PREMIUM RESIDENTIAL HRVs & ERVs Dy AMERICAN Caldes

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Superior IAQ Solutions

Our **Premium Series HRV's and ERV's** exchange stale air, pollutants, and excessive humidity with fresh outside air, while recovering up to 90% of the heat energy from the exhausted air then transferring the heat energy to the incoming fresh air.





HRV 95SRD

HRV 120SRD







As with all American ALDES' products, the Premium HRV and ERV Series Heat and Energy Recovery Ventilators represent years of tested and quality proven products with an unparalleled commitment to IAQ (indoor air quality) ventilation. Our extensive selection of sizes and features ensures a appropriate model for every application, each designed for easy installation.

All Premium HRV and ERV Series units are also designed to become part of a complete **VentZone® System**. Adding **American ALDES' ZRT-2's** (Zone Register Terminals) to the system will eliminate the needfor individual bath and kitchen exhaust ventilation, providing for an added cost savings.

HOW AIR EXCHANGE DEVICES WORK

In the heating season, HRV's and ERV's work by drawing fresh air in from the exterior. The air is distributed throughout the house either by a dedicated duct system or through the forced air heating/air conditioning system to all interior spaces. At the same time, vents located in the kitchen, bathrooms, laundry rooms and other areas that produce moisture or pollutants exhaust an equal amount of stale, humid air to the exterior. (Sometimes air is drawn directly off of the return air of a forced air heating/air conditioning system.)



As the two airstreams pass each other in the core of the unit, the fresh air is tempered with energy recovered from the exhausted air. An ERV will also transfer some moisture to the fresh air if this air is dryer than the exhausted stale air, improving comfort in overly dry houses.

In the cooling season the reverse occurs. The fresh air from the exterior is cooled by the exhausted air conditioned indoor air. The ERV will transfer moisture from fresh air to the outgoing air supply, if the outgoing air is dryer. This reduces the humidity load on the air conditioning system, which would otherwise result in the continuous introduction of humid summer air to the indoors.

THE BENEFITS OF AIR EXCHANGE

Today's insulated energy-efficient structures need continuous air exchange to ensure superior Indoor Air Quality. HRV's or ERV's in the ventilation system can solve the problem by eliminating moisture that can cause structural damage, rust, mildew, and musty air, as well as damage to expensive wall coverings and painted surfaces.

CHOOSING THE RIGHT SYSTEM

There are national and local codes and standards that specify ventilation rates. The specification chart on the last page shows the maximum home size for each model, operating on high speed, to meet the ASHRAE Standard 62.1 level of outdoor air.

The effectiveness numbers show the reduction of heating load due to ventilation. In the case of the ERV, the value for the summer, illustrates the reduction of the ventilation load on the air conditioner. During the heating season, energy costs can be reduced up to 80%.

Call us today to find out which **American ALDES Premium Series** HRV or ERV is right for your home or project.





PN: 28 780 ADXC-II Digital LCD Control Panel Provides 4 operation modes with electronic dehumidistat



PN: 28 781 APVC Digital Control Panel 24/7programmable ventilation with electronic dehumidistat



PN: 28 779 DET-II 20/40/60 Minutes Push **Button Timer** Not for use with ZRTs



PN: 28 782 DH-II Remote Mount Dehumidistat Control

DUCT ACCESSORIES



Supply/Exhaust Grille

White plastic. Removable for easy cleaning. For exhaust or supply air. Various Sized from 4" dia to 8" dia.



Supply/Exhaust Vent

White plastic. Mesh protection from outside elements. 5" and 6" size available



Wall Hood

Screened or dampered wall hood maximize airflow, minimize noise. Galvanized steel, stainless steel or copper.



Elbow

Plastic 4" round to 3-1/2" oval dia. available, for 2" x 4" partition.



Universal Sleeve

New or retrofit installations. 4" to 6" dia. sizes available. Galvanized steel



ZRT-2 Zone Register Terminal

Allow zoned boosting of exhaust airflows in kitchens and bathrooms.

PREMIUM SERIES CONTROLS

A variety of remote control options are available, all connected through a low voltage digital microprocessor control module located on the exterior of the unit. When in operation for indoor air quality at less than the maximum speed rate, boost capacity is available either through manual switches or automatic controls to meet short term, spot ventilation needs.

DUCT INSTALLATION CONFIGURATIONS



Fully Ducted System

A fully ducted system is the most desirable configuration, and is highly recommended to get the best results from the system in all climate types.



Dedicated Exhaust Points, with distribution of fresh supply air through HVAC System

Appropriate for heating systems only. For Air Conditioning, avoid hard duct connection HVAC return. Instead, supply to register in main living area, near return grille of HVAC.



Exhaust from HVAC Return and distribution of Fresh Air through HVAC System

As the least desirable solution, this configuration is difficult to assure balanced airflows, and can cause moisture problems in ducting in warm humid seasons. Requires knowledgeable installer to address these issues.

SPECIFICATION AND PERFORMANCE DATA											
				AIRFLOW DATA					DIMENSIONAL DATA		
Model No.	Efficiency	Core*	Defrost	CFM (L/s) 0.1" (25 Pa.)	CFM (L/s) 0.2" (50 Pa.)	CFM (L/s) 0.3" (75 Pa.)	CFM (L/s) 0.4" (100 Pa.)	CFM (L/s) 0.5" (125 Pa.)	L In. (mm)	W In. (mm)	H In. (mm)
HRV 95SRD Compact unit for tight closet installations, small lhomes and apts up to 1,100SF	80%	A	Recirculate	89 (42)	78 (37)	64 (30)	36 (17)	N/A	18.5 (470)	16 (406)	24.5 (622)
HRV 120SRD Most cost effective for moderate single family homes, up to 2,600 SF	68%	A	Recirculate	143 (68)	138 (65)	132 (62)	128 (61)	123 (58)	22.0 (559)	25.14 (375)	9.25 (235)
HRV 155SRD Most cost effective for moderate single family homes up to 2,700 SF	76%	A	Recirculate	169 (80)	161 (76)	150 (71)	130 (61)	56 (26)	30.75 (780)	14.75 (375)	19.0 (483)
HRV 200SRD The most popular HRV for homes up to 4,000 SF	74%	A	Recirculate	232 (109)	223 (105)	215 (102)	195 (92)	198 (89)	32.5 (828)	14.75 (375)	19.0 (483)
HRV 300DDD Double core design for highest effficiency of larger homes up to 5,000 SF	90%	A	Damper	265 (125)	260 (123)	250 (118)	235 (111)	220 (104)	49.0 (1245)	14.75 (375)	19.0 (483)
ERV 200S Most popular ERV for homes up to 3,800 SF	80% Winter 55% Summer	E	N/A	195 (92)	185 (87)	175 (83)	160 (76)	145 (68)	30.75 (780)	14.75 (375)	19.0 (483)

* A = Aluminum E = Enthalpy

Home size is based on ASHRAE 62.1 Air Change Rate recommendations.



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