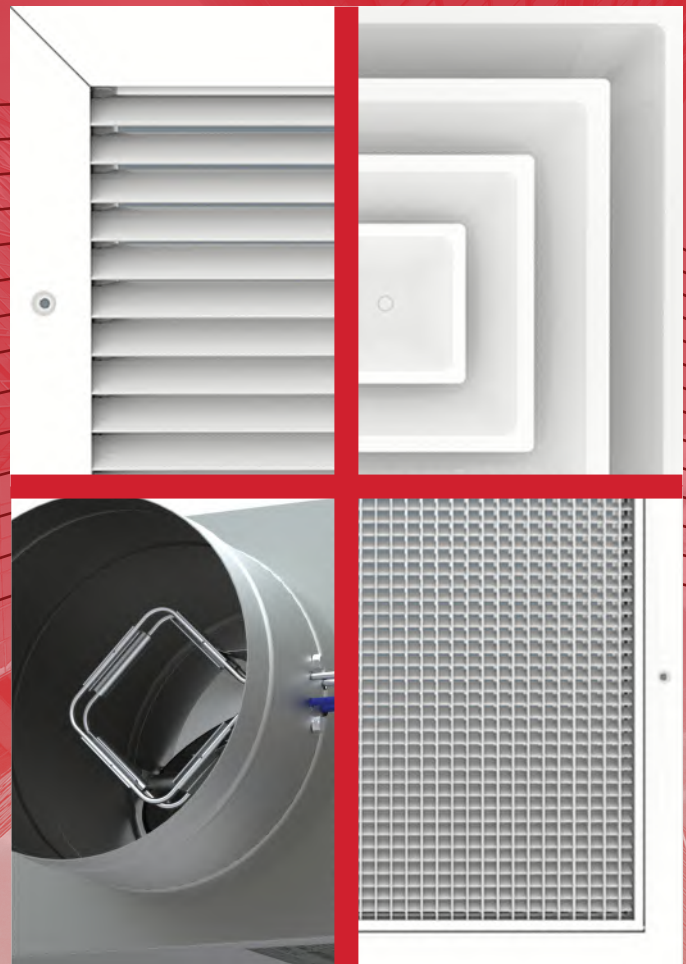




PRODUCT HANDBOOK

GRILLES • REGISTERS • DIFFUSERS • AIR TERMINAL UNITS • ZONE DAMPERS





ABOUT OUR HANDBOOK

Our product handbook is a streamlined overview of every USAire™ product currently available. This handbook is best used in conjunction with our website (listed below). If you are interested in a product, simply type the model number of your choice into our website search bar. Click on your model number to be taken to it's own page which includes submittals, performance data and more.

www.usaire.com • 727.441.2651

**Metal Industries • 1985 Carroll St.
Clearwater, FL 33765**



GRILLES & REGISTERS • 4-5



- Residential Grilles and Registers
- Floor Products
- Residential/Light Commercial Grilles and Registers
- Spiral Duct Grilles
- Filter Grilles
- Heavy Duty Grilles
- Industrial & Specialty Grilles
- Grilles & Registers Accessories

CEILING DIFFUSERS • 6-7



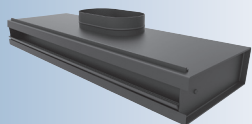
- Square Face Cone Diffusers
- Louvered Face Diffusers
- Perforated Ceiling Diffusers
- Round Diffusers
- VAV Diffusers
- Ceiling Diffuser Accessories

LINEAR DIFFUSERS & GRILLES • 8



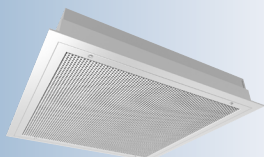
- Linear Slot Diffusers
- Linear Bar Grilles
- Linear Accessories

PLENUM SLOT DIFFUSERS • 8



- Plenum Diffusers with Adjustable Pattern Controllers

CRITICAL ENVIRONMENT PRODUCTS • 9



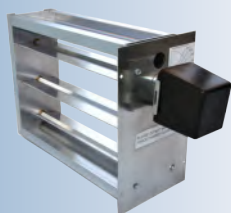
- Laminar Flow Diffusers
- Radial Flow Diffusers

AIR TERMINAL UNITS • 9



- Single Duct Air Terminals
- Retrofit Air Terminals

ZONE DAMPERS • 9



- Spring Return Zone Control Dampers
- Modulating Zone Control Dampers
- Standalone Dampers
- Bypass Dampers

RESIDENTIAL GRILLES & REGISTERS

SERIES 100

Stamped Sidewall Supply Grilles



Series is available as 1, 2, 3 and 4 way deflection models. Multi-shutter damper on "M" models. Face only (FO) and aluminum (AL) construction optional.

