

# Sustainable HVAC with Energy Recovery



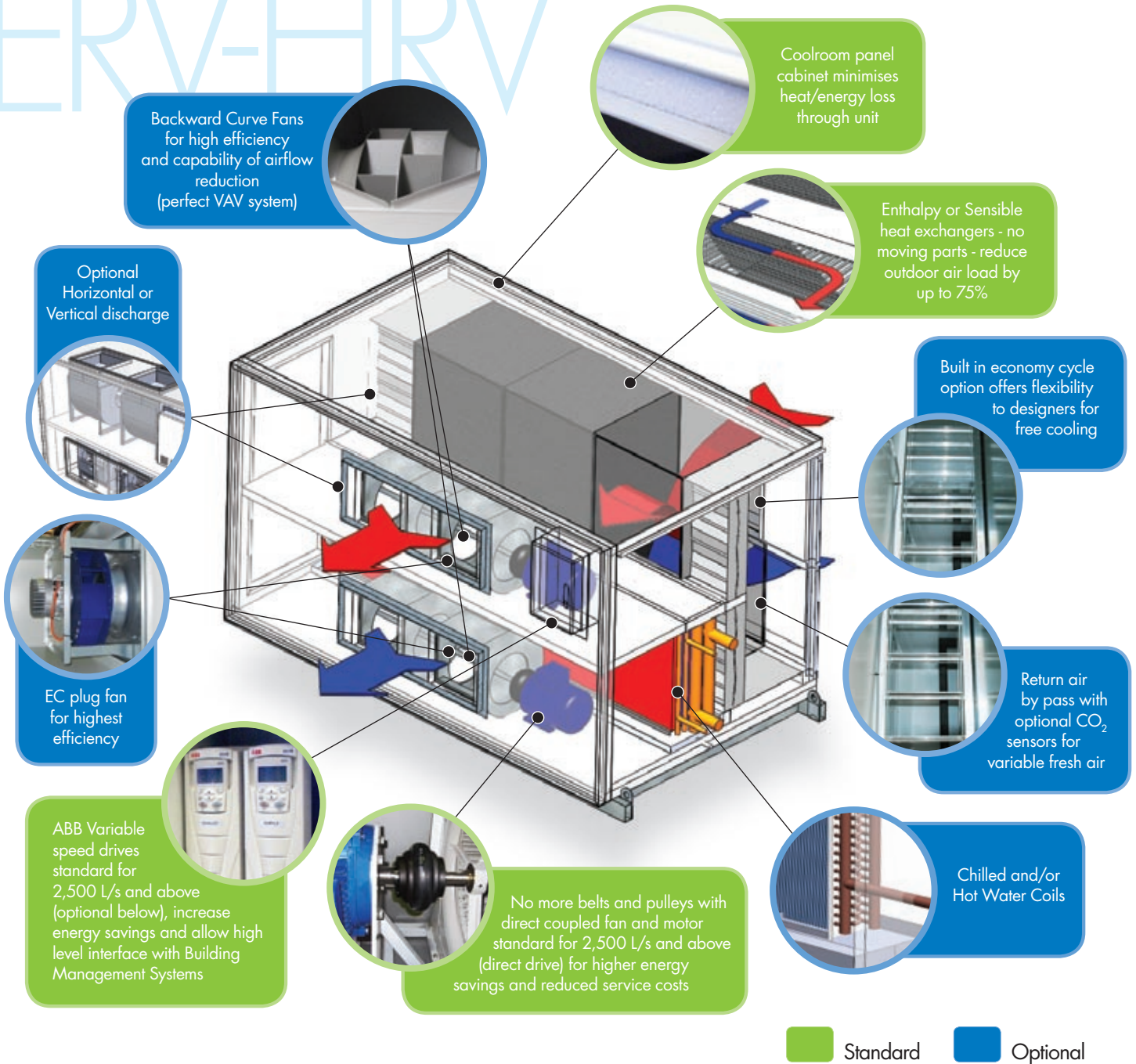
## Energy Recovery Ventilators (ERV)



