Row) for A/C
1	UPC-01-3642	Return Air Box with Grille and Filter
1	UPC-04-3642	Return Air Duct, R 4.2 18"D x 10 feet
1	UPC-59-3642	Return Air Adapter
1	UPC-24B	Secondary Drain Pan
1	UPC-61-3642	Starting Collar for Round Duct
4	UPC-89TM-6	TFS Install Kit, Round Metal plenum
4	UPC-26TC-6	Sound Attenuator Tubing with couplings attached, Twist-Fit System 2" ID x 12'L, R-3.3
1		3rd Party Condensing Unit

You will need all accessories as with any other A/C System such as Disconnect Box, Thermostat, Tape, Line Set, Etc.

**Used for example only.* Unico air handlers match up with the outdoor units of all manufacturers. Call Unico Technical Support for all match-ups.



3 Ton Estimated Material List using 3642

Qty	Part Number	Description
1	M3642BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M3642CL1-E	Module, Refrigerant Coil (6 Row) (HP)
1	M3642CL1-H	Module, Heating (w/ Hot Water Coil)
1	UPC-61-3642	Adapter, Supply, 3642
1	UPC-24C	Drain Pan, Secondary, 3 Module, 3642
1	UPC-104-3642	Adapter, Return Air, Heat or Vertical Module 3642
1	UPC-04-3642	Return Air Duct, 18" x 10'L
1	UPC-01-3642	Filter, Grille/Return Box, 14" x 30"
3	UPC-89TM-6	TFS Install Kit, round metal plenum, Includes 6 supply outlet, w/toggles and screws, 6 take-offs, curved flange
3	UPC-38TC-W-6*	TFS, coupling, 2" duct, 12 connectors, makes 6 couplings - For white outlet face plates
3	UPC-26TC-6	Sound attenuator tubing, TFS, couplings attached 2" ID x 12'L, R-3.3 (72 ft. per box)

3.5 Ton Estimated Material List

Qty	Part Number	Description
1	M3642BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M3642CL1-E	Module, Refrigerant Coil (6 Row) (HP)
1	M3642CL1-H	Module, HEATING (w/ Hot Water Coil)
1	UPC-61-3642	Adapter, Supply, 3642
1	UPC-24C	Drain Pan, Secondary, 3 Module, 3642
1	UPC-104-3642	Adapter, Return Air, Heat or Vertical Module 3642
1	UPC-04-3642	Return Air Duct, 18" x 10'L
1	UPC-01-3642	Filter, Grille/Return Box, 14" x 30"
3	UPC-38TC-W-6*	TFS, Coupling, 2" Duct, 12 Connectors, makes 6 couplings - For white outlet face plates
3	UPC-26TC-6	Sound Attenuator Tubing, TFS, Couplings Attached 2" ID x 12'L, R-3.3 (72 ft. per box)
3	UPC-38TC-W-1*	TFS, Coupling, 2" Duct, 2 Connectors, makes 1 coupling - For white outlet face plates
3	UPC-26TC-1	Sound Attenuator Tubing, TFS, Couplings Attached 2" ID x 12'L, R-3.3, single length (12 ft. per box)

Each material list assumes the minimum of six 12' runs per ton.

*Couplings only required if splicing tube

HOW TO CHOOSE A UNICO SYSTEM

4860 SELECTION GUIDE - *Follow this simple 6 Step Guide to creating a Unico System*



STEP ONE:

Choosing a Blower Module

Choose one, all modules are compatible with any major condensing unit/heat pump manufacturer

- Single Speed Motor: M4860BL2-ST2 (Single Speed, 1750 RPM, PSC blower)
- Variable Speed Motor: EC motor, 120/208/230V (can use default settings or be programmed with a laptop computer): M4860BL1-EC2



STEP TWO:

Choosing a Coil Module

Choose one, this is the cooling module, although it can be used for heating with the use of a heat pump compatible with any major condensing unit/heat pump manufacturer

- Air Conditioning Coil 3-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the coil from freezing and the liquid refrigerant from slugging the compressor: M4860CL1-B
- Heat Pump Coil 4-Row Deep: Uses externally balanced TXV, has two bi-metal switches to prevent the liquid refrigerant from slugging the compressor and the coil from freezing: M4860CL1-E

All M4860 Coils have a spacer included to fit between the blower module and coil module, this is needed in both vertical and horizontal applications. If installing horizontally, please be sure to install the drip plate, included with the spacer.



STEP THREE:

Choosing your return air components

Most Unico System installations only require one (1) central return. There are three components of the return air:

The Return Air Box and Filter Grille

The Return Air Adapter

The Return Air Duct

- Return Air Box: The Return Air Box consists of a filter grille and box, with "Q" bands for easy installation: UPC-01-4860
- Return Air Duct: This consists of ten-foot-long return air duct made out of a sound attenuating material that is 20 inches inside diameter: UPC-04-4860
- Return Air Adapter for Cooling Module: This is a rectangular to elliptical connector that is fastened to the cooling coil module with self-tapping metal screws: UPC-59-4860
- Return Air Adapter for Heating Module: This is a latching adapter that clips to the hot water heating module, the other end then attaches with the "Q" bands included in the return air box: UPC-104-4860
- Multiple Return Air Box: This item attaches to the cooling module or hot water module with the suitcase latches and flanges as other modules. It includes a filter that is easily accessible from either end: M4860R1



STEP FOUR:

Choosing Accessories

- Secondary Drain Pan: Designed to catch an emergency overflow from the primary drain pan. A must if installing the air handler in a horizontal position: UPC-24C (two modules) UPC-24D (three modules)
- Starting Collar: This piece is used to attach the plenum to the blower module of the air handler: UPC-61-4860 (Round Duct) or UPC-62-4860 (Square Duct)
- Vertical Stand: This stand has a filter rack and space for a hot water coil: M4860V2

5

STEP FIVE:

Choosing Supply Air

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (1) Supply outlet with Toggles and screws and (1) take-off, curved flange: UPC-89TM-1

Twist-Fit System Installation Kit: Round Metal plenum, kit includes (6) Supply outlets with Toggles and screws and (6) take-offs, curved flange: UPC-89TM-6

Twist-Fit System (1) Single Sound Attenuator Tubing with couplings attached, 2" ID x 12'L, R-3.3 (12 ft. per box): UPC-26TC-1

Twist-Fit System (6) Six Sound Attenuator Tubes with couplings attached, 2" ID x 12'L, R-3.3 (72 ft. per box): UPC-26TC-6

A **MINIMUM** of six (6) outlets per ton are needed

6

STEP SIX:

Choosing an Outdoor Unit

IF USING THE TXV COIL (either for air-conditioning or heat pump), use any major third-party equipment manufacturer. To check the ratings go to www.ahridirectory.org, then go to "Air-Conditioning". You can select your match-up by going to "Outside Unit" of your choice, then "Indoor Unit" of Unico. If there is no match-up, please call our Technical Support department at 1-800-527-0896 to check the specifications.

Example Parts List*

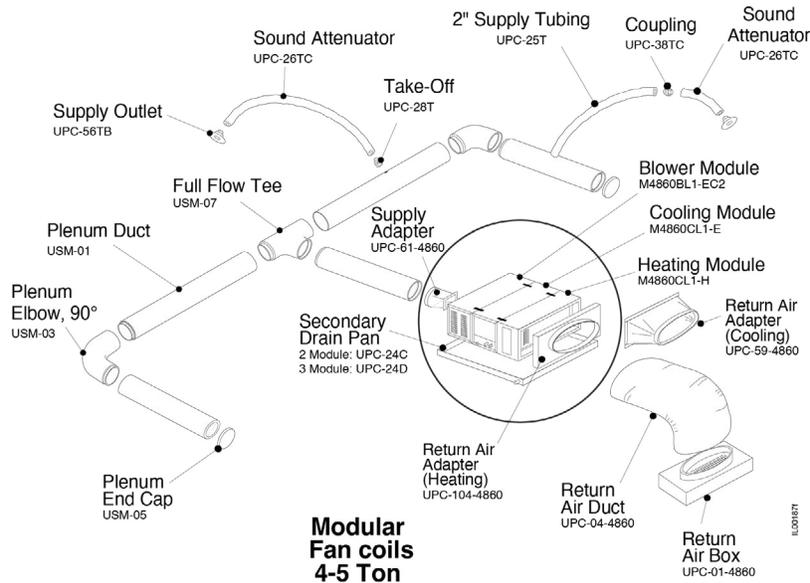
We have a customer who wants a **five-ton air conditioner**. The air handler is installed horizontally, using the variable speed motor and no supply runs are more than twelve feet. Here is an example material list

Qty	Part Number	Description
1	M4860BL1-EC2	4 to 5 Ton Variable Speed Blower for 120/208/230V power
1	M4860CL1-B	4 to 5Ton Refrigerant Coil (3 Row) for A/C
1	UPC-01-4860	Return Air Box with Grille and Filter
1	UPC-04-4860	Return Air Duct, R 4.2 20"D x 10 feet
1	UPC-59-4860	Return Air Adapter
1	UPC-24B	Secondary Drain Pan
1	UPC-61-4860	Starting Collar for Round Duct
6	UPC-89TM-6	TFS Install Kit, Round Metal plenum
6	UPC-26TC-6	Sound Attenuator Tubing with couplings attached, Twist-Fit System 2" ID x 12'L, R-3.3
1		3rd Party Condensing Unit

You will need all accessories as with any other A/C System such as Disconnect Box, Thermostat, Tape, Line Set, Etc.

**Used for example only.* Unico air handlers match up with the outdoor units of all manufacturers. Call Unico Technical Support for all match-ups.

TYPICAL SYSTEM SHEETS



4 Ton Estimated Material List

Qty	Part Number	Description
1	M4860BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M4860CL1-E	Module, Refrigerant Coil (6 Row) (HP)
1	M4860CL1-H	Module, Heating (w/ Hot Water Coil)
1	UPC-61-4860	Adapter, Supply, 4860
1	UPC-24D	Drain Pan, Secondary, 3 Module, 4860
1	UPC-104-4860	Adapter, Return Air, Heat or Vertical Module 4860
1	UPC-04-4860	Return Air Duct, 20" x 10'L
1	UPC-01-4860	Filter, Grille/Return Box, 24" x 30"
4	UPC-89TM-6	TFS Install Kit, round metal plenum, includes 6 supply outlet, w/toggles and screws, 6 take-offs, curved flange
4	UPC-38TC-W-6*	TFS, Coupling, 2" duct, 12 connectors, makes 6 couplings - For white outlet face plates
4	UPC-26TC-6	Sound Attenuator tubing, TFS, couplings attached 2" ID x 12'L, R-3.3 (72 ft. per box)

5 Ton Estimated Material List

Qty	Part Number	Description
1	M4860BL1-EC2	Module, Blower, S.M.A.R.T. Control, Variable Speed EC Motor, 120/208/230V
1	M4860CL1-E	Module, Refrigerant Coil (6 Row) (HP)
1	M4860CL1-H	Module, Heating (w/ Hot Water Coil)
1	UPC-61-4860	Adapter, Supply, 4860
1	UPC-24D	Drain Pan, Secondary, 3 Module, 4860
1	UPC-104-4860	Adapter, Return Air, Heat or Vertical Module 4860
1	UPC-04-4860	Return Air Duct, 20" x 10'L
1	UPC-01-4860	Filter, Grille/Return Box, 24" x 30"
5	UPC-89TM-6	TFS Install Kit, round metal plenum, includes 6 supply outlet, w/toggles and screws, 6 take-offs, curved flange
5	UPC-38TC-W-6*	TFS, Coupling, 2" duct, 12 connectors, makes 6 couplings - for white outlet face plates
5	UPC-26TC-6	Sound Attenuator tubing, TFS, couplings Attached 2" ID x 12'L, R-3.3 (72 ft. per box)

Each material list assumes the minimum of six 12' runs per ton.