SERIES 200

Stamped Curved Blade Sidewall Supply Grilles



Series available as 1, 2, 3 and 4 way deflection models with curved blades. Multi-shutter damper on "M" models. Face only (FO) and aluminum (AL) construction optional.

SERIES 1300

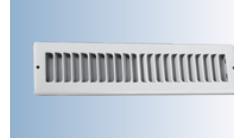
Stamped Baseboard Return Grille



Economical return grille with 1/2" stamped lanced face and fins set at 30° angle.

MODEL 1320

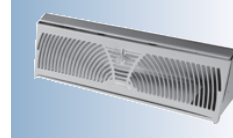
Stamped Toe Space Grille



Toe space grille with multi-angle fins. Available in white or brown finishes.

MODEL 1340

Baseboard Diffuser



Model with a fan shaped air pattern and flap style damper, available in white or brown. 1340R also available (no damper).

MODEL 1400

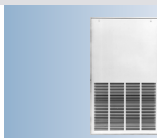
Return Air Grille



Economical return grille with 1/2" spaced stamped louvers and fins fixed at a 50° angle.

MODEL 1410AD

Access Door



Access door with 1/2 stamped face and 1/2 solid panel. Easily permits access to equipment.

MODEL 1410F

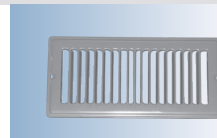
Return Air Filter Grille



Model is the most economical filter grille with removable, stamped face and fins fixed at 50°. Allows use of 1" filter.

MODEL 1500

Floor Register Face Only



Face only floor register with heavy-gauge, multi-angle fins. Available with a damper (1510D) and in white or brown finish.

MODEL 1510X

Floor Register Face Only



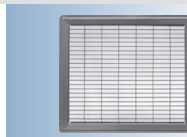
Face only floor register with heavy-gauge, multi-angle fins. Available with a damper (1510DX) and in white or brown finish.

FLOOR PRODUCTS

RESIDENTIAL/LIGHT COMMERCIAL GRILLES & REGISTERS

MODEL 1530

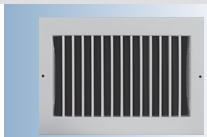
Bar Style Floor Grille



Heavy duty floor grille with crossbracing. Available with a lever-operated multi-shutter damper (1530M) and in white or brown finish.

SERIES V

Aluminum Stamped Frame Supply Grilles



Includes V (Single deflection/vertical blades), VH (Double deflection/vertical blades), VM with a built in multi-shutter damper, and V OBD with opposed blade damper.

SERIES 4000/4000S

Al./Steel, Single/Double Deflection Supply Grilles



Single deflection is offered in the 4002 model, double deflection is offered in the 4004 models. H or V signifies horizontal or vertical blades in front.

MODEL V4002SM

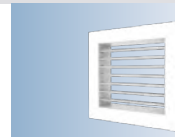
Single Deflection Steel Sidewall Grille



Economical steel construction supply grille with multi-shutter damper and adjustable front vertical blades. Damper operated by lever handle in frame.

SERIES 4000-AF/4000S-AF

Airfoil Blade Aluminum or Steel Supply Grilles



Model is available with single or double deflection (4002 or 4004). Airfoil blades provide superior pressure drop performance.

SERIES L

Aluminum Curved Blade Supply Grilles



Series is available with 1 way (L), 2 way (LT), 2 way corner (LTC), 3 way (LS3) and 4 way (LS4) directional air patterns. Multi-shutter damper on "M" models.

MODEL RH

Roll Formed Aluminum Return Air Grilles



Model available in a number of borders to integrate into a wide range of ceiling and sidewall applications.

MODEL RHE

Extruded Aluminum Return Air Grilles



Series is a premier extruded aluminum return grille, offering superior construction for high performance and durability.

MODEL SRH

Steel Return Air Grille



Model is constructed of steel and an economical choice for a return grille. Available in multiple border types for a wide range of ceiling and sidewall applications.