### Clever, customisable ERV - improves indoor air quality

- Packaged with efficient heat or energy recovery modules to reduce chiller/air conditioning capacity
- VSDs reduce fan power consumption and supply outdoor air on demand
- Variable outdoor air with CO<sub>2</sub> Sensors to adjust outdoor air volumes and economy cycle options
- Optional backward curved and EC plug fans
- Direct coupled fans and motors
- Chilled water coils designed to specified requirements
- Flexible configurations to suit tight plant rooms and retrofits
- Installation options of a Stand Alone, In Series or Parallel
- Australian designed and manufactured
- Earn NABERS & Green Star rating points and meet Section J requirements of BCA

# ERV-HRV



## Heat Exchanger Energy Savings (Figures in kW saving)

Massive energy savings representing reduced carbon emissions, smaller plant size and fast paybacks.

L/s	Sydney	Brisbane	North Queensland	Adelaide	Melbourne	Canberra	Darwin	Perth	Hobart
1,000	20.2	25.8	31.1	15.2	10.8	7.9	32.9	15.2	5.3
2,000	40.4	51.6	62.2	30.4	21.6	15.8	65.8	30.4	10.6
5,000	101	129	155.4	75.9	53.9	39.5	164.4	75.9	26.6
8,000	161.6	206.4	248.8	121.6	86.4	63.2	263.2	121.6	42.4

*Air Change products internationally patent protected.*



### Multi Award Winning Technology

ARBS Industry Awards "ESD Product" Winner 2010

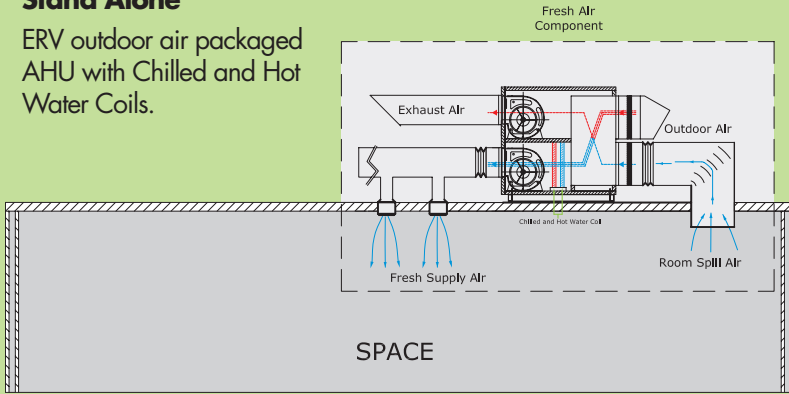
SEDA "Green Globe" Winner 2002 & 2003

AIRAH "Excellence in HVAC" Winner 2003 (Qld) & 2006 (National)

# Installation and Product Options

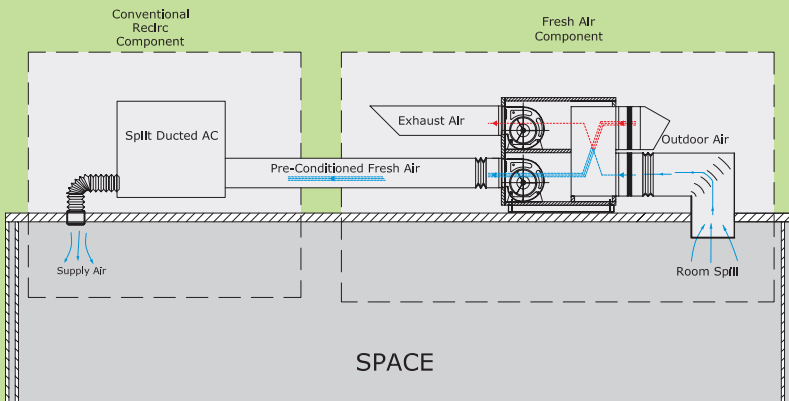
## Stand Alone

ERV outdoor air packaged AHU with Chilled and Hot Water Coils.