*Couplings only required if splicing tube

PRODUCT FEATURES

- The EC Motor has the best efficiency and control as well as the quietest operation.
- Balanced wheels
- Direct drive motor
- Shaft key connection
- Separate control box
- Control voltage transformer
- Screw terminal connections
- Heat pump AFS bypass
- Boiler relay
- Six (6) modes of operation
- Adjustable low airflow mode
- Efficient ventilation mode
- Point-to-point wiring
- Electric heater fan interlock
- Electric heater stage 3 lockout protection
- Chilled water relay
- Fan cycling EAC, ERV, or HRV relay
- Potable water circulation
- Humidifier compatibility
- Soft-start and soft-stop
- Constant airflow
- Low airflow indicator
- Preset airflow rate
- Laptop configurable
- Laptop troubleshooting
- Optimized for zone damper systems
- Optimized for efficiency and sound
- Dual Voltage



M1218BL1-EC2
Blower Module



M3036BL1-EC2
Blower Module

Part Number	M1218BL1-EC2*	M2430BL1-EC2	M3036BL1-EC2	M3642BL1-EC2	M4860BL1-EC2
Unit Dimensions	12" X 20" X 15"	17.5" x 25" x 13.75"	17.5" x 30" x 13.75"	17.5" x 38" x 13.75"	17.5" x 38" x 13.75"
Box Dimensions	24" x 22" x 14"	29"X16"X20"	34"X 16" X20"	42"X 16" X20"	42"X 16" X20"
Weight (lbs)	60	62	73	73	73
Decibel Rating		56	56	56	58
Capacity	1 to 1 1/2 Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
Electrical Power	120/208/230 Volt Single Phase				
Nominal Air Flow Rate in CFM	300	600	750	900	1250
SEER*	12	12	12	12	12

* Will vary with condenser matchup

PRODUCT FEATURES



M2430BL2-ST2
Blower Module

- Balanced wheels
- Direct drive motor
- Shaft key connection
- Quick motor replacement
- Separate control box
- Control voltage transformer
- Adjustable restrictor plate
- Screw terminal connections
- Heat pump AFS bypass
- Two (2) modes of operation



M4860BL2-ST2
Blower Module

Part Number	M1218BL2-ST2*	M2430BL2-ST2	M3036BL2-ST2	M3642BL2-ST2	M4860BL2-ST2
Unit Dimensions	12" X 20" X 15"	17.5" x 25" x 13.75"	17.5" x 30" x 13.75"	17.5" x 38" x 13.75"	17.5" x 38" x 13.75"
Box Dimensions	24" x 22" x 14"	29" X 16" X 20"	34" X 16" X 20"	42" X 16" X 20"	42" X 16" X 20"
Weight (lbs)	60	62	73	73	73
Capacity	1 to 1 1/2 Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
Electrical Power	208/230 Volt Single Phase				
Nominal Air Flow Rate/CFM	300	600	750	900	1250
SEER**	12	12	12	12	12

* Many different combinations

* Will vary with condenser matchup

HEAT PUMP COILS

PRODUCT FEATURES

- Slant coil for M2430, M3036 and M3642
- Internally mounted TXV easily accessible, uses chatleff thread connections
- Standard Unico System "latch" method
- High Efficiency heat transfer surface
- Two bi-metal switches to prevent freezing
- Stainless Steel Drain Pan
- Four row deep refrigerant coil for cooling only, six rows deep for heat pump, allows for greater temperature drop over the coil
- Compatible for use with R22/R-407C and R410A refrigerants



M3642CL1-E
Heat Pump Coil

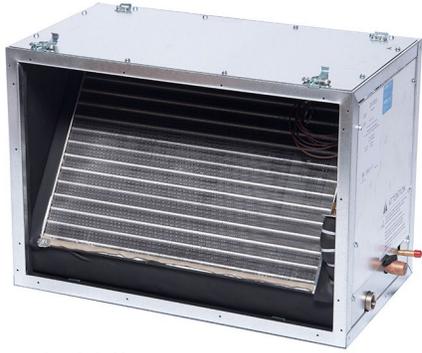
Part Number	M1218CL1-E	M2430CL1-E	M3036CL1-E	M3642CL1-E	M4860CL1-E
Unit Dimensions	12" X 20" X 16"	17.5" x 25" x 13.75"	17.5" x 30" x 13.75"	17.5" x 38" x 13.75"	17.5" x 38" x 24"
Box Dimensions	24" X 22" X 14"	29" X 16" X 20"	34" X 16" X 20"	42" X 16" X 20"	42" X 26" X 18"
Weight (lbs)	33	62	78	78	88
Capacity	1 to 1 1/2 Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
Refrigerant Line Sizes	3/8" X 5/8"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"
Compatible Condenser Size in Tons	1 to 1 1/2 Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons
4 to 5 tons					
SEER**	12	12	12	12	12**
Refrigerant Type	R410A	R410A or R22			
Condensate Connection	1/2"	3/4"	3/4"	3/4"	3/4"

** Will vary with condenser matchup

* "B" Coil is 4 rows deep/3 row for 4860

* "E" Coil is 6 rows deep/4 row for 4860

Note: Either type may be used with cooling only or with heat pump, please call Technical Support at 1-800-527-0896, option 1 for details



M2430CL1-E
Heat Pump Coil



M3642CL1-B
AC Coil



M4860CL1-B
AC Coil

Part Number	M2430CL1-B	M3036CL1-B	M3642CL1-B	M4860CL1-B
Unit Dimensions	17.5" x 25" x 13.75"	17.5" x 30" x 13.75"	17.5" x 38" x 13.75"	17.5" x 38" x 24"
Box Dimensions	29" X 16" X 20"	34" X 16" X 20"	42" X 16" X 20"	42" X 26" X 18"
Weight (lbs)	62	78	78	88
Capacity	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
Refrigerant Line Sizes	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"
Compatible Condenser Size in Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
SEER**	12	12	12	12
Refrigerant Type	R410A or R22			
Condensate Connection	3/4"	3/4"	3/4"	3/4"

** Will vary with condenser matchup

* "B" Coil is 4 rows deep/3 row for 4860

* "E" Coil is 6 rows deep/4 row for 4860

Note: Either type may be used with cooling only or with heat pump, please call Technical Support at 1-800-527-0896, option 1 for details

HEAT PUMP COATED COILS

PRODUCT FEATURES

- Reduces formicary corrosion
- Slant coil for M2430, M3036 and M3642
- Internally mounted TXV easily accessible, uses chatleff thread connections
- Standard Unico System "latch" method
- High efficiency heat transfer surface
- Two bi-metal switches to prevent freezing
- Stainless steel drain pan
- Four row deep refrigerant coil for cooling only, six rows deep for heat pump, allows for greater temperature drop over the coil
- Compatible for use with R22/R-407C and R410A refrigerants
- Heat pump coil has a 24v relay switch that bypasses anti-frost mode during the heating cycle

Unico has an "E-Coated Coil Option" available for all evaporator coil models in its current line. E-Coating improves the life of the coil by reducing the possibility of leaks and coil failures due to formicary corrosion



A00811-K01-C
E-Coated Coil Assembly
for M4860CL1-B

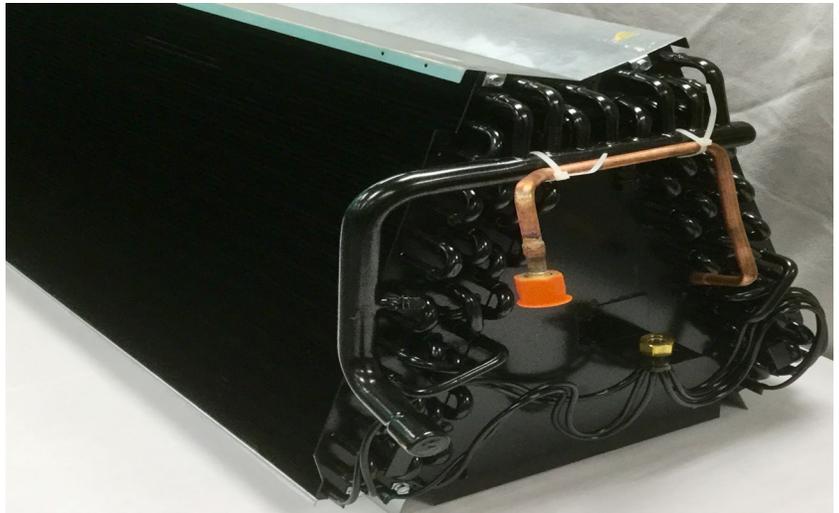
Part Number	M1218CL1-E0C	M2430CL1-E0C	M3036CL1-E0C	M3642CL1-E0C	M4860CL1-E0C
Unit Dimensions	12" X 20" X 16"	17.5" x 25" x 13.75"	17.5" x 30" x 13.75"	17.5" x 38" x 13.75"	17.5" x 38" x 24"
Box Dimensions	24" X 22" X 14"	29" X 16" X 20"	34" X 16" X 20"	42" X 16" X 20"	42" X 26" X 18"
Weight (lbs)	33	62	78	78	88
Capacity	1 to 1 1/2 Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
Refrigerant Line Sizes	3/8" X 5/8"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"
Compatible Condenser Size in Tons	1 to 1 1/2 Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons
SEER**	12	12	12	12	12
Refrigerant Type	R410A	R410A or R22			
Condensate Connection	1/2"	3/4"	3/4"	3/4"	3/4"

** Will vary with condenser matchup

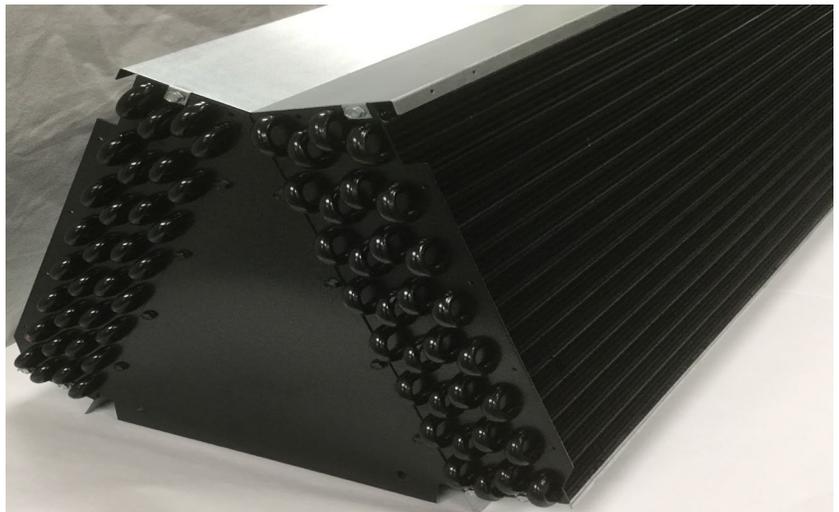
* "B" Coil is 4 rows deep/3 row for 4860

* "E" Coil is 6 rows deep/4 row for 4860

Note: Either type may be used with cooling only or with heat pump, please call Technical Support at 1-800-527-0896, option 1 for details



A00811-K02-C
E-Coated Coil Assembly
for M4860CL1-E



Part Number	M2430CL1-B0C	M3036CL1-B0C	M3642CL1-B0C	M4860CL1-B0C
Unit Dimensions	17.5" x 25" x 13.75"	17.5" x 30" x 13.75"	17.5" x 38" x 13.75"	17.5" x 38" x 24"
Box Dimensions	29" X 16" X 20"	34" X 16" X 20"	42" X 16" X 20"	42" X 26" X 18"
Weight (lbs)	62	78	78	88
Capacity	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
Refrigerant Line Sizes	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"
Compatible Condenser Size in Tons	2 to 2 1/2 Tons	2 1/2 to 3 Tons	3 to 3 1/2 Tons	4 to 5 tons
SEER**	12	12	12	12
Refrigerant Type	R410A or R22			
Condensate Connection	3/4"	3/4"	3/4"	3/4"

** Will vary with condenser matchup

* "B" Coil is 4 rows deep/3 row for 4860

* "E" Coil is 6 rows deep/4 row for 4860

Note: Either type may be used with cooling only or with heat pump, please call Technical Support at 1-800-527-0896, option 1 for details

CHILLED WATER COILS

PRODUCT FEATURES

- Can be used for either hot water or chilled water
- 22 gauge construction
- Compatible with ground source chillers for geothermal applications
- Easy snap latches
- Fully lined with closed-cell insulation
- Evenly spaced aluminum fins mechanically bonded to copper
- Full fin collars provide for excellent heat transfer
- Tubes are 3/8" outside diameter
- All water lines are sweat connections extending out of the cabinet



M3642CL1-C
Chilled Water Coil



M3036CL1-C
Chilled Water Coil

Part Number	M1218CL1-C	M2430CL1-C	M3036CL1-C	M3642CL1-C	M4860CL1-C
Unit Dimensions	12" X 20" X 16"	25" X 17 1/2" X 13 3/4"	30" X 17 1/2" X 13 3/4"	38" X 17 1/2" X 13 3/4"	38" X 17 1/2" X 24"
Box Dimensions	24" X 22" X 14"	29" x 16" x 20"	34" x 16" x 20"	42" x 16" x 20"	42" x 26" x 18"
Weight (lbs)	33	53	76	76	76
Water Connections	5/8" (Sweat)	7/8" (Sweat)	7/8" (Sweat)	7/8" (Sweat)	1-1/8" (Sweat)
Condensate Line Connection	1/2"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"	3/8" X 7/8"
Actual Coil Dimensions		13" X 23" X 4 1/2 "		13" X 30" X 4 1/2"	13" X 38" X 4 1/2"
BTU's of Output* 60,600*	20,900*	37,900*	41,600*	51,300*	

* Based on 40F incoming water, 8 GPM and Max CFM

PRODUCT FEATURES



M3036CL1-H
Hot Water Coil

- Can be matched to a blower module for heating only or matched with a blower module and cooling module for that both heating and cooling
- 22 gauge galvanized steel construction
- Easy snap latches
- Corrugated aluminum fins mechanically bonded to copper tubes
- Tubes are 1/2" diameter on staggered centers
- Each system is pressure tested at the factory
- Full-collar fins provide greater tube-fin contact for excellent heat transfer



M2430CL1-H
Hot Water Coil



M4860CL1-H
Hot Water Coil

Part Number	M1218CL1-H	M2430CL1-H	M3036CL1-H	M3642CL1-H	M4860CL1-H
Unit Dimensions	12" X 20" X 6"	25" X 17 1/2" X 13 3/4"	30" X 17 1/2" X 13 3/4"	38" X 17 1/2" X 13 3/4"	38" X 17 1/2" X 13 3/4"
Box Dimensions	24" X 22" X 14"	29" x 14" x 18"	34" x 14" x 18"	42" x 14" x 18"	42" x 14" x 18"
Weight (lbs)	25.5	53	76	76	76
Water Connections	5/8" (Sweat)	7/8" (Sweat)	7/8" (Sweat)	7/8" (Sweat)	7/8" (Sweat)
Condensate Line Connection		3/4"	3/4"	3/4"	1-18"
Actual Coil Dimensions	10" X 19" X 4"	13" X 23" X 4 1/2"	13" X 30" X 4 1/2"	13" X 38" X 4 1/2"	13" X 38" X 4 1/2"
BTU's of Output*	36,900 BTU @ 170F EWT	62,400	74,800	102,300	120,000