SERIES 4002R/4002RS

Aluminum/Steel Return Air Grilles

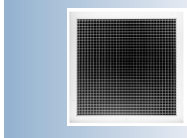


Single deflection return air grille to match the 4000/4000S series of supply grilles. Available with horizontal (H) or vertical (V) fixed front blades.

SPIRAL DUCT GRILLES

MODEL CC5

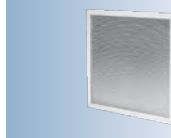
Aluminum Cube Core Return and Exhaust Grilles



½"x½"x½" cube core model great for high capacity applications requiring minimum pressure drop and noise. Standard construction is aluminum.

MODEL RP/SPR

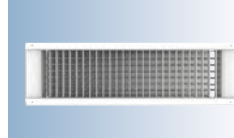
Aluminum/Steel Perforated Return Grille



Model ideal for return/exhaust applications that require low pressure drops and low sound. Available in steel (SRP).

MODEL 4004P/SP

Aluminum/Steel Spiral Duct Supply Grille



The models offer superior performance in exposed duct applications offering a clean, low profile appearance and universal fit. Model P is aluminum, SP steel.

MODEL 4004PCF

Aluminum Curved Frame Spiral Duct Grille

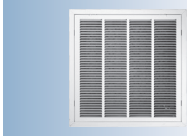


This curved frame spiral duct grille features a curved frame that fits flush to the contour of round or spiral duct offering a clean finish.

FILTER GRILLES

MODEL 1410F

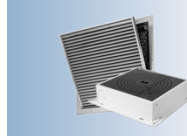
Steel Return Air Filter Grille



Economical filter grille model for Lay-in (-6) or surface mount (-1) applications. Accepts 1" filters (not incl.) and can be provided w/ R6 fiberglass molded back (FGBP).

SERIES 1420F/SRH20F/RH20F/CC520F/SPR20F

Return Air Grille w/ Plenum Back



The 20F Series offers the base return grille model for use in a Lay-in application (24" x 24") with a plenum back for standard 20" x 20" filters (not included).

SERIES RHF/RHEF/SRHF

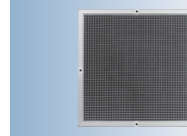
Aluminum/Steel Filter Return Grille



Series available in aluminum (RHF) and steel (SRHF). Extruded aluminum RHEF is our premiere model offering superior appearance and performance.

MODEL CC5F

Aluminum Cube Core Filter Return Grille



These cube core return and exhaust filter grilles are designed to provide low pressure drop and low sound levels.

MODEL RPF/SRPF

Al/Steel Perforated Face Filter Return Grille

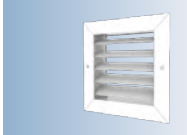


The series is designed for 1" thick filters (by others) and includes a hinged face with thumb latches for quick filter changes.

HEAVY DUTY GRILLES

MODEL HDRH

Heavy Duty Aluminum Return Grille



An excellent choice for projects that require a grille or register to withstand moderate physical abuse.

MODEL 4500/4538/4500S/4538S

Heavy Duty Aluminum/Steel Sidewall Return Grille



Heavy duty return grille is designed for applications such as gymnasiums. The border & deflection blades are heavy gauge. Comes in 0° (4500) and 38° (4538) deflection.

MODEL DG

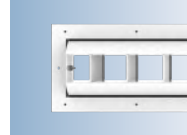
Aluminum Door Grilles



These extruded aluminum door grilles are designed to transfer air through doors or walls. DG has U-channel frame, DGDF dual flanges and DGSF single flange.

MODEL RL

Industrial/High Capacity Supply Roto-Louver



The model's outlets are engineered for high capacity, long throw applications such as gymnasiums, industrial plants and other large spaces.

MODEL OAL

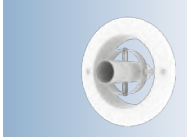
Aluminum Outside Air Louver



Model inhibits the entrance of wind, rain, snow, birds and airborne debris while enhancing the building's exterior appearance.

MODEL JA

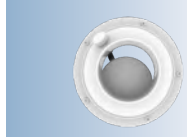
Aluminum/Steel Jet Aire High Capacity Nozzle



Jet Aire diffusers offer an economical solution to high capacity air distribution applications requiring long throw distances.

MODEL MPK

Aluminum Punkah Louver



Model discharges a high velocity jet that can be directed to condition a specific space or area.

MODEL MRD

Architectural Round High Capacity Grille



Series is an excellent choice for applications requiring an adjustable outlet with high velocity capacities and long throw.