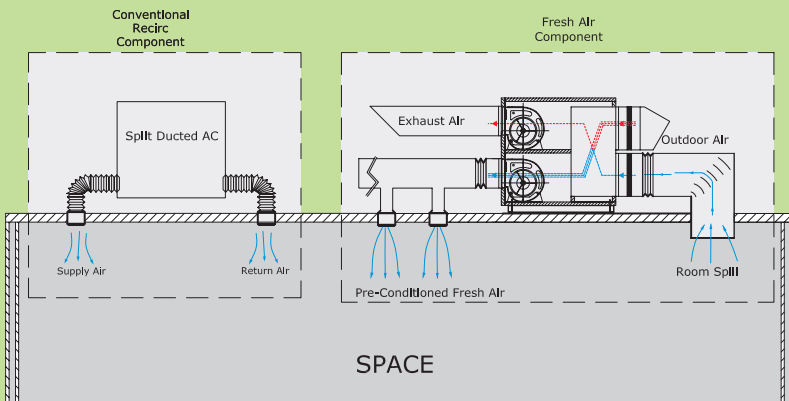
## In Series

ERV providing pre-conditioned outdoor air to the Split ducted air conditioner.



## Parallel

ERV providing pre-conditioned fresh air to the air conditioned space.



**NB** Filters required for fresh air and return air intake



**The Ark, North Sydney**

**Air Change** 4x ERV 2000 l/s to 2500 l/s  
**Design & Construct** Hastie Australia  
**Developer** Investa  
**Architect** Rice Daubney



**154 Melbourne Street, Brisbane**

**Air Change** 5x ERV-RAS-CWC 2500 l/s to 8000 l/s  
**Consultant** Webb Australia  
**Installation** Coolmaster



**Commonwealth Bank, Homebush**

**Air Change** 9x ERV-H/CWC 2000 l/s to 7000 l/s  
**Consultant** Aurecon  
**Installation** Hastie Australia  
**Builder** Bovis Lend Lease

- Aldi - Australia wide
- Ark - 40 Mount St - NSW
- Leichhardt Council - NSW
- Presbyterian Ladies College Croydon, Library - NSW
- Ropes Crossing Community Centre - NSW
- Kormilda College - NT
- Cairns Base Hospital - Qld
- Royal Brisbane Hospital Campus - Qld
- Ergon Energy, Mackay - Qld
- Amberley Airforce Base - Qld
- Sunshine Coast University - Qld
- Strathalbyn Library and Community Centre - SA
- Flagstaff Hill Primary School - SA
- Yatala Prison Visitors Centre - SA
- Incat - TAS
- Melbourne University School Rural Health - VIC
- Caulfield General Medical Centre - VIC
- Carrum downs Police Station - VIC
- Victoria University St Albans Campus - VIC
- Curtin University Perth - WA
- Mandarin Hotel Jakarta - Indonesia

recent installations



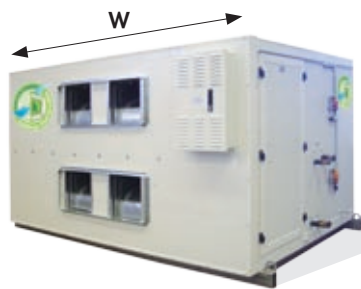
featured in the  
**Australian Technology Showcase**



green building council australia  
 MEMBER



## Plant Room Options – Customisable Configurations



**Wide Configuration:**  
Customised ERV low profile single height heat exchanger, ideal for rooftop or height restricted plant room and retrofits.



**Tall Configuration:**  
Customised ERV double stacked heat exchangers in tall configuration, also available in square base suitable for constricted plant room and retrofits.

