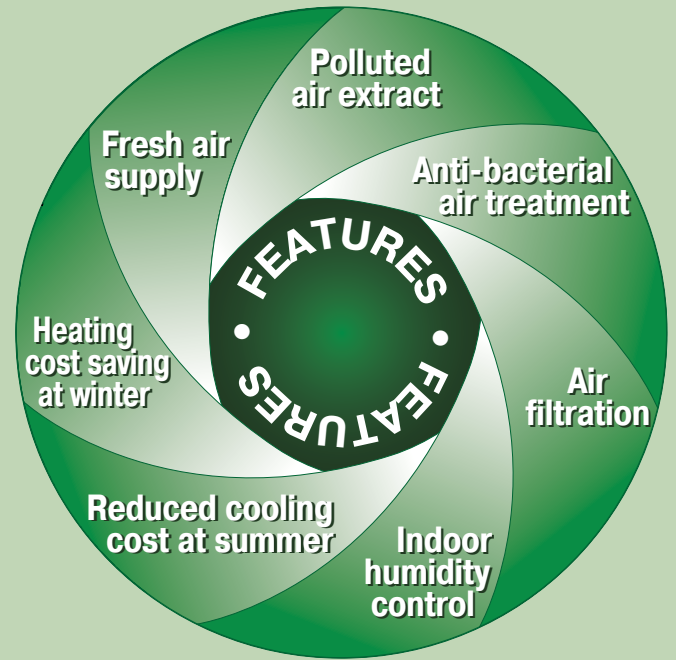




Single Room ERV units

TwinFresh Comfo RA1-50-2



THE MOST INNOVATIVE VENTILATION SOLUTION

Replace Your Mechanical Ventilation with TwinFresh Comfo

● Ventilation Application example based on TwinFresh Comfo



One TwinFresh Comfo unit can serve rooms up to 343 SQ.FT

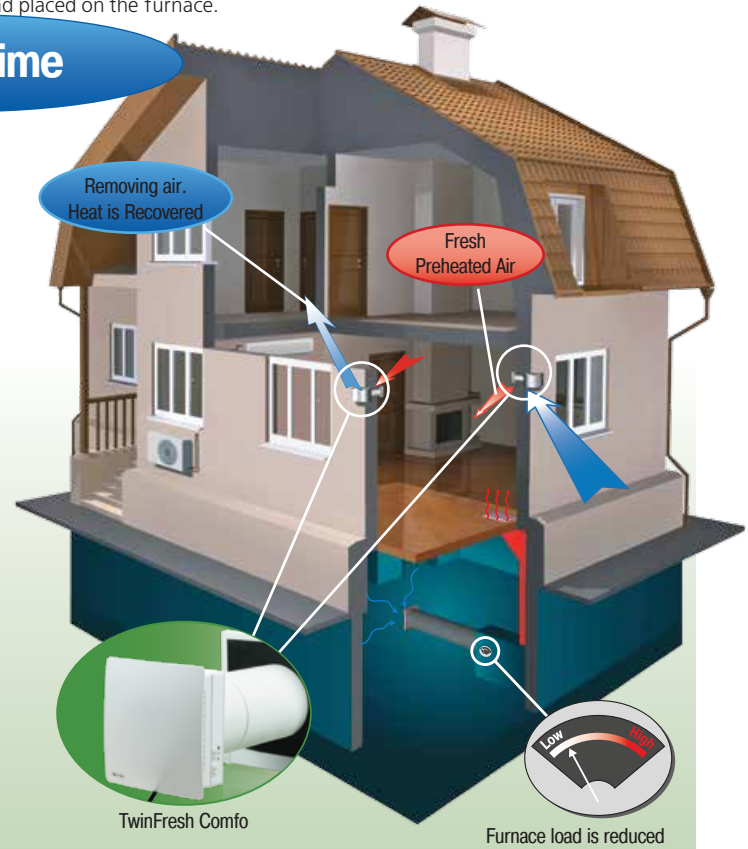
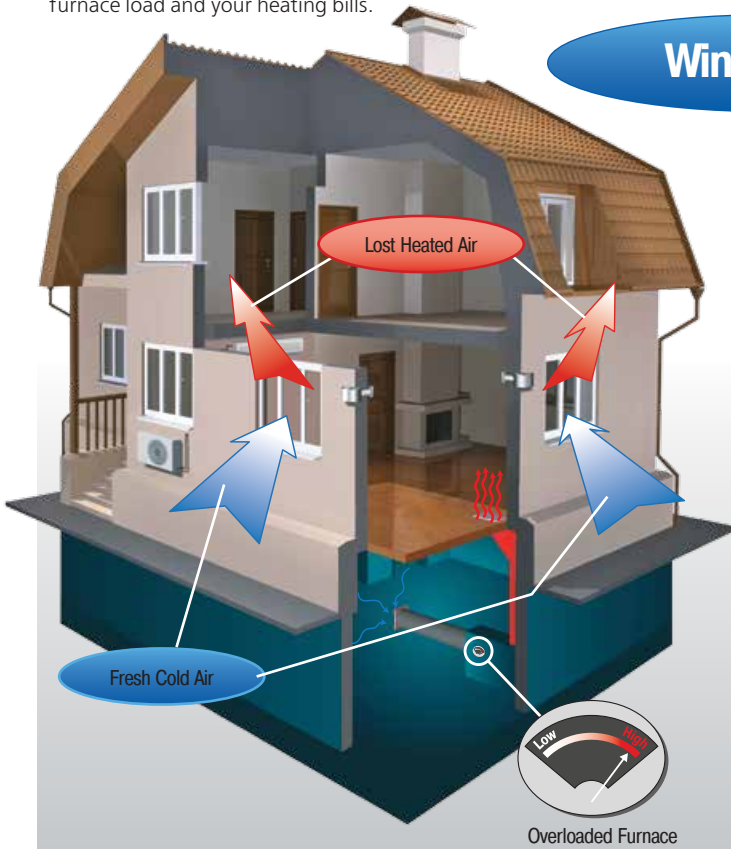
To arrange a ventilation system based on **TwinFresh Comfo ventilators**, install one unit in each room. For larger premises, install two ventilators. Units can operate independently or can be wired for Master-Slave operation.

Air flows from