GRILLES & REGISTERS ACCESSORIES

MODEL TBP/STBP

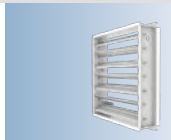
Aluminum/Steel Panels
for Grilles & Diffusers



Model is a panel for use with grilles, registers and diffusers in T-Bar applications. Available in aluminum or steel.

MODEL OBD/OBDA

Opposed Blade Damper



Tapered blades set in a U-channel frame. Opposed blades on 1" centers. Screw-driver slot operator. Available in aluminum (OBDA) and steel (OBD).

MODEL TBPF/STBPF

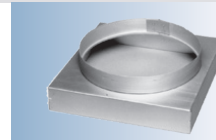
T-Bar Plaster Frame



Model permits the installation of the T-Bar frame style ceiling diffuser into plaster or gypsum type ceilings. Available in aluminum (TBPF) or steel (STBPF).

MODEL TR/TR DEEP

Square to Round
Transition



Square-to-Round transition permits installation onto square necks to allow for round or flex duct applications.

MODEL PF

Plaster Frame



Provides uniform opening in plaster ceilings or sidewalls to accommodate grilles and registers.

SQUARE DIFFUSERS

MODEL LIPF/SLIPF

Extruded Aluminum Lay-in
Plaster Frame



Model is an extruded aluminum Lay-in plaster frame for use in hard ceiling applications.

MODEL 4700

Square Face
Step Down Diffuser



2-cone square face diffuser with round neck. Available in steel or aluminum construction (4700 AL).

MODEL 4800

Square Face
Step Down Diffuser



3-cone square face diffuser with round neck. Available in steel or aluminum construction (4800 AL).

MODEL 5906-6

Square Face Diffuser with
Universal R6 Molded Back



The 5906-6 (2-cone), 5906-3-6 (3-cone) and 5956-6 (plaque) are supply diffusers with scored R6 molded fiberglass backs for spin in collars.

MODEL 4750

Square Plaque
Face Diffuser



Steel construction with optional aluminum construction (4750 AL).

MODEL 4900

Ex. Al. Square/Rect. Louver
Face Ceiling Diffuser



Models provide an aesthetically pleasing solution to air distribution requirements, regardless of room configurations.

MODEL 5500

Aluminum Square/Rect.
Louver Face Diffuser



Aluminum construction models available in 1-way (S1/R1), 2-way (S2/R1), 3-way (S3/R3), corner (SC) and 4-way (S4/R4) air patterns.

MODEL 5500S

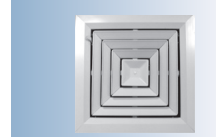
Steel Square/Rect.
Louver Face Diffuser



Economical steel construction models available in 1-way (S1/R1), 2-way (S2/R1), 3-way (S3/R3), corner (SC) and 4-way (S4/R4) air patterns.

MODEL 5200

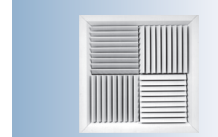
Economical Aluminum
Face Diffuser



Aluminum economical square louver face diffuser. Available in 1-way (S1), 2-way (S2), 2-way corner (SC), 3-way (S3) or 4-way (S4) air patterns.

MODEL 9000

Square Modular
Core Diffuser

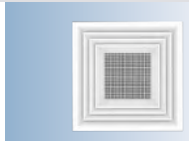


Aluminum square modular core ceiling diffuser. Adjustable cores designed to provide a flexible range of air patterns.

PERFORATED DIFFUSERS

MODEL 5500 DAF CC5

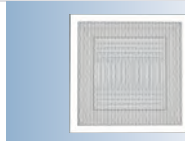
Concentric Supply/Return
Ceiling Diffuser



Concentric supply/return diffusers provide a functional solution to roof top package single outlet air distribution requirement.

MODEL 7000

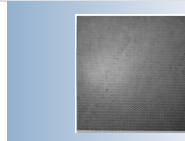
Al. Perforated Diffuser
with Pattern Controller



Model is an aluminum perforated supply diffuser with curved blade pattern controllers mounted in the neck of the diffuser.

MODEL PRTB/SPRTB

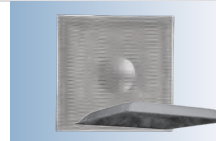
Perf. Screen for Non-Ducted
Plenum Return



Models are an economical choice for non-duct plenum return applications and come without pattern controllers. In aluminum (PRTB) or steel (SPRTB).