* Based on 180F incoming water, 8 GPM and Max CFM

EC UPGRADE KITS

PRODUCT FEATURES

- The EC Motor has the best efficiency and control as well as the quietest operation.
- Available for all Unico System blower modules manufactured after 2003 (These have the motor located in the air-stream)
- Available for air handler sizes M2430, M3036, M3642, and M4860
- Uses almost 45% less energy than a PSC motor
- Soft-start/soft-stop
- Can easily re-adjust airflow with laptop
- Provides the ASHRAE 62.2 standard for fresh air intake
- Ideal for use with two-speed condensing units
- Dry contacts make wiring a breeze

A01543-K24
(M4860)
Upgrade Kit



A01543-K22
(M2430)
Upgrade Kit



Part Number	Fits Unico Blower Module Number	Dimensions	Weight (lbs.)
A01543-K22	M2430	16" X 20" X 29"	20
A01543-K23	M3036 AND M3642	16" X 20" X 29"	20
A01543-K24	M4860	16" X 20" X 29"	20

PRODUCT FEATURES

- Made of 22 gauge galvanized steel
- Available for all sizes of air handlers
- Comes in two-module and three-module sizes
- Condensate line does not need to be trapped



UPC-20B
Two Section Drain Pan



UPC-24C
Three Section Drain Pan



UPC-94
Drain Pan for M1218

Part Number	UPC-94	UPC-20B	UPC-20C	UPC-27B	UPC-27C	UPC-24B	UPC-24C	UPC-24D
Dimensions	24" X 42"	29" X 31 1/2"	29" X 43 3/4"	34" X 31-1/2"	34" X 43-3/4"	42" X 31 1/2"	43" X 41 3/4"	42 X 54"
Weight (in lbs.)	12	11	14	14	20	14	20	24
Matching Air Handler	M1218	M2430	M2430	M3036	M3036	M3642	M3642/M4860	M4860
Number of Modules	N/A	2	3	2	3	2	2 or 3	3

ELECTRIC FURNACE

PRODUCT FEATURES

- Available from 2 to 20 KW
- Can be used as either primary or auxiliary heating
- Galvanized insulated sheet metal cabinet enclosure
- Line level auto limit primary safety set at 165F
- Line level fuse link back-up safety
- Fan interlock control
- Low air flow pressure switch
- Circuit breakers on all units
- Time delay sequencers for a gradual “stepped” power draw, allowing for a softer start
- Low voltage (24v) terminal strip
- Specially designed for Unico and optimal efficiency
- Single supply (all units) or dual supply (15 and 20 KW units)



WON0202-C
2KW Electric Furnace



WON1002-C
10KW Electric Furnace



WON2002-C
20KW Electric Furnace

Part Number	Nominal KW Rating	Unico System Matchup	Min. Airflow (CFM)	Length
WON0202-C	2	ALL SIZES	200	13"
WON0502-C	5	ALL SIZES	250	13"
WON0752-C	7.5	ALL SIZES	300	16"
WON1002-C	10	M2430, M3036, M3642, M4860	500	16"
WON1502-C	15	M2430, M3036, M3642, M4860	600	21"
WON2002-C	20	M3036, M3642, M4860	800	24"

PRODUCT FEATURES

- EC motor is standard in Vertical one-piece units, which has the best efficiency and control, and the quietest operation.
- Balanced wheels
- Direct drive motor
- Shaft key connection
- Fully insulated with 1" closed cell insulation
- 22 gauge painted metal cabinet
- Can be used with R410 or an optional chilled water coil
- Screw terminal connections
- Control voltage transformer
- Heat pump AFS bypass
- Adjustable low air flow mode
- Programmed constant air flow
- Heating (boiler) relay included
- Cooling (chiller) relay included
- Efficient ventilation mode
- ASHRAE 62.2 compliance mode
- Point-to-point wiring
- Dual Voltage
- Electric heater fan interlock
- Electric heater stage 3 lockout
- Humidifier compatibility
- EAC, HRV, ERV relay potable water circulation
- Soft-start and soft-stop
- Designed to fit into any closet only 20 to 23 ¾" wide
- Low airflow indicator

- Preset customizable airflow settings
- Built in airflow diagnostics
- Laptop adjustable
- Laptop troubleshooting
- Optimized for zoning with hydronic systems
- Optimized for efficiency and sound
- One-piece, no assembly required!

Unico has an "E-Coated Coil" Option available for all evaporator coil models in its current line. E-Coating improves the life of the coil by reducing the possibility of leaks and coil failures due to formicary corrosion.



V3642B-1EC2BX
3-3.5 Ton Vertical
Air Handler Unit



V2430B-1EC2CX
1.5-2.5 Ton Vertical
Air Handler Unit

Part Number	V2430	V3036	V3642
Unit Dimensions	20" X 20" X 42"	20" X 24" X 42"	23 3/4" X 25" X 44"
Box Dimensions	27" x 22" x 44"	27" x 25" x 44"	31" x 26" x 46"
Weight (Lbs)	169	200	227
Refrigerant Line Connection	1/2" X 1/4" Male Flare	5/8" X 3/8" Male Flare	3/4" X 3/8" Male Flare
Chilled Water Connections	7/8" O.D.	7/8" O.D.	7/8" O.D.
Compatible Condenser Size (in tons)	2 to 2 1/2	2 1/2 to 3	3 to 3 1/2
Air Flow Rating (in CFM)	400 to 600	450 to 875	500 to 1000
SEER*	12	12	12

*Check AHRI directory for matchup

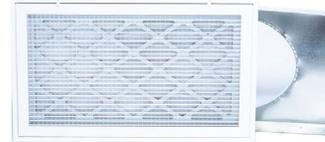
RETURN AIR GRILLE AND FILTERS

PRODUCT FEATURES

Return Air Grille

- Includes: Throwaway filter, two duct band, and Q clips
- White enamel paint
- Grille face hinges down for easy filter replacement
- Pleated filters are available

A00558-005
Pleated Air Filter

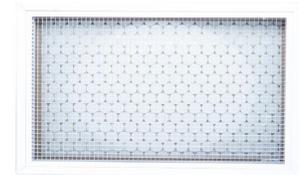


UPC-01-2430
Return Air Grille

Pleated Air Filter

- These are cleanable, using a standard household vacuum cleaner attachment

UPC-01-4860NC
Return Air Grille



Return Air Grille and Pleated Filter

Return Air Grille	Duct Diameter	Width	Length	Filter Size	Model No. Matchup
UPC-01-1218	12"	20 1/4"	14 1/4"	14" X 20"	M1218
UPC-01-2430	14"	25 1/4"	14 1/4"	14" X 25"	M2430
UPC-01-3036	16"	30 1/4"	14 1/4"	14" X 30"	M3036
UPC-01-3642	18"	30 1/4"	14 1/4"	14" X 30"	M3642
UPC-01-4860	20"	30 1/4"	24 1/4"	24" X 30"	M4860
UPC-01-4860NC	20"	30 1/4"	20 1/4"		

Pleated Air Filter	Filter Size	Model No. Matchup	MERV Rating
A00558-001	14 X 5 X 1	UPC-01-2430, M2430R	
A00558-002	14 X 30 X 1	UPC-01-3036, UPC-01-3642, M3036R	
A00558-003	18 X 20 X 1	M3642V, M4860V	
A00558-004	18 X 25 X 1	M2430V	
A00558-005	18 X 18 X 1	M3642V, M4860V, V2430	
A00558-006	24 X 30 X 1	UPC-01-4860	
A00558-007	18 X 30 X 1	M3036V	
A00558-008	18 X 22 X 1	V3036	
A00558-009	21 X 22 X 1	V3642	
A00558-010	20 X 14 X 1	UPC-01-1218	
A00558-011	14 X 38 X 1	M3642R1, M4860R1	
A00558-012	20 X 30 X 1	UPC-01-4860NC	
A00558-013	16 X 12 X 1	UPC-105-1218	MERV 7
A02654-002	14 X 30 X 1	UPC-01-3036, UPC-01-3642, M3036R	MERV 13
A02654-003	18 X 20 X 1	M3642V, M4860V	MERV 13
A02654-004	18 X 25 X 1	M2430V	MERV 13
A02654-005	18 X 18 X 1	M3642V, M4860V, V2430	MERV 13
A02654-006	24 X 30 X 1	UPC-01-4860	MERV 13
A02654-007	18 X 30 X 1	M3036V	MERV 13
A02654-008	18 X 22 X 1	V3036	MERV 13
A02654-009	21 X 22 X 1	V3642	MERV 13
A02654-010	20 X 14 X 1	UPC-01-1218	MERV 13
A02654-011	14 X 38 X 1	M3642R1, M4860R1	MERV 13
A02654-012	20 X 30 X 1	UPC-01-4860NC	MERV 13
A02654-013	16 X 12 X 1	UPC-105-1218	MERV 13

PRODUCT FEATURES

- Tough Aluminized outer mylar wrap
- Spun-bond nylon and helical wire core
- 1" fiberglass insulation
- R4.2 - R8
- Sections are 10 (ten) feet long



UPC-04R6-3642
Return Air Duct



UPC-04R6-1218
Return Air Duct



UPC-04-4860
Return Air Duct

Part Number	Used On	Diameter	R Factor	Weight (lbs.)
UPC-04-1218	M1218	12"	4.2	9
UPC-04-2430	M2430	14"	4.2	9
UPC-04-3036	M3036	16"	4.2	14
UPC-04-3642	M3642	18"	4.2	14
UPC-04-4860	M4860	20"	4.2	14
UPC-04R6-1218	M1218	12"	6	12
UPC-04R6-2430	M2430	14"	6	12
UPC-04R6-3036	M3036	16"	6	17
UPC-04R6-3642	M3642	18"	6	17
UPC-04R6-4860	M4860	20"	6	21
UPC-04R8-1218	M1218	12"	8	15
UPC-04R8-2430	M2430	14"	8	20
UPC-04R8-3036	M3036	16"	8	20
UPC-04R8-3642	M3642	18"	8	20
UPC-04R8-4860	M4860	20"	8	24

RETURN AIR ADAPTERS

PRODUCT FEATURES

Return Air Adapter for Cooling Module

- UPC-59 series

Return Air Adapter for Heating Module

- UPC-104 series
- Used with hot water coil or using vertical plenum module (MXXXXV2)

For Cooling Module

- Has an insulation strip
- Uses self-tapping screws to attach to the cooling module, and either refrigerant or chilled water

For Heating Module

- Mounts directly to the heating module or the vertical plenum module
- No additional fabrication required
- Can be used in either vertical or horizontal installations



UPC-59-2430
Return Air Adapter for M2430



UPC-104-3036
Return Air Adapter for M3036



UPC-104-4860
Return Air Adapter for M4860

Return Air Adapter - Cooling Module

Part Number	Height	Width	Depth	Duct Diameter	Weight (lbs.)	Matches to:
UPC-59-2430	13 1/2"	22"	11 1/2"	14"	6	M2430CL1-C, B or E
UPC-59-3036	13 1/2"	27"	11 1/2"	16"	9	M3036CL1-C, B OR E
UPC-59-3642	13 1/2"	35"	10 1/2"	18"	9	M3642CL1-C, B OR E
UPC-59-4860	11 1/2"	35"	15"	20"	14	M4860CL1-C, B OR E

Return Air Adapter - Heating Module

Part Number	Height	Width	Depth	Duct Diameter	Weight (lbs.)	Matches to:
UPC-104-1218			2"	12"		M1218
UPC-104-2430	17 1/2"	25"	2"	14"	6	M2430CL1-H/M2430V2
UPC-104-3036	17 1/2"	30"	2"	16"	9	M3036CL1-H/M3036V2
UPC-104-3642	17 1/2"	38"	2"	18"	9	M3642CL1-H/M3642V2
UPC-104-4860	17 1/2"	38"	2"	20"	14	M4860CL1-H/M4860V2

PRODUCT FEATURES

M4860R1
Return Module

For Return Air Plenum

- The return air module is designed for easy installation of multiple return air duct systems
- Module comes without return air opening so that the installing contractor can cut the number of return ducts
- The top and three sides of the module can be used for return air connections
- A centrally located disposable air filter is accessible from either side of the cabinet
- The return air module is ideal for providing fresh air from outside, effectively turning it into a mixing box
- Return air ducts can be of any material, provided it is acoustic and sized according to the ACCA Manual "D" guidelines
- The cabinet is fully insulated with a closed cell insulation. **(There is no exposed fiberglass in the cabinet)**
- Uses 24 gauge galvanized steel with removable access panels



M2430V2
Vertical Module

- Room for optional hot water coil with access from both sides
- Centrally located pleated filter
- Heavy-duty closed cell insulation **(no exposed fiberglass insulation)**
- Standard Unico System 'latch' system
- Includes external secondary drain pan
- Compatible with Unico return products, or can be used as "free, or wild" return

Return Air Plenum (RAP Module)

Part Number	Wgt (lbs.)	Unit Dimensions	Box Dimensions	Unico System	Filter No.	Filter Size	Filter Type
M2430R1	30	25" x 13.75" x 17.5"	29" X 20" X 21"	M2430	A00558-001	14" X 25" X 1"	Pleated
M3036R1	30	30" x 13.75" x 17.5"	42" X 16" X 20"	M3036	A00558-002	14" X 30" X 1"	Pleated
M3642R1	30	38" x 13.75" x 17.5"	42" X 16" X 20"	M3642	A00558-011	14" X 38" X 1"	Pleated
M4860R1	30	38" x 13.75" x 17.5"	42" X 16" X 20"	M4860	A00558-011	14" X 38" X 1"	Pleated

Vertical Return Plenum Module

Part Number	Wgt (lbs.)	Unit Dimensions	Box Dimensions	Unico System	Filter No.	Filter Size	Filter Type
M2430V2	33	25" x 18.25" x 17.5"	29" X 20" X 21"	M2430	A00558-004	18" X 25" X 1"	Pleated
M3036V2	45	30" x 18.25" x 17.5"	41" X 20" X 21"	M3036	A00558-007	18" X 30" X 1"	Pleated
M3642V2*	45	38" x 18.25" x 17.5"	41" X 20" X 21"	M3642	A00558-003	18" X 20" X 1"	Pleated
M4860V2*	45	38" x 18.25" x 23"	41" X 20" X 21"	M4860*	A00558-003	18" X 20" X 1"	Pleated
					A00558-005	18" X 18" X 1"	Pleated

* Requires Both Filters (A00558-003 and A00558-005)

ROUND OUTLETS

PRODUCT FEATURES

- Made in both 2" and 2 ½" sizes
- All white outlets can be painted to match any decor
- Wood outlets are available in a wide variety, and can be stained and finished to match your decor

2" Outlets - Twist-Fit System

- Lock-and-release tabs for easy assembly
- Change outlet face plates in a snap
- Available in flush mount
- Available in **10 different wood species**
- Reduce supply tube installation time by as much as 50%!
- The Twist-Fit System provides the tightest connections and fastest installation.