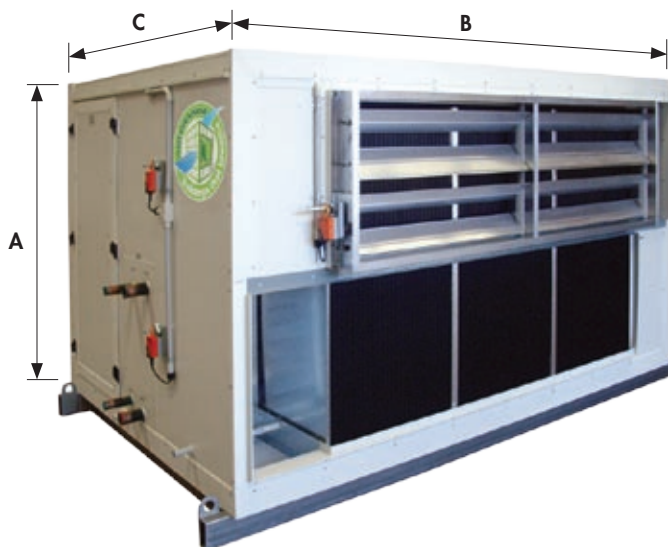
## Energy & Heat Recovery Ventilator Units

Air Handling Units also available. Contact Air Change for full technical specifications.

Model No.	ERV/HRV 250	ERV/HRV 550	ERV/HRV 750	ERV/HRV 1000	ERV/HRV 1500	ERV/HRV 2000	ERV/HRV 2500	ERV/HRV 3000	ERV/HRV 3500	ERV/HRV 4000	ERV/HRV 4500	ERV/HRV 5000	ERV/HRV 6000	ERV/HRV 7000	ERV/HRV 8000
Flow Rate (L/s)	150-250	250-550	550-750	750-1000	1000-1500	1500-2000	2000-2500	2500-3000	3000-3500	3500-4000	4000-4500	4500-5000	5000-6000	6000-7000	7000-8000
External Static (Pa)	<150				<200			<300				<350			
Fans	Single Phase Direct Drive, 3 Speed*						Three Phase Direct Coupled Motor/Fan, VSD controlled								
Volt/ph/Hz	240/50/1						415/50/3								
Weights (kg)	124	163	183	222	332	353	736	768	963	978	1289	1358	1506	1744	1946
Construction	50mm sandwich panel, 0.6mm clad colourbond both sides. UV treated polymer joiners for maximum strength, insulation and durability.														

\* Three Phase Direct Coupled Motor/Fan, VSD controlled option available on request for ERV/HRV 2000 and below. Specifications subject to change without notice – check Air Change engineers or web site for latest specifications.

## ERV/HRV Schematic



Ask Air Change engineers for technical information on ERV/HRV with water or DX coils.

Overall Dimensions*	
Model No.	A x B x C
<b>ERV250</b>	895 x 955 x 1160
<b>ERV550</b>	1040 x 1255 x 1230
<b>ERV750</b>	1040 x 1255 x 1230
<b>ERV1000</b>	1155 x 1600 x 1260
<b>ERV1500</b>	1295 x 2200 x 1480
<b>ERV2000</b>	1295 x 2200 x 1480
<b>ERV2500</b>	1770 x 2250 x 1825
<b>ERV3000</b>	1770 x 2250 x 1825
<b>ERV3500</b>	1770 x 2900 x 1885
<b>ERV4000</b>	1770 x 2900 x 1885
<b>ERV4500</b>	2040 x 3550 x 2275
<b>ERV5000</b>	2040 x 3550 x 2275
<b>ERV6000</b>	1820 x 4200 x 2095
<b>ERV7000</b>	1820 x 4850 x 2195
<b>ERV8000</b>	1820 x 5500 x 2195

\*Standard ERV-RT Dimension  
Please contact Air Change engineers for unit dimensions with Economy cycle options and for customisable configurations.



Toll Free 1300 766 704 - [www.airchange.com.au](http://www.airchange.com.au)

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Refrigerant Trading Authorisation No: AU23586

Air Change products internationally patent protected.