MODEL 7300

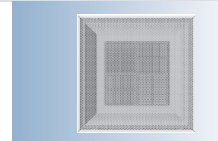
Perf. Supply Diffuser with
Fiberglass Backpan



Model is an economical diffuser w/ fiberglass backpan, designed to allow field installation of an inlet collar. Use 7300R for return applications (no air pattern disc).

MODEL 7500/7500 AF

Perf. Face Ceiling Diff. with
Face Mount Pattern Cont.

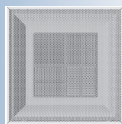


Models have a round neck and face mounted adjustable pattern controllers. Optional alum. face (AF). Use 7500R for return app., no pattern controllers.

PERFORATED DIFFUSERS

MODEL 7550/7550 AF

Perf. Face Ceiling Diff. with Face Mount Pattern Cont.



Models have a square neck & face mounted adjustable pattern controllers. Optional alum. face (AF). Use 7550R for return app., no pattern controllers.

MODEL 7600/7600 AF

Perf. Ceiling Face Diff. with Curved Blade Pattern Cont.



Models have a round neck and neck mounted adjustable pattern controllers. Optional alum. face (AF). Use 7600R for return app., no pattern controllers.

MODEL 7650/7650 AF

Perf. Face Ceiling Diff. with Curved Blade Pattern Cont.



Models have a square neck & neck mounted adjustable pattern controllers. Optional alum. face (AF). Use 7650R for return app., no pattern controllers.

MODEL 7900

Al. Perforated Face Modular Core Diffuser



Models are a great choice for VAV applications. Modular cores can be field adjusted with several discharge air patterns.

MODEL 7950

Perf. Face Modular Core Diffuser - Steel Backpan



Cores can be field adjusted to a variety of air patterns. An excellent choice for VAV applications.

ROUND DIFFUSERS

MODEL 900

Aluminum Fixed Round Diffuser



Economical high performance diffuser, available with optional damper (900D). Concentric rings for even air distribution.

MODEL 3000

Adjustable 3-Cone Round Diffuser



Models incorporate a high induction design to efficiently handle large volumes of air at high cooling temperature differentials.

MODEL 3100

Fixed/Adjustable Round Diffuser



Models incorporate a high induction design to efficiently handle large volumes of air at high cooling temperature differentials.

MODEL R5750

Round Panel Architectural Diffuser



Model blends well into the ceiling surface. Steel is standard construction, available in aluminum (R5750 AL).

VAV DIFFUSERS

MODEL SC/SCVH

Thermal VAV Diffuser



Models are thermally powered VAV diffusers completely self-powered and self-contained. Cooling only (SC) and heat/cool (SCVH) models available.

MODEL SE-HC

Electronic VAV Diffuser



Model regulates the amount of supply air into the space, uses a wall-mounted thermostat to achieve true VAV control in heating/cooling mode.

MODEL LAD

Linear "Anti-Strat" Changeover Diffuser



Change in air pattern prevents stratification issues with heated air diffusion. Thermally powered by the supply air.

MODEL VAC/VACH

VAV Linear Diffusers



Induction slot samples room air to assure precise control. Available in cooling only (VAC) and heat/cool (VACH).

CEILING DIFFUSER ACCESSORIES

MODEL BDS

Steel Butterfly Damper



The model is a steel butterfly damper with adjustable blades.

MODEL D3/SD3

Al./Steel Radial Opposed Blade Damper



The model is an aluminum radial opposed blade damper. It is also available in steel (SD3).

MODEL RSD

Galvanized Steel Radial Shutter Damper



This model is a galvanized steel radial shutter damper for use with round neck diffusers.

MODEL OBD/OBDA

Opposed Blade Damper



Tapered blades set in a U-channel frame. Opposed blades on 1" centers. Screw-driver slot operator. Available in aluminum (OBDA) and steel (OBD).

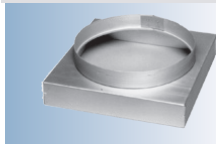
MODEL TBPF/STBPF

T-Bar Plaster Frame



Model permits the installation of T-Bar frame style ceiling diffuser into plaster or gypsum ceilings. Available in aluminum (TBPF) or steel (STBPF).