2" TFS Outlets Are Also Available To Purchase In 6 - Packs!

2 ½" Outlets

- White outlets can be painted to match any decor
- Outlets can be supplied from the factory in: Black, Brass Plated, and Chrome Plated
- Standard outlet kits come with toggles and screws
- Available in 10 different wood species
- With 2 ½" tubing, you have longer runs and less outlets.



UPC-256-CHR
Chrome 2 ½" Outlet



UPC-256-BRS
Brass 2 ½" Outlet



UPC-256-BLK
Black 2 ½" Outlet

	Reco. Airflow	Min. No. of Outlets	Outlet Material	Rough Opening Size	Weight (lbs.)
2" Outlets	30-35 CFM	6 per Nominal Ton	30% Glass Filled Polypropylene	4"	4.2 oz.
2 1/2" Outlets	40-45 CFM	5 per Nominal Ton	30% Glass Filled Polypropylene	5"	5 oz.



UPC-57T-WL-1
Walnut 2" TFS Outlet



UPC-57T-MH-1
Mahogany 2" TFS Outlet



UPC-57T-MA-1
Maple 2" TFS Outlet



UPC-57T-B-1
Birch 2" TFS Outlet



UPC-57T-WO-1
White Oak 2" TFS Outlet



UPC-57T-PO-1
Poplar 2" TFS Outlet



UPC-57T-PI-1
Pine 2" TFS Outlet



UPC-57T-RO-1
Red Oak 2" TFS Outlet



UPC-57T-K-1
Knotty Pine 2" TFS Outlet



UPC-57T-C-1
Cherry 2" TFS Outlet



UPC-56TB-1
White 2" TFS Outlet

PRODUCT FEATURES

Fire-stop Duct Outlet for the 2" Supply Duct

- UL-555C 1-hour fire rating: designed for use in the ceiling, floor or wall applications where supply outlets are required by code to have a 1-hour or less F-rated structure
- Designed for static conditions, meaning that the fire suppression system should turn off the air flow in the event of a fire
- A special foam outlet will close off above a certain temperature, shutting off the air flow to the rest of the structure
- Same size as our UPC-56TB-1 and is installed to the drywall in the same manner (has different duct end of the connection)



UPC-56FR-1
Fire Rated Outlet

Angled Outlets

- Specially designed for use in vaulted ceilings to direct the air straight down
- The faceplate is angled at 15° or 25°



UPC-58-1-25
25° Angled outlet



UPC-58-1-15
15° Angled outlet

Part Number	Recommended Airflow	Minimum Number of Outlets	Angle	Rough Opening Size	Wgt (lbs.)
UPC-56FR-1	30-35 CFM	6 per Nominal Ton		4"	1
UPC-56FR-1-BLK	30-35 CFM	6 per Nominal Ton		4"	1
UPC-58-1-15	30-35 CFM	6 per Nominal Ton	15 degrees	4"	1
UPC-58-1-25	30-35 CFM	6 per Nominal Ton	25 degrees	4"	1

PRODUCT FEATURES

- The rectangular outlets have a narrow (1/2") slot for air flow that gives it a better appearance in a sidewall application
- 90 degree slotted outlets UPC-67TA are designed to quietly turn the air inside a typical stud wall cavity
- Straight outlets UPC-68T are designed for other limited space applications
- All slotted outlets may be used in the floor, ceiling, or high wall applications



UPC-67TA
90° Twist Fit Outlet Assembly

UPC-68T
Twist Fit Outlet Assembly

Part Number	Reco. Airflow	Reco. Number of Outlets	Outlet Material	Trim Plate Material	Rough Opening Size	Wgt (lbs.)
UPC-67A	30-35 CFM	7 per Nominal Ton	Plastic HDPE, black	Plastic, White, Paint-able	1" X 9.25"	2
UPC-68	30-35 CFM	7 per Nominal Ton	Plastic HDPE, black	Plastic, White, Paint-able	1" X 9.25"	2

PRODUCT FEATURES

- Square duct in either 6 ½", 8 ½", or 9 ½"
- Ready for installation in four (4) foot lengths
- also available unassembled (flat)
- Available in R4.2 and R 6
- Can be used on all Unico Systems
- Tees and elbows are available prefabricated
- Turning vanes are included with the tees
- End caps and tape are also available



UPC-18-085S-4
Square Fiberglass Elbow
R4.2, 8.5, 4-pack



UPC-12-095S6-4
Square Fiberglass Duct
R4.2 9.5" x 9.5"



UPC-15-065S-4
Square Fiberglass End Caps
6.5" R4.2

Part Number	Description	Dimensions	Qty (per box)	Weight (lbs.)
UPC-11-065S-4	Turning Vane, Square, 6.5"	13" X 13" X 10.5"	4	5
UPC-11-085S-4	Turning Vane, Square, 8.5"	23" X 10" X 11"	4	5
UPC-11-095S-4	Turning Vane, Square, 9.5"	23" X 10" X 11"	4	6
UPC-12-065R6-4	Duct, Fiberglass, Square, 6.5" X 6.5", R6	73" X 19" X 19"	4	40
UPC-12-065S-4	Duct, Fiberglass, Square, 6.5" X 6.5"	18" X 18" X 72"	4	30
UPC-12-065S6-8F	Duct, Fiberglass, Flat, 6.5" X 6.5", Unassembled	34" X 8" X 72"	8	60
UPC-12-085R6-4	Duct, Fiberglass, Square, 8.5" X 8.5", R6	73" X 22" X 22"	4	51
UPC-12-085S6-4	Duct, Fiberglass, Square, 8.5" X 8.5"	21.5" X 21.5" X 72"	4	34
UPC-12-085S6-8F	Duct, Fiberglass, 8.5" X 8.5", Flat, Unassembled	42" X 8" X 72"	8	68
UPC-12-095R6-4	Duct, Fiberglass, Square, 9.5" X 9.5", R6	73" X 24" X 24"	4	56
UPC-12-095S6-4	Duct, Fiberglass, Square 9.5" X 9.5"	24" X 24" X 72"	4	40
UPC-15-065R6-4	End Caps, Fiberglass, for 6.5" R6	11" X 11" X 16"	4	2
UPC-15-065S6-4	End Caps, Fiberglass, for 6.5" R4.2	8" X 8" X 5"	4	1
UPC-15-085R6-4	End Caps, Fiberglass, for 8.5" R6	12" X 12" X 16"	4	2
UPC-15-085S-4	End Caps, Fiberglass, for 8.5" R4.2	10" X 10" X 5"	4	2
UPC-15-095R6-4	End Caps, Fiberglass, for 9.5" R6	12" X 12" X 16"	4	2
UPC-15-095S-4	End Caps, Fiberglass, for 9.5" R4.2	10" X 11" X 17"	4	2
UPC-16V-065R6-4	Tee, Fiberglass, Full Flow, 6.5", R6 (with turning vane)	36" X 25" X 22"	4	20
UPC-16V-065S-1	Tee, Fiberglass, 6.5" X 6.5", R4.2, Single pack	14" X 16" X 9"	1	4
UPC-16V-065S-4	Tee, Fiberglass, 6.5" X 6.5", R4.2	32" X 21" X 18"	4	12
UPC-16V-085R6-4	Tee, Fiberglass, 8.5" X 8.5", R6	40" X 28" X 24"	4	35
UPC-16V-085S-1	Tee, Fiberglass, 8.5" X 8.5", R4.2, Single Pack	29" X 16" X 20"	1	5
UPC-16V-085R6-4	Tee, Fiberglass, Full Flow, 8.5" X 8.5", R6	27" X 20.5" X 47"	4	14
UPC-16V-095S-1	Tee, Fiberglass, 9.5" X 9.5", R4.2, Single Pack	44" X 32" X 26"	1	40
UPC-16V-095S-4	Tee, Fiberglass, Square, 9.5", R4.2, 4-pack	29" X 16" X 20"	4	6
UPC-17	Tape, Thermo-lock, 3" x 350'	27" X 20.5" X 47"	1	15
UPC-18-065SR6-4	Elbow, Fiberglass, Square, R6.5, 4-Pack	8" X 8" X 4"	4	2
UPC-18-065S-1	Elbow, Fiberglass, Square, R4.2, Single Pack	26" X 25" X 24"	1	14
UPC-18-065S-4	Elbow, Fiberglass, Square, R4.2, 4-Pack	14" X 14" X 9"	4	2
UPC-18-085R6-4	Elbow, Fiberglass, Square, 8.5", R6, 4-Pack	30" X 18" X 18"	4	9
UPC-18-085S-1	Elbow, Fiberglass, Square, 8.5", R4.2, Single Pack	26" X 25" X 27"	1	20
UPC-18-085S-4	Elbow, Fiberglass, Square, 8.5", R4.2, 4-Pack	29" X 16" X 20"	4	3
UPC-18-095R6-4	Elbow, Fiberglass, Square, 9.5", R6, 4-Pack	24" X 23.5" X 45"	4	15
UPC-18-095S-1	Elbow, Fiberglass, Square, 9.5", R4.2, Single Pack	32" X 20" X 26"	1	22
UPC-18-095S-4	Elbow, Fiberglass, Square, 9.5", R4.2, 4-Pack	29" X 16" X 20"	4	3

PRODUCT FEATURES



- Prefabricated 28 gauge metal
- Includes: Full flow tees, Full flow elbows, End caps, and Insulation sleeves
- Available in 7", 9", and 10"

USM-08
Galvanized Tee 9"



UPC-11-07R-4
7" Turning Vane



USM-14
Galvanized Elbow 10"



USM-02
Galvanized Duct 9" x 5'

Part Number	Description	Qty (per box)	Dimensions	Weight (lbs.)
USM-01	Duct, Galvanized 7" X 5' 28 ga	1	11" X 11" X 63"	10
USM-02	Duct, Galvanized 9" X 5' 28 ga	1	11" X 11" X 63"	10
USM-03	Elbow, Galvanized 7" 28 ga.	1	23" X 19" X 22"	5
USM-04	Elbow, Galvanized 9" 28 ga.	1	28" X 24" X 23"	5
USM-05	End Cap UN-crimped 7" ID	1	23" X 19" X 22"	5
USM-06	End Cap UN-crimped 9" ID	1	23" X 19" X 22"	5
USM-07	Tee, Galvanized 7" ID	1	30" X 23" X 32"	5
USM-08	Tee, Galvanized 9" ID	1	30" X 23" X 32"	5
USM-09	Tee, Reducing 9" X 7" X 7"	1	30" X 23" X 32"	5
USM-10	Insulation Sleeve 7' X 5' x 2" (R8)	1	25" X 18" X 18"	5
USM-11	Insulation Sleeve 9" X 5' x 2" (R8)	1	25" X 18" X 20"	5
USM-12	Reducer 9" X 7"	1	18" X 18" X 20"	5
USM-13	Duct, Galvanized 10" X 5' 28 ga	1	12" X 12" X 63"	10
USM-14	Elbow, Galvanized 10"	1	24" X 25" X 35"	5
USM-15	Tee, Galvanized 10"	1	30" X 23" X 32"	5
USM-16	Insulation Sleeve 10" X 5' x 2" (R8)	1	32" X 12" X 28"	5
USM-17	Reducer 10" X 9"	1	28" X 24" X 23"	5
USM-18	End Cap 10"	1	23" X 19" X 22"	5
USM-19	Tee, Galvanized Reducer 10" x 9" x 9"	1	30" X 23" X 32"	5
UPC-11-07R-4	Turning Vane, Round, 7"	1	10" X 10" X 11"	5
UPC-11-09R-4	Turning Vane, Round, 9"	1	13" X 13" X 10.5	5
UPC-11-10R-4	Turning Vane, Round, 10"	1	13" X 13" X 10.5"	5

PRODUCT FEATURES

The supply tubing is offered in two inside diameters, 2" and 2 ½".

There are two styles of supply duct:

Sound Attenuator tubing, sold in 12' lengths

Aluminum Core tubing, sold in 25' lengths

- Available in R3.3, R4.2, R6 and R8 insulation
- Both styles of tubing can be cut to length as needed
- The inner core layer of the tubing is either:
 - Two-ply corrugated aluminum OR spun-bound nylon*
- The outer jacket for all is made of a two-ply reinforced reflective mylar; providing a vapor seal to prevent leakage and moisture migration and increases the insulation factor by reducing the radiant heat transfer. A fiberglass blanket insulation then fills the void between the jacket and the core
- The R3.3 and R4 duct have one insulation layer and vapor barrier
- The R6 and R8 have two layers of insulation and a double v.