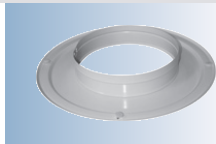
CEILING DIFFUSER ACCESSORIES

MODEL TR/TR DEEPSquare to Round
Transition

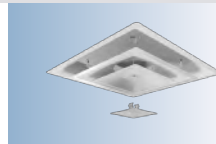
Square-to-round transition permits installation onto square necks to allow for round or flex duct applications.

MODEL SNAP 59

Snap-in Collar



The SNAP 59 (1-1/2" high) and SNAP 59-2 (2" high) accessory attaches to the 5906-6 series diffusers to allow duct connections.

MODEL SNAP 582-Cone to 3-Cone
Conversion

Converts a 2-cone diffuser into a 3-cone diffuser.

MODEL FGBP

Fiberglass Backpan



R6 molded fiberglass backpan for ceiling diffusers. Foil facing and pre-scored for round necks 6" - 14".

LINEAR SLOT DIFFUSERS & BAR GRILLES

MODEL AFL

Linear Slot Diffuser



Model satisfies the demanding engineering and architectural criteria, providing superior air distribution performance.

MODEL AFLCLinear Slot Diffuser
with Concealed Mount

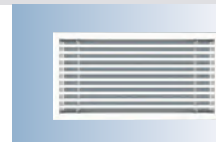
Model satisfies the demanding engineering & architectural criteria, providing superior air distribution performance with concealed mounting.

MODEL 6600Supply/Return Linear
Slot Diffuser

The 6600 series aluminum linear slot diffusers are an excellent choice for continuous linear applications, providing a clean appearance and easy installation.

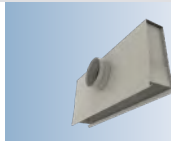
MODEL 2000Extruded Aluminum
Linear Bar Grille

Models are engineered for supply/return applications. 1" border, 7/32" bars on 1/2" centers. Floor mount use Model 2000F. Blade deflection available in 0° (2000) or 15° (2015).

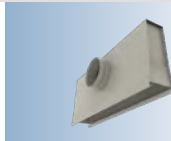
MODEL 2100Extruded Aluminum
Linear Bar Grille

Models are engineered for supply/return applications. 1/2" border, 7/32" bars on 1/2" centers. Blade deflection available in 0° (2100) or 15° (2115).

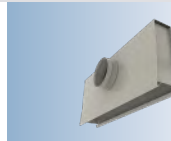
LINEAR ACCESSORIES

MODEL UPI AFLUniversal Plenum
Standard Mount

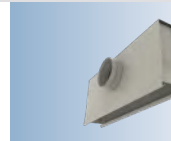
Model is designed to connect Model AFL to the ducted supply or return system. Standard with 1/2" fiberglass insulation.

MODEL UPI AFLCUniversal Plenum for
Concealed Mount

Model is designed to connect Model AFLC to the ducted supply or return system. Standard with 1/2" fiberglass insulation.

MODEL UPI 6600Universal Plenum for Supply/
Return Linear Slot Diffuser

Model is an easily installed, economical accessory to the 6600 linear slot diffuser, for connection to ducted supply/return system. Standard with 1/2" fiberglass insulation.

MODEL UPI 2000/2100Universal Plenum for Ex.
Aluminum Linear Bar Grille

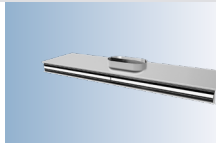
Model is designed to connect Model 2000/2100 to the ducted supply or return system. Standard with 1/2" fiberglass insulation.

MODEL FODR

Face Operated Damper



Model FODR face operated damper for use with linear slot diffusers.

PLENUM SLOT
DIFFUSERS**MODEL PHPS/PHNS**High Performance
Plenum Slot Diffuser

Steel supply/return plenum slot diffusers with heavy duty extruded aluminum pattern controllers, and gasket for horizontal discharge pattern.

CRITICAL ENVIRONMENTS

MODEL HPL-CL

Environmental/Hospital Supply Diffuser



Models are engineered for supply air distribution in critical environments such as hospital operating rooms and clean rooms.

MODEL HRD-CL

Radial Discharge Pattern Critical Environ. Diffuser



Models are engineered for supply air distribution in critical environments such as chemistry labs and clean rooms.

AIR TERMINAL UNITS

MODEL PH

Single Duct Air Terminal Unit



The simplest and most widely used VAV terminal unit. Capacities ranging from 80-8,000 CFM in 10 sizes.

MODEL PT

Round Retrofit Air Terminal Unit



These retrofit air terminal units enable the conversion of existing constant volume systems to more energy efficient, variable air volume (VAV) systems.

ZONE DAMPERS

MODEL RZRD/RZQD

Spring Return Zone Damper



Two-position zone damper in round (RZRD) or square/rectangular (RZQD) with 24VAC spring return actuator.

MODEL RFRD

Spring Return Round Retrofit Zone Damper



Two-position round retrofit zone damper for slide-in applications. Available in 5" - 10" diameters.

MODEL MRD/MQD

Modulating Zone Damper



Floating point round (MRD) or square/rectangular (MQD) zone damper with 24VAC modulating high torque actuator for light commercial applications up to 2" WC.

MODEL MMRD/MMQD

Standalone Modulating Zone Damper



Standalone VAV zone damper in round (MMRD) or square/rectangular (MMQD) regulates supply air into space for commercial applications up to 2" WC.

MODEL BBRD/BBQD

Barometric Bypass Damper



Easily adjustable barometric damper in round (BBRD) or square/rectangular (BBQD) for bypass duct from supply to return.

MODEL EBRD/EBQD

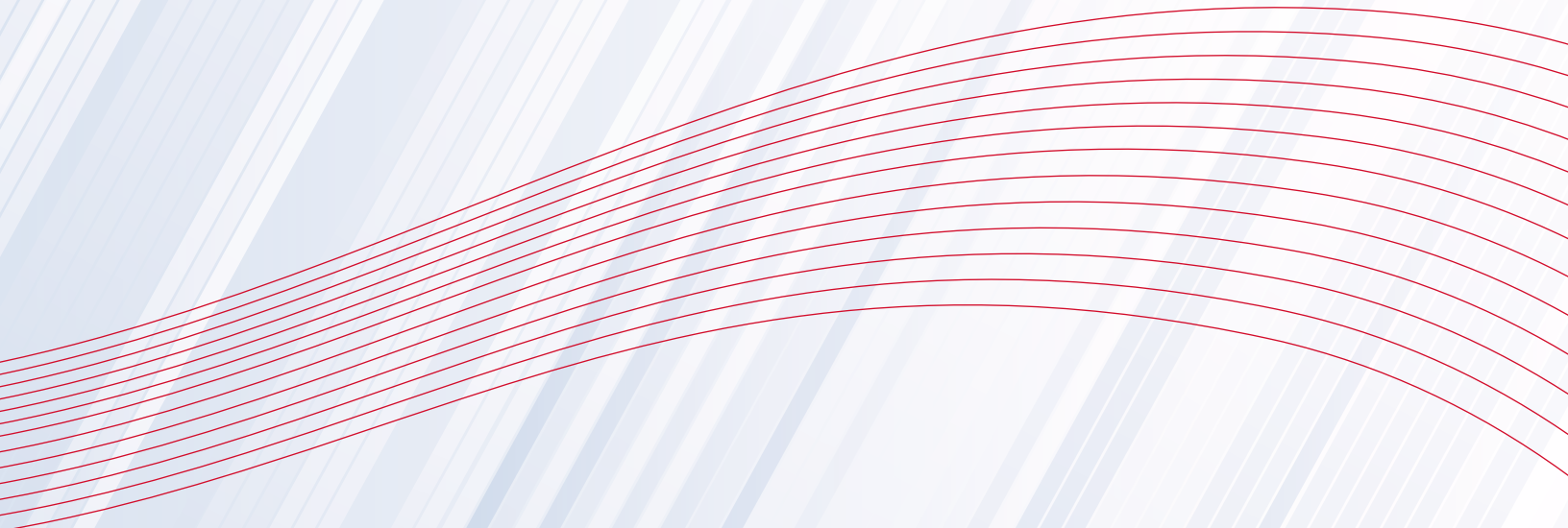
Electronic Bypass Damper



Motorized bypass damper with static pressure sensor in round (EBRD) or square/rectangular (EBQD) for light commercial bypass duct applications.

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USAIRE™



USAIRE™

USAire™ is a leading manufacturer of residential and commercial grilles, registers and diffusers. We are a team of industry professionals committed to maintaining our position as the leader in the industry in customer service and quick delivery of high quality and high performance products.

USAire is part of the Metal Industries family of brands, which was founded in 1947 and has been focused on providing the highest quality products to the HVAC industry, and doing so with respect for our customers, our employees and the environment.

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