2 ½" supply tubing is NOT compatible with the Twist-Fit System

*The Twist-Fit System
Supply Duct Connections
Reduce the Steps and
Time Involved In the
Installation Process!*



UPC-226-R8-5
2.5" Sound Attenuator,
R8, 12' length



UPC-26TC03-6
2" Twist-Fit System Sound Attenuator
R3.3, 3' length



UPC-25T-1
2" Twist-Fit System Supply
Tubing, 25' length

Part Number	Description	Dimensions	Qty (per box)	Weight (lbs.)
UPC-25T-1	Supply Tubing, TFS, 2" x 25'	32" X 31" X 4"	1	9
UPC-25T-4	Supply Tubing, TFS, 2" x 25'	31" X 15" X 31"	4	30
UPC-25T-R4-1	Supply Tubing, TFS, 2" x 25' R4.2	8" X 8" X 15"	1	10
UPC-25T-R4-4	Supply Tubing, TFS, 2" x 25' R4.2	32" X 30" X 15"	4	58
UPC-25T-R6-1	Supply Tubing, TFS, 2" X 25' R6	5" X 5" X5"	1	10
UPC-25T-R6-4	Supply Tubing, TFS, 2" X 25' R6	37" X 37" X 22"	4	58
UPC-25T-R8-1	Supply Tubing, TFS, 2" X 25' R8	32" X 31" X 4"	1	10
UPC-25T-R8-4	Supply Tubing, TFS, 2" X 25' R8	37" X 37" X 22"	4	61
UPC-26TC-1	Sound Attenuator, TFS, 2" X 12'	25" X 25" X 6"	1	5
UPC-26TC-6	Sound Attenuator, TFS, 2" X 12'	24" X 24" X 23"	6	28
UPC-26TC03-1	Sound Attenuator, TFS, 2" X 3' R3.3	10.5" X 10.5" X 10.5"	1	2
UPC-26TC03-6	Sound Attenuator, TFS, 2" X 3' R3.3	22.5" X 5.25" X 38.5"	6	7
UPC-26TC03R4-1	Sound Attenuator, TFS, 2" X 3' R4.2	10.5" X 10.5" X 10.5"	1	2
UPC-26TC03R4-6	Sound Attenuator, TFS, 2" X 3' R4.2	22.5" X 5.25" X 38.5"	6	7
UPC-26TC03R6-1	Sound Attenuator, TFS, 2" X 3' R6	10.5" X 10.5" X 10.5"	1	2
UPC-26TC03R6-6	Sound Attenuator, TFS, 2" X 3' R6	34.5" X 6.25" X 34.5"	6	7
UPC-26TC03R8-1	Sound Attenuator, TFS, 2" X 3' R8	10.5" X 10.5" X 10.5"	1	3
UPC-26TC03R8-6	Sound Attenuator, TFS, 2" X 3' R8	34.5" X 6.25" X 34.5"	6	8
UPC-26TCR4-1	Sound Attenuator, TFS, 2" X 12' R4.2	32" X 31" X 4"	1	6
UPC-26TCR4-6	Sound Attenuator, TFS, 2" X 12' R4.2	24" X 24" X23"	6	32
UPC-26TCR6-1	Sound Attenuator, TFS, 2" X 12' R6	32" X 31" X 4"	1	6
UPC-26TCR6-6	Sound Attenuator, TFS, 2" X 12' R6	26" X 26" X 33"	6	36
UPC-26TCR8-1	Sound Attenuator, TFS, 2" X 12' R8	32" X 31" X 4"	1	6
UPC-26TCR8-6	Sound Attenuator, TFS, 2" X 12' R8	26" X 26" X 33"	6	40
UPC-26TD03R4-1*	Sound Attenuator, TFS, Dbl Vapor Barrier, 2" X 3' R4.2	10.5" X 10.5" X 10.5"	1	3
UPC-26TD03R4-6*	Sound Attenuator, TFS, Dbl Vapor Barrier, 2" X 3' R4.2	22.5" X 5.25" X 38.5"	6	7
UPC-26TDR4-1*	Sound Attenuator, TFS, Dbl Vapor Barrier, 2" X 12' R4.2	25" X 25" X 6"	1	6
UPC-26TDR4-6*	Sound Attenuator, TFS, Dbl Vapor Barrier, 2" X 12' R4.2	26" X 26" X 33"	6	36
UPC-225-1	Supply Tubing, 2.5" X 25' 1 Piece	32" X 31" X 4"	1	9
UPC-225-3	Supply Tubing, 2.5" X 25' 3 Pieces	32" X 34" X 12"	3	30
UPC-225-R4-3	Supply Tubing 2.5" X 25' 3 Pieces R4.2	32" X 34" X 12"	3	58
UPC-225-R6-3	Supply Tubing, 2.5" X 25' 3 Pieces. R6	38" X 38" X 19"	3	58
UPC-225-R8-3	Supply Tubing, 2.5" X 25' 3 Pieces. R8	38" X 38" X 19"	3	61
UPC-226-5	Sound Attenuator, 2.5" X 12'	24" X 24" X23"	5	28
UPC-226-R4-5	Sound Attenuator, 2.5" X 12' R4.2	24" X 24" X23"	5	32
UPC-226-R6-5	Sound Attenuator, 2.5" X 12' R6	26" X 26" X 33"	5	36
UPC-226-R8-5	Sound Attenuator, 2.5" X 12' R8	26" X 26" X 33"	5	40
UPC-226D-R4-5*	Sound Attenuator, Dbl Vapor Barrier, 2.5" X 12 R4.2	24" X 24" X23"	5	28

* Certain states have made it a code requirement to have 2 vapor barriers for porous type supply tubing. Unico has always had this feature within our R6 and R8 supply tubing and now offer you this option in our R4 supply tubing.

COUPLING KITS

PRODUCT FEATURES

- Pre-installed on tubing
- Contains 2 connectors per coupling to connect tubing together
- Used at the take-off and faceplate
- Comes in white or black, depending on application



UPC-38TC-6
Coupling Kit, TFS, 2" Duct,
12 connectors, makes 6 couplings

*The Twist-Fit System
Provides the Tightest
Connections and
Fastest Installation!*



UPC-38TCR6-W-1
Two white twist fit connectors for splicing two
2" R6 flex ducts together. These can also be
used for white face plate outlets.

Part Number	Description	Dimensions	Qty (per box)	Weight (lbs.)
UPC-38TC-1	Coupling Kit, TFS, 2"-Mixed	5.5" X 5.5" X 5.5"	1	1
UPC-38TC-6	Coupling Kit, TFS, 2"-Mixed	10.5" X 10.5" X 10.5"	6	3
UPC-38TC-B-1	Coupling Kit, TFS, 2" R3.3-Black	5.5" X 5.5" X 5.5"	1	1
UPC-38TC-B-6	Coupling Kit, TFS, 2" R3.3-Black	10.5" X 10.5" X 10.5"	6	3
UPC-38TC-W-1	Coupling Kit, TFS, 2" R3.3-White	5.5" X 5.5" X 5.5"	1	1
UPC-38TC-W-6	Coupling Kit, TFS, 2" R3.3-White	10.5" X 10.5" X 10.5"	6	3
UPC-38TCR6-B-1	Coupling Kit, TFS, 2" R6-Black	5.5" X 5.5" X 5.5"	1	1
UPC-38TCR6-B-6	Coupling Kit, TFS, 2" R6-Black	10.5" X 10.5" X 10.5"	6	3
UPC-38TCR6-W-1	Coupling Kit, TFS, 2" R6-White	5.5" X 5.5" X 5.5"	1	1
UPC-38TCR6-W-6	Coupling Kit, TFS, 2" R6-White	10.5" X 10.5" X 10.5"	6	3

PRODUCT FEATURES

- Can be ordered in fiberglass or metal plenum (ductwork)

Includes all parts and pieces to make one (1) supply outlet

- Supply air face-plate with Toggles and Screws
- Takeoff
- 2" winter plug



UPC-89TF-1

Includes one UPC-56TB supply air face plate with toggles and screws, one UPC-23B spin-in takeoff for R4.2 square fiberglass duct, and one 2" winter plug.



UPC-89TM-6

Includes six UPC-56TB supply air face plates with toggles and screws, six UPC-28T-1 saddle tap take off for round metal duct, and six 2" winter plugs.

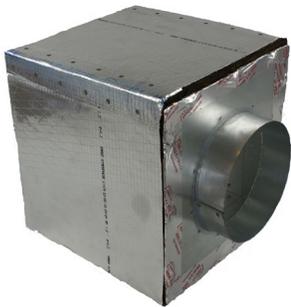
Part Number	Description	Dimensions	Qty (per box)	Weight (lbs.)
UPC-89TF-1	Install Kit, TFS, 2", 1" Fiberglass Plenum	5.5" X 5.5" X 5.5"	1	1
UPC-89TF-6	Install Kit, TFS, 2", 1" Fiberglass Plenum	10.5" X 10.5" X 10.5"	6	3
UPC-89TFR6-1	Install Kit, TFS, 2", 1.5" Fiberglass Plenum	5.5" X 5.5" X 5.5"	1	1
UPC-89TFR6-6	Install Kit, TFS, 2", 1.5" Fiberglass Plenum	10.5" X 10.5" X 10.5"	6	3
UPC-89TM-1	Install Kit, TFS, 2", Round Metal Plenum	5.5" X 5.5" X 5.5"	1	1
UPC-89TM-6	Install Kit, TFS, 2", Round Metal Plenum	10.5" X 10.5" X 10.5"	6	3
UPC-89TMF-1	Install Kit, TFS, 2", Flat Metal Plenum	5.5" X 5.5" X 5.5"	1	1
UPC-89TMF-6	Install Kit, TFS, 2", Flat Metal Plenum	10.5" X 10.5" X 10.5"	6	3

PRODUCT FEATURES

When installed in forced air heating and cooling systems, the Unico Ultraviolet Lighting System coupled with high efficiency filters provide the maximum protection against airborne pathogens.

- Kills airborne or surface microorganism inside the duct like mold and bacteria
- Easy maintenance, with quick and easy bulb replacement
- Unico UV adapter provides flexibility and the option to support leading brands of UV lights
- Our safety design means no exposure to high voltage or UV rays
- Purifies the air
- Reduces airborne particles that can irritate allergies and asthma
- Protects from outdoor contaminants and pollutants
- Unit produces NO ozone
- Through the use of added materials, our system has been designed to enhance and amplify the effectiveness of the UV light

With the need to combat airborne viruses and respiratory illnesses, UV light sources combined with the high velocity air circulation features of a Unico system help your home and business add another level of protection to your treated environment by reducing airborne particles.



UVC1-09
Unico UV Cabinet only
(no UV light source included)

A02647-G01
UV Light Assembly

Part Number	Description
UVL1-09	Module Assembly with UV Light
UVC1-09	Cabinet
Only	
A02647-G01	UV Light Assembly
A02649-G01	Replacement Bulb, 18w, 60V

PRODUCT FEATURES

Unico thermostats have easy-to-view, large blue displays for easy programming.



A00915-G03
Single Stage
Programmable Thermostat



A00915-G04
Two Stage
Programmable Thermostat



A00915-G05
Two Stage Programmable
Thermostat with Touchscreen

A00915-G03 & A00915-G04

- Quick one-button programming
- Configures as manual heat/cool, auto changeover, heat only, or cool only
- Exclusive cool savings feature saves energy during peak A/C demand periods
- Hydronic 2 or 3 wire applications
- Three anticipation settings
- Exclusive battery power monitor
- Longer battery life
- Easy-access battery compartment
- 5-Year Warranty

A00915-G05

All of the above features plus:

- Large square blue touchscreen display with 10 second back light
- Dual fuel heat pump control
- Programmable fan
- Circulation fan cycling
- Automatic daylight savings option

MISCELLANEOUS PARTS

PRODUCT FEATURES

Thermo-lock

- Tape-can withstand up to 4" w.c. static pressure, sold in 350' rolls, UL-181

Turbometer

- Only tool recommended for checking the airflow at the outlet for The Unico System® *Batteries included*

Plaster Frame Kit

- Makes installation of Unico outlets in new construction and "gut" rehabs easy, allows the Unico installer to finish the job and let the drywall contractor know where to cut the outlets

Hole Cuter

- Sharpened duct connector easily cuts a hole for use with fiberglass duct installations

Starting Collar

- Available for either round or square plenum

Plastic Outlet Balancing Kits

- Allows the user to "fine-tune" the airflow at the outlet, especially if there is a big difference between a heating and a cooling load

Deflector

- If an outlet is in an objectionable position, such as directly over someone or something, the deflector cancels the aspiration effect and spreads the air across the ceiling

Mild Weather Kits

- Ensure the proper operation of heat pump systems on cooler days by keeping the head pressure to an acceptable level

Part Number	Description
UPC-17	Thermo-lock tape, 3" x 350'
Turbometer	Measures air flow
UPC-61-1218	Starting Collar, Round for U1218
UPC-61-2430	Starting Collar, Round for M2430
UPC-61-3036	Starting Collar, Round for M3036
UPC-61-3642	Starting Collar, Round for M3642
UPC-61-4860	Starting Collar, Round for M4860
UPC-62-1218	Starting Collar, Square for U1218
UPC-62-2430	Starting Collar, Square for M2430
UPC-62-3036	Starting Collar, Square, for M3036
UPC-62-3642	Starting Collar, Square for M3642
UPC-62-4860	Starting Collar, Square for M4860
UPC-55-5	Hole Cutter
UPC-35-15	Take-off balancing orifice package
UPC-235-15	Take-off balancing orifice package for 2 ½" duct
UPC-65X	Mild Weather Kit
UPC-45-5	Deflector Kit
UPC-245-5	Deflector Kit for 2 ½" outlets
UPC-86-5	Plaster Frame Kits

PRODUCT FEATURES

- Provides unparalleled heating for up to 1,800 SF or 3,200 SF
- Features a compact footprint and high-quality construction
- Uses a multi-stage, variable speed blower
- Includes an ECM motor, using less power and providing better air flow
- Is modular – quick and easy to install, like The Unico System
- AI and IoT technology monitors and self-diagnoses any foreseen complications
- Requires minimal to no maintenance, saving you time and money
- Removes up to 41% less electrical energy to produce heat
- Can be paired with The Unico System for the very best and efficient year-round indoor comfort



Part Number	Description	Dimensions	Qty (per box)	Weight (lbs.)
THRMS-1-1800	Cocoon Heater, Single Chamber, 1800 sq. ft.	25" x 20" x 37"	1	137
THRMS-1-3200	Cocoon Heater, Single Chamber, 3200 sq. ft.	25" x 20" x 57"	1	212

QUIET GUIDE

It's no secret that sound increases with increased air velocity and turbulence. A large duct system would be extremely loud if it had high velocity air but not the SDHV Unico System. It is designed from the ground up to be quiet.

Following our standard design and installation instructions will give you one of the quietest systems on the market. However, sometimes you need better than that.

This guide gives you 7 easy strategies to get the lowest sound levels from your Unico System. For systems with a noise complaint, solutions are highlighted as a FIX.

1. Always Use Sound Attenuators

The sound attenuators have a porous inner liner that absorbs the air noise.

The minimum supply run length is 6ft. Runs shorter than this are not recommended and could lead to excessive noise. Where possible, use the full 12 feet of sound attenuator for each supply run as this will greatly help to reduce noise. When the aluminum supply tube is used, each run must have a minimum of 3ft of sound attenuator at the end of the run. *FIX: Add or replace the last 3ft with sound attenuator.*

2. Not Enough Outlets

For most applications, six (2 inch) outlets per ton work well. However, it is not unusual to use 7 to 8 (or more) outlets per ton for a super quiet system, or sometimes 5 to 6 outlets per ton is preferred as more economical where sound is not as important. Use the chart below to select how many outlets to use. *FIX: Add more outlets to make the system quieter.*

Unico System Sound Level Recommendations

Sound Level	Approx. DB(A)		2-inch Outlet		2 ½ inch Outlet		Recommended Application
	CFM	Outlet/Ton	CFM	Outlet/Ton	CFM	Outlet/Ton	
Ultra Low	25	14	14	17	12		Multimedia Rooms
Very Low	27	19	11	23	9		Rooms with Hard Surfaces (wood or concrete)
Low	29	30	7	36	6		Rooms with Carpet, Drapes, Furniture
Normal	32	40	6	50	5		Large Rooms or Where Sound is not Critical
High	35	50+	4	60+	3		Industrial Environments

NOTE: The actual sound levels measured in a room will vary depending on the number of outlets in the room, how the duct was installed (length, bends, wrinkles, outlet design) and the furnishings in the room (carpet, draperies, etc.).

3. Airflow Too High

Our EC motor makes it easy to adjust the airflow for performance and for sound. Using a laptop and our ECMconfig software, you can check the airflow and then set it to exactly what you need. The rated performance of the unit is 250 CFM per nominal ton. Simply adjust the setting to give you the airflow you need. Sound follows airflow so minimizing the airflow will also minimize the sound. If you need to reduce sound without adding outlets, you can try reducing the airflow but don't go below 200 CFM per ton (in some places, like California, you cannot go below 250). *FIX: Reduce the airflow to make the system quieter.*

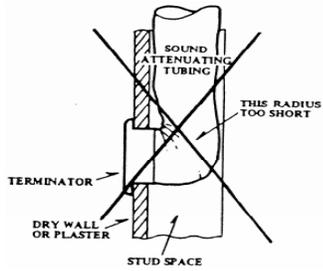
4. Runs Too Short

The system works best when all the duct runs are about the same length. If a few are significantly shorter than the others, the airflow and sound will be greater for those runs. *FIX: Increase the duct length or install a balancing orifice at the takeoff to reduce airflow and noise.*

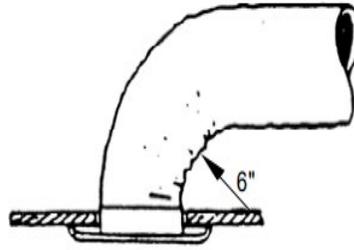
5. Tight Bend Before An Outlet

To plan the length of duct runs, be sure to provide sufficient length that gives as generous a radius as possible in the sound attenuating tubing at the outlet. The minimum radius must be at least 6-inches as indicated, but the greater the radius near the outlet, the quieter the run will be.

For stud walls, we recommend using our UPC-67A slotted outlet, which has a built-in radius. Using a round outlet in these types of walls can mean a very tight bend in the tubing which can create noise at the outlet. *FIX: Straighten the duct or replace the round outlet with the 90 degree slotted outlet.*



Incorrect Placement of Tubing



Typical Supply Tubing Bend



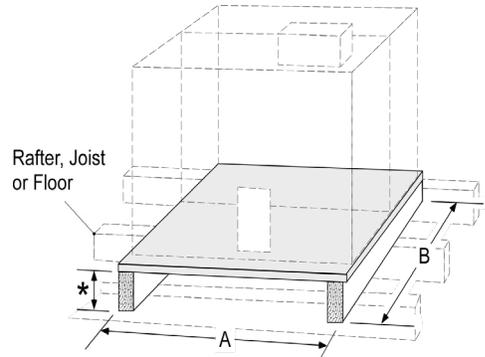
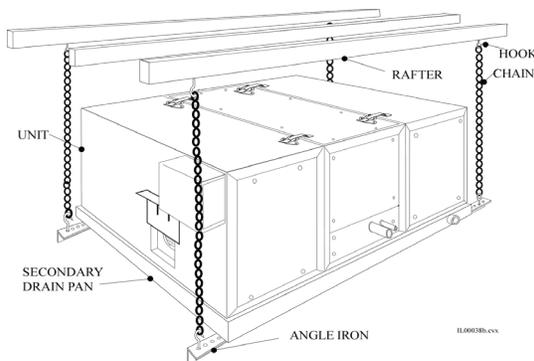
UPC-67A in stud wall

6. Blocked Or Obstructed Outlets

If there is something obstructing the air flow, either inside or outside the duct near the outlet, this can cause additional noise. In order to distribute the air, promote air circulation and achieve more even temperatures, outlet openings must remain unobstructed. Keep furniture and other obstructions at least 3 feet away from outlet openings. This will also help the overall comfort of the system as it will allow the air to better circulate, creating more even temperatures. Be sure to keep the duct and insulation trimmed to the same length to avoid bunching the duct near the outlet and creating turbulence. *FIX: Clear the obstruction or trim the end of the duct so the duct, insulation, and outer vapor barrier are the same length.*

7. Takeoffs Incorrectly Located On the Main Duct

Do not install supply takeoffs on an elbow or tee, within 12" of the end of the supply plenum run, or less than 24" away from blower. These are very turbulent areas in the duct system and could lead to excessive noise. *FIX: Relocate the takeoffs on the main duct (plenum) capping any unused takeoffs.*



UNIT/SYSTEM NOISE

1. Short Unlined Returns

If the return is very short (under 6 feet) or is not lined with some sort of acoustic dampening (like our return duct), this can cause the return to be noisy from the sound of the system. We recommend using our 10-foot return duct with a 90° bend to reduce any noise from the return. If a sheet metal return is used, line the interior with an acoustic liner.

2. Improperly Mounted System

If the unit is not mounted securely, it may vibrate, transmitting noise to the rest of the house. We recommend using vibration isolating pads or springs. The unit can also be hung from the rafters as shown below.

TWIST-FIT REPLACEMENT GUIDE

Aluminum Supply

Discontinued Part #	New Part #
UPC-25-1	UPC-25T-1
UPC-25-4	UPC-25T-4
UPC-25-R4-4	UPC-25T-R4-1
	UPC-25T-R4-4
UPC-25-R6-4	UPC-25T-R6-1
	UPC-25T-R6-4
UPC-25-R8-4	UPC-25T-R8-1
	UPC-25T-R8-4

Sound Attenuator

Discontinued Part #	New Part #
UPC-26C-6	UPC-26TC-1
	UPC-26TC-6
UPC-26CR4-6	UPC-26TCR4-1
	UPC-26TCR4-6
UPC-26DR4-6	UPC-26TDR4-1
	UPC-26TDR4-6
UPC-26CR6-6	UPC-26TCR6-1
	UPC-26TCR6-6
UPC-26CR8-6	UPC-26TCR8-1
	UPC-26TCR8-6

Supply Air & Outlet Components

Discontinued Part #	New Part #
UPC-28F	UPC-28TF-1
	UPC-28TF-6
UPC-28	UPC-28T-1
	UPC-28T-6
UPC-38C-10	UPC-38TC-1
	UPC-38TC-6

Face Plates

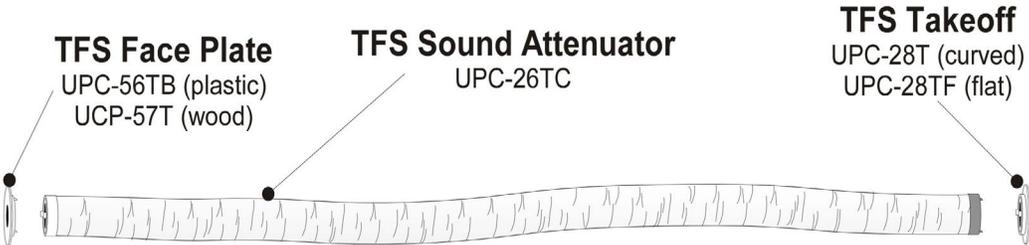
Discontinued Part #	New Part #
UPC-56B	UPC-56TB-1
	UPC-56TB-6
UPC-56B-BLK	UPC-56TB-BLK-1
	UPC-56TB-BLK-6
UPC-56B-BRS	UPC-56TB-BRS-1
	UPC-56TB-BRS-6
UPC-56B-CHR	UPC-56TB-CHR-1
	UPC-56TB-CHR-6
UPC-57-B	UPC-57T-B-1
	UPC-57T-B-6
	UPC-57T-B-F-1
	UPC-57T-B-F-6
UPC-57-C	UPC-57T-C-1
	UPC-57T-C-6
	UPC-57T-C-F-1
	UPC-57T-C-F-6
UPC-57-K	UPC-57T-K-1
	UPC-57T-K-6
	UPC-57T-K-F-1
	UPC-57T-K-F-6
UPC-57-MA	UPC-57T-MA-1
	UPC-57T-MA-6
	UPC-57T-MA-F-1
	UPC-57T-MA-F-6
UPC-57-MH	UPC-57T-MH-1
	UPC-57T-MH-6
	UPC-57T-MH-F-1
	UPC-57T-MH-F-6
UPC-57-PI	UPC-57T-PI-1
	UPC-57T-PI-6
	UPC-57T-PI-F-1
	UPC-57T-PI-F-6
UPC-57-PO	UPC-57T-PO-1
	UPC-57T-PO-6
	UPC-57T-PO-F-1
	UPC-57T-PO-F-6
UPC-57-RO	UPC-57T-RO-1
	UPC-57T-RO-6
	UPC-57T-RO-F-1
	UPC-57T-RO-F-6
UPC-57-WL	UPC-57T-WL-1
	UPC-57T-WL-6
	UPC-57T-WL-F-1
	UPC-57T-WL-F-6
UPC-57-WO	UPC-57T-WO-1
	UPC-57T-WO-6
	UPC-57T-WO-F-1
	UPC-57T-WO-F-6

Outlet Kits

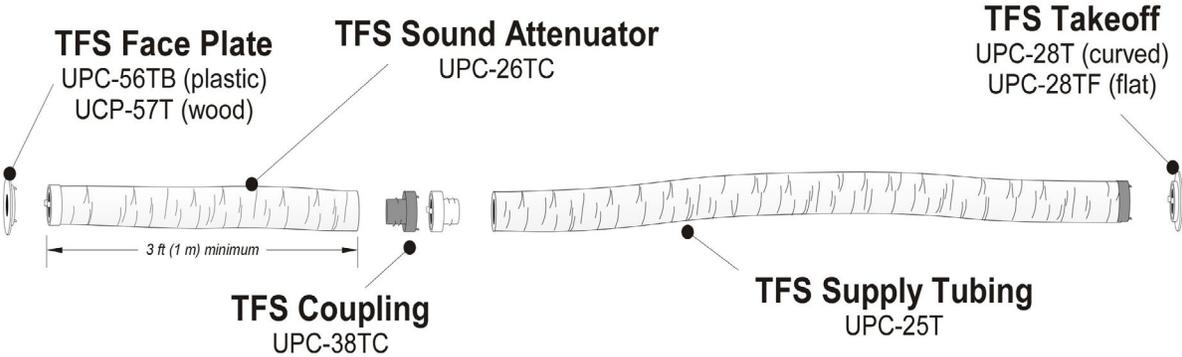
Discontinued Part #	New Part #
UPC-80F-1	UPC-26TC-1
	UPC-89TF-1
	UPC-38-TC-W-1*
UPC-80M-1	UPC-26TC-1
	UPC-89TM-1
	UPC56TB-1
	UPC-38TC-W-1*
UPC-80MF-1	UPC-26TC-1
	UPC-89TMF-1
	UPC-38TC-W-1*
UPC-80FR6-1	UPC26TCR6-1
	UPCFR6-1
	UPC-38TC-W-1*
UPC-80MR6-1	UPC-26TCR6-1
	UPC89TM-1
	UPC-38TC-W-1*
UPC-89M-6	UPC-89TM-6
	UPC-38-TC-6*
UPC-89M-8	UPC-28T-1
	UPC-28T-6
	UPC-38TC-W-1*
	UPC-38TC-W-6*
	UPC-56TB-1
	UPC-56TB-6
UPC-89MF-6	UPC-89TMF-6
	UPC-38TC-W-6*
UPC-89F-6	UPC-89TF-6
	UPC-38TC-W-6*
UPC-89FR-6	UPC-89TFR6-6
	UPC-38TC-W-6*

***Couplings only required if splicing tube**

UNICO TWIST-FIT SYSTEM™ CONNECTIONS



Method A: 6 to 12 ft. (1.8 to 3.6 m) runs



Method B: 6 to 35 ft. (1.8 to 10.7 m) runs

MODULAR PARTS REPLACEMENT GUIDE

These replacements guides will help you select the correct replacement part needed.

Vertical Replacement Parts

2430 Vertical Units

Unit	Motor	Wheel	Control Box	DX Coil	CW Coil	HW Coil	TX Valve	Frost Switch	Filter
V2430B-1EC1BX	A01018-G20	A00584-003	A01882-G02	A01948-G01			A00808-013	A00060-G04	A00558-005
V2430B-1EC2BX	A01018-G20	A00584-003	A01882-G01	A01948-G01			A00808-013	A00060-G04	A00558-005
V2430B-1EC1EX	A01018-G20	A00584-003	A01882-G02	A01914-G01			A00808-013	A00060-G04	A00558-005
V2430B-1EC2EX	A01018-G20	A00584-003	A01882-G01	A01914-G01			A00808-013	A00060-G04	A00558-005
V2430B-1EC1BH	A01018-G20	A00584-003	A01882-G02	A01948-G01		HW-V2430	A00808-013	A00060-G04	A00558-005
V2430B-1EC1EH	A01018-G20	A00584-003	A01882-G02	A01914-G01		HW-V2430	A00808-013	A00060-G04	A00558-005
V2430B-1EC2BH	A01018-G20	A00584-003	A01882-G01	A01948-G01		HW-V2430	A00808-013	A00060-G04	A00558-005
V2430B-1EC2EH	A01018-G20	A00584-003	A01882-G01	A01914-G01		HW-V2430	A00808-013	A00060-G04	A00558-005
V2430B-1EC2CX	A01018-G20	A00584-003	A01882-G01		A02389-G01				A00558-005
V2430B-1EC2CH	A01018-G20	A00584-003	A01882-G01		A02389-G01	HW-V2430			A00558-005
V2430B-1EA2AX	A01018-G20	A00584-003	A01882-G04	A01948-G01					A00558-005

3036 Vertical Units

Unit	Motor	Wheel	Control Box	DX Coil	CW Coil	HW Coil	TX Valve	Frost Switch	Filter
V2430B-1EC1BX	A01018-G20	A00584-003	A01882-G02	A01948-G01			A00808-013	A00060-G04	A00558-005
V3036B-1EC1BX	A01018-G21	A00582-003	A01882-G02	A01951-G01			A00808-014	A00060-G04	A00558-008
V3036B-1EC2BX	A01018-G21	A00582-003	A01882-G01	A01951-G01			A00808-014	A00060-G04	A00558-008
V3036B-1EC1EX	A01018-G21	A00582-003	A01882-G02	A01950-G01			A00808-014	A00060-G04	A00558-008
V3036B-1EC2EX	A01018-G21	A00582-003	A01882-G01	A01950-G01			A00808-014	A00060-G04	A00558-008
V3036B-1EC1BH	A01018-G21	A00582-003	A01882-G02	A01951-G01		HW-V3036	A00808-014	A00060-G04	A00558-008
V3036B-1EC1EH	A01018-G21	A00582-003	A01882-G02	A01950-G01		HW-V3036	A00808-014	A00060-G04	A00558-008
V3036B-1EC2BH	A01018-G21	A00582-003	A01882-G01	A01951-G01		HW-V3036	A00808-014	A00060-G04	A00558-008
V3036B-1EC2EH	A01018-G21	A00582-003	A01882-G01	A01950-G01		HW-V3036	A00808-014	A00060-G04	A00558-008
V3036B-1EC2CX	A01018-G21	A00582-003	A01882-G01		A02395-G01				A00558-008
V3036B-1EC2CH	A01018-G21	A00582-003	A01882-G01		A02395-G01	HW-V3036			A00558-008
V3036B-1EA2AX	A01018-G21	A00582-003	A01882-G04	A01951-G01					A00558-008

3642 Vertical Units

Unit	Motor	Wheel	Control Box	DX Coil	CW Coil	HW Coil	TX Valve	Frost Switch	Filter
V3642B-1EC1BX	A01018-G21	A00582-003	A01882-G02	A01958-G01			A00808-014	A00060-G04	A00558-009
V3642B-1EC2BX	A01018-G21	A00582-003	A01882-G01	A01958-G01			A00808-014	A00060-G04	A00558-009
V3642B-1EC1EX	A01018-G21	A00582-003	A01882-G02	A01957-G01			A00808-014	A00060-G04	A00558-009
V3642B-1EC2EX	A01018-G21	A00582-003	A01882-G01	A01957-G01			A00808-014	A00060-G04	A00558-009
V3642B-1EC1BH	A01018-G21	A00582-003	A01882-G02	A01958-G01		HW-V3642	A00808-014	A00060-G04	A00558-009
V3642B-1EC1EH	A01018-G21	A00582-003	A01882-G02	A01957-G01		HW-V3642	A00808-014	A00060-G04	A00558-009
V3642B-1EC2BH	A01018-G21	A00582-003	A01882-G01	A01958-G01		HW-V3642	A00808-014	A00060-G04	A00558-009
V3642B-1EC2EH	A01018-G21	A00582-003	A01882-G01	A01957-G01		HW-V3642	A00808-014	A00060-G04	A00558-009
V3642B-1EC2CX	A01018-G21	A00582-003	A01882-G01		A02396-G01				A00558-009
V3642B-1EC2CH	A01018-G21	A00582-003	A01882-G01		A02396-G01	HW-V3642			A00558-009

Blower Replacement Parts

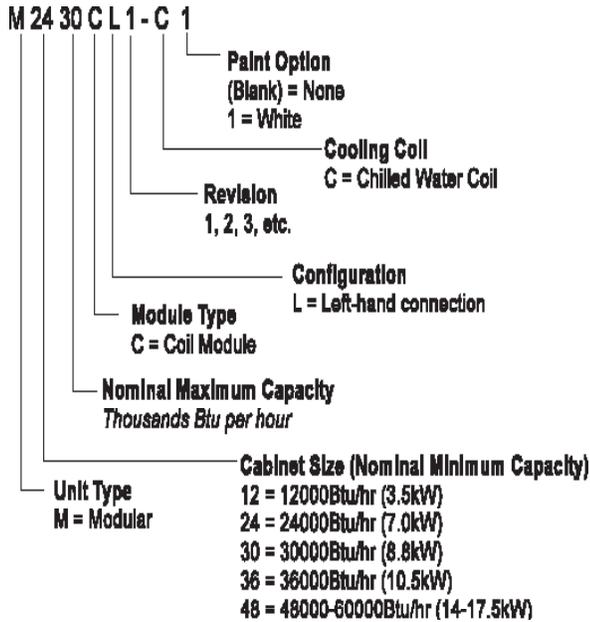
Unit	Motor	Wheel	Control Box
M2430BL1-EA2	A01018-G20	A00584-003	A01834-G04
M2430BL1-EC1	A01018-G20	A00584-003	A00175-G10
M2430BL1-EC2	A01018-G20	A00584-003	A00175-G07
M2430BL2-ST2	A01018-G05	A00584-001	A00175-G03
M3036BL1-EA2	A01018-G21	A00582-003	A01834-G04
M3036BL1-EC1	A01018-G21	A00582-003	A00175-G10
M3036BL1-EC2	A01018-G21	A00582-003	A00175-G07
M3036BL2-ST2	A01018-G09	A00582-001	A00175-G03
M3642BL1-EC1	A01018-G21	A00582-003	A00175-G10
M3642BL1-EC2	A01018-G21	A00582-003	A00175-G07
M3642BL2-ST2	A01018-G09	A00582-001	A00175-G03
M4860BL1-EC1	A01018-G21	A00580-003	A00175-G10
M4860BL1-EC2	A01018-G21	A00580-003	A00175-G07
M4860BL2-ST2	A01018-G09	A00580-001	A00175-G03

Coil Replacement Parts

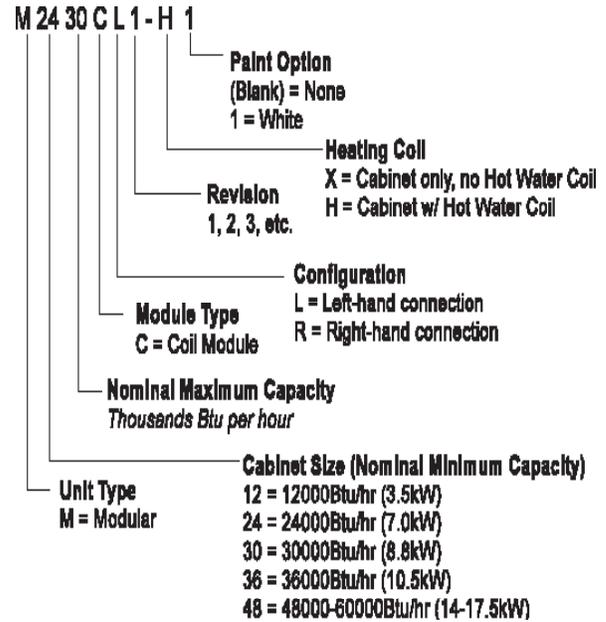
Unit	Coil Assembly	Valve	Drain Pan
M2430CL1-A	A01835-K02		A00095-K01
M2430CL1-B	A00791-K01	A00808-013	A00095-K01
M2430CL1-C	A01665-K02		A00095-K01
M2430CL1-E	A00793-K01	A00808-013	A00095-K01
M3036CL1-A	A01858-K01		A00095-K05
M3036CL1-B	A01622-K01	A00808-014	A00095-K05
M3036CL1-C	A01665-K01		A00095-K05
M3036CL1-E	A01736-K02	A00808-014	A00095-K05
M3642CL1-B	A00790-K01	A00808-014	A00095-K02
M3642CL1-C	A01665-K03		A00095-K02
M3642CL1-E	A00792-K01	A00808-014	A00095-K02
M4860CL1-B	A00811-G01	A00808-015	A00835-G01
M4860CL1-C	A01126-G01		A00835-G01
M4860CL1-E	A00811-G02	A00808-015	A00835-G01

HOW TO READ UNICO MODEL NUMBERS

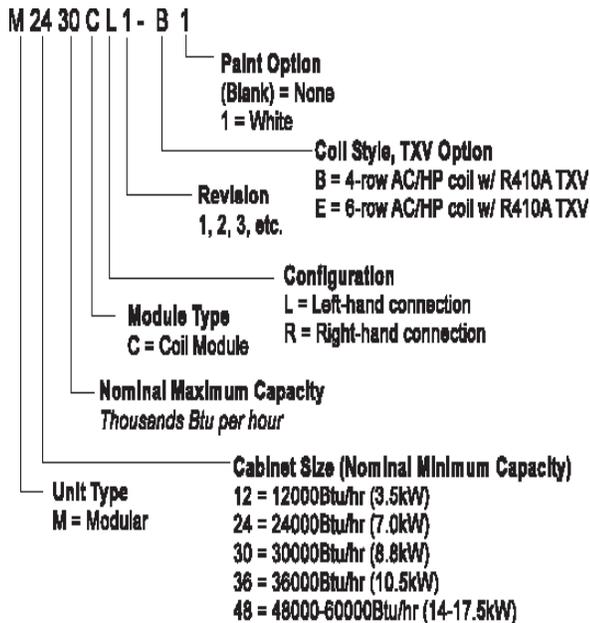
Cold Water Coil Modules Model Number Key



HOT Water Coil Modules Model Number Key

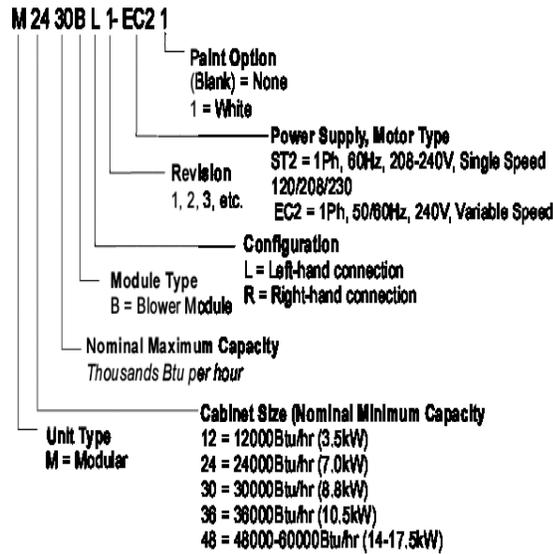


Coil Modules Model Number Key

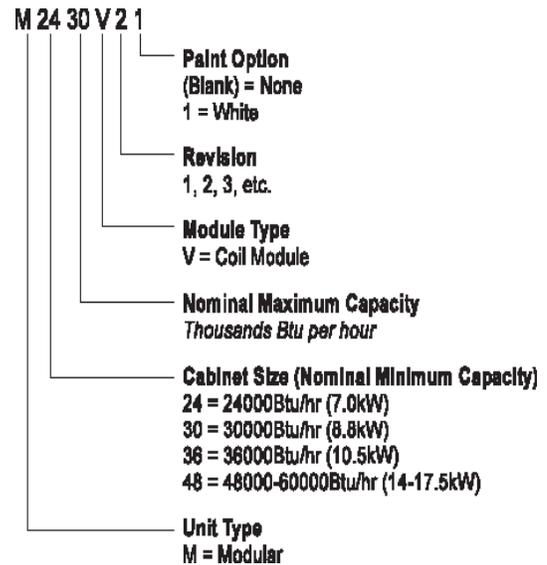


HOW TO READ UNICO MODEL NUMBERS

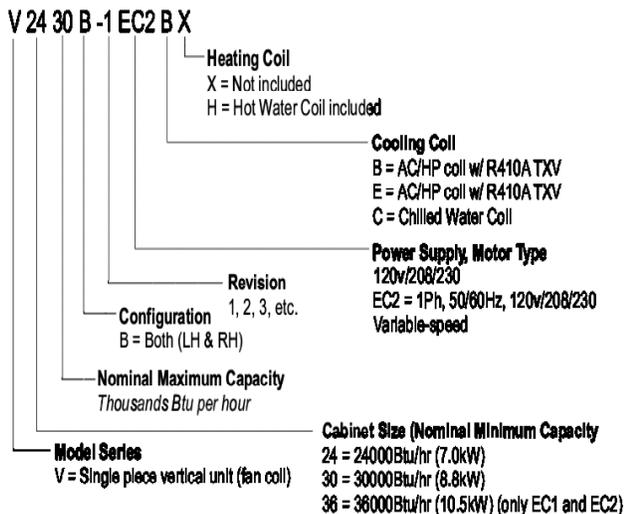
Blower Modules Model Number Key



Vertical Return Modules Model Number Key



Vertical Modules Model Number Key



UNICO UNIVERSITY

Being a business owner and HVAC professional takes up a lot of your time. Staying up-to-date with the latest product improvements and industry trends can be a daunting challenge.

That's why we set up Unico University as your "one-stop-shop" for all things Unico.

Unico University offers a choice of three types of training programs to get you on board and help you keep informed about new installation innovations and methods: Online, Field, and Factory trainings.



ONLINE TRAINING

Unico offers online courses on the basics of the Unico System. This is a great way to familiarize yourself with the Unico System, it's innovative components, and gain insight on how installing the Unico System can help your business grow.

FIELD TRAINING

Unico also offers several training locations around the country which are conducted by our local Unico representatives. Though not quite as immersive as Unico University In-Factory Training, you and your employees will gain a comprehensive understanding of the Unico System and proper installations techniques.

2-1/2 DAY FACTORY TRAINING

Hosted at the Unico factory in St. Louis, this immersive, in-person training occurs once a month and includes demonstrations, hands-on instruction, and includes a tour of the factory. Unico trainer, Jason Church, will cover everything you need to know about the Unico System and iSeries Outdoor Inverter Unit, including start-up, layout, design and troubleshooting. Unico provides lodging and lunch – you only need cover your cost for travel to St. Louis.

To view upcoming training classes, please visit www.unicosystem.com/training

If you have any questions please call us at 800-527-0896, or email training@unicosystem.com

DESIGN SERVICES

If you have a project that needs design assistance, we offer a free service which includes a System Design and an estimated Materials list. All you need to do is submit your plans and our Design team will contact you for more information.

In order to streamline your request, we have a Web-based form to expedite your request.

Upon submittal of the Load Calculation Design Form, an e-mail defining the case number for your project will be sent to you.



SEND US YOUR PLANS

Plans submitted for Unico System Design & Layout are preferred to be received electronically. This allows for a quicker turnaround time on your design project. Email your project plans to Design Plans.

In addition, a room-by-room heat loss/heat gain calculation is required for our designs.

If opting to send hard copies of your drawings, please mail to:

Unico Inc.
System Design Services
1120 Intagliata Drive
Arnold, MO 63010
Attn: Victor Carroll

Plan drawings are accepted in the following formats:

AUTOCAD (PREFERRED FORMAT)

Submissions should include each floor in a separate file, an elevation view, and a window schedule

PDF: Same format submission as AutoCAD **WRIGHTSOFT:** Entire file should be submitted

Unico, Inc. reserves the right to use our design of your plans in our marketing materials. Unico makes no claims that the information provided to us is correct or complete. It is the responsibility of the installing contractor, design engineer, or architect to verify the design conditions and performance. Thank you for your support!

IMPORTANT NOTICE

Clearance Warranty

One-Year: Our standard warranty on all Clearance Unico System parts and Clearance pieces is one full year from the date of installation.

Five-Year: Unico, Inc. is pleased to extend our limited parts warranty for an additional four years when a Unico Preferred Contractor installs and registers the clearance system. The four-year extension is applicable only to The Unico System serial numbered products. Clearance items must be registered within 90 days of install.

**iSeries Wall-Mounts are eligible for One-Year warranty ONLY. Items denoted as 'Clearance Items' are not eligible for return, exchange, or credit.*

Important Notice

The Unico System® is an AHRI listed and matched HVAC system designed to be installed by a qualified, licensed HVAC contractor per Unico's installation instructions.

Many states and local jurisdictions have specific requirements for contractors to be trained and licensed before installing HVAC systems. Many local building codes require specific installation design, methodology permitting and testing before an HVAC system can be operated.

Unico recommends you select your qualified installing contractor before purchasing equipment so the contractor can assure the system is designed and sized correctly, matched to any auxiliary equipment and compliant with local codes and requirements.

Unico does not provide a warranty for equipment installations that are not performed by a licensed HVAC contractor.

For help finding a Unico Preferred Contractor (UPC) in your area, contact our Customer Care representatives at 800-527-0896, option 4 or insidesales@unicosystem.com.

Attention To Property Owners/Non-Resident Owners:

Please note that the warranty for Unico equipment is non-transferable.

If you are registering a system for a property that you will not own/plan to sell within six months, please register as a "Property Owner" in the Installation Type field.

Your warranty will be a one-year warranty, and then, within six months of the registration date, you provide the name and contact information for the new homeowner, he/she will receive the balance of the Unico warranty.

We do not want the new homeowner to have any issues after they purchase the home, so please do not register yourself as the "Homeowner" or "Residential". If you do this, and the new homeowner needs to submit a warranty claim, they will be told that the warranty is null and void since it is non-transferable.

RETURNS POLICY

Return Shipping

If you have ordered the wrong product or no longer want a product you ordered, you will be responsible for the return shipping cost. Returns created because we mistakenly shipped you the wrong item and/or the item is damaged or defective, qualify for free return shipping up to 90 days after the item was received. Please see the refund policy for your specific return for more detailed information.

Ordered the Wrong Products

If you have ordered the wrong product or no longer want a product you ordered, you will be responsible for the return shipping cost. You can call or email our Technical Support team to set up the return for you. The products must be returned in new and unused condition in the original packaging. The Return Authorization must be included in the box. The customer is responsible for all shipping charges associated with the return. There will be no restocking fee if you return the item within 30 days of receipt. After 30 days, a 25% restocking fee will be applied. We do not offer exchanges, but we would be happy to assist you in locating the correct item if you did make an incorrect purchase. If you need assistance, please email or call our Technical Support team.

Freight Packages – Please Inspect Upon Delivery

Please inspect all freight packages carefully before signing for them. If a package looks damaged in any way as a result of the shipping process, please do not sign for it. Refuse delivery, take pictures of the damage if possible, and contact Unico Technical Support immediately with a description of the damage. We will contact the freight company and submit a claim. If you are unsure whether the shipment looks damaged or not, please inspect it further and open it in front of the driver before signing that it has been received. It is your right as a customer to fully inspect any freight packages prior to the driver leaving. In the event that you notice concealed damages after the driver has left, you must notify Unico within 24 hours of receipt of delivery.

Received Defective Products - UPS Delivery

Unico must be notified of defective products within 30 days of receipt. Please call or email our Technical Support team to set up the return details. Be sure to complete the Warranty Claim Form. For fastest replacement, please place a new order for the replacement items and we will ship them out to you as soon as possible (you will be credited for the full amount of the original item(s) ordered when we receive your return). Unico will pay the shipping cost associated with the replacement.

Received a Damaged Package

If a damaged package is left at your door, please contact us immediately. You can call or email our Technical Support team to set up the return for you. Please place a new order for the replacement items and we will ship them out to you as soon as possible (you will be credited for the full amount of the original item(s) ordered when we receive your return). All returned products must be unused and in the original packaging. The Return Authorization must be included in the box.

Received Incorrect Products (Not What You Ordered)

It is rare that we send out the wrong products, as we double check every order. If you do happen to receive an incorrect product, you must notify Unico as soon as possible by calling or emailing our Technical Support team to set up the return for you. Please place a new order for the replacement items and we will ship them out to you as soon as possible (you will be credited for the full amount of the original item(s) ordered when we receive your return). All products must be returned in new and unused condition in the original packaging. The Return Authorization must be included in the box.

WARRANTY POLICY

Unico, Inc. manufactures the finest heating and cooling product available and is proud to offer the following warranty program:

1

Unico, Inc. branded products include a standard, limited one year parts only warranty effective from date of equipment commissioning as long as the details of the installation meet the limited warranty requirements shown in the latest update of Unico Bulletin 10-010. Non Unico branded products that may be sold by Unico or a third-party include the original manufacturers limited warranty only and is subject to the terms and conditions of that manufacturer's limited warranty.

2

An extension to a **5-Year Limited Warranty** is available for residential projects as described in Unico Bulletin 10-012. In summary, the following is needed to extend to a limited five-year warranty.

- A. *The extension applies to new Unico branded products with a Unico serial number that are installed no later than 360 days from the date the product was shipped from Unico.*
- B. *A listed Unico Preferred Contractor (UPC) in good standing must install The Unico System®.*
- C. *The system must be installed per Unico installation instructions and currently published technical bulletins.*
- D. *The project must be registered on The Unico System® website before any warranty claims can be processed. (www.unicosystem.com/product-warranty/)*

3

An extension to a **10-Year Limited Warranty** is available for residential projects as described in Unico Bulletin 10-014. In summary, the following is needed to extend to a limited ten-year warranty.

- A. *The extension applies to Unico branded products with a Unico serial number only.*
- B. *An installation must include both a new blower and coil module to qualify for this extended warranty.*
- C. *A listed Unico Preferred Contractor (UPC) in good standing must install The Unico System®.*
- D. *The project must be registered on The Unico System® website within 90 days of installation. (www.unicosystem.com/product-warranty/) and no later than 360 days after the product was shipped from Unico.*
- E. *The system must be installed per Unico installation instructions and currently published technical bulletins.*

4

Warranty Details – please read latest version of bulletins 10-010, 10-012, or 10-014 in full for the detailed eligibility requirements, exclusions, processing requirements and additional terms of Unico's limited warranty. Unico reserves the right in its sole discretion to amend, update, or discontinue warranty programs and coverage terms. **For the most up-to-date Warranty Policy, please go online to www.unicosystem.com*

LIFTGATE/RESIDENTIAL DISCLAIMER

A liftgate is a special hydraulic platform fitted on the back of a truck that can raise or lower a shipment to and from the ground.

Commercial trucks are designed to load and unload onto loading docks. When shipments are being made to addresses without access to a dock, liftgate equipment is needed.

Not all trucks are equipped with liftgates, so you will need to indicate at the point of purchase if a liftgate is required. If you don't communicate that a liftgate is needed, delivery trucks may arrive without the required equipment and won't be able to complete the delivery. This could cause a delay in the shipment and added delivery fees.

PROPOSITION 65 WARNING

Proposition 65, also known as the Safe Drinking Water and Toxic Enforcement Act, requires that California residents be informed of products that contain chemicals known to cause cancer, birth defects, or other reproductive harm.

For more information about California Proposition 65, please visit <https://www.p65warnings.ca.gov/>.

 **WARNING:** Cancer and Reproductive Harm-
www.P65Warnings.ca.gov

POLICIES & DISCLAIMERS

Made in the USA

We are very proud of the fact that we not only assemble all of our products in St. Louis, MO, but also that we manufacture our own parts for our blower and coil cabinets. This keeps many jobs here on our own soil and provides more money for our local, state and national economy.

ISO 9001:2015 Quality Management

In 2013, Unico became an ISO 9001 certified company. ISO 9001 ensures that our customers consistently receive the highest quality products that we can produce and that we continually strive to improve our processes and quality standards into the future. We will continue to undergo internal as well as third-party audits to make sure that these standards and processes are being upheld.

U.S. General Services Administration Contract Holder

We are very proud that we are a vendor for the United States GSA. Established in 1949 by Missouri native President Truman, the administration is tasked with supplying the Federal government and its employees with cost effective, high quality products and services.

U.S. Green Building Council Member

Unico, Inc. is also a member of the USGBC, whose vision is to produce greener, more sustainable buildings and communities. The Unico System® has been instrumental in helping many different homes and buildings achieve LEED certification, which ensures that the structure is incredibly efficient and built or renovated with sustainable designs in mind.

NEED TECHNICAL SUPPORT?

We are here to help with part match-ups and troubleshooting the installation process.



Call: (800) 527-0896, option 1
Email: service@unicosystem.com,
or **Text-A-Tech:** (314) 222-2487
with any questions you may have.

Business Hours: Monday-Friday / 7:00am - 5:00pm (CST)



Follow us on



**National Trust for
Historic Preservation**
Save the past. Enrich the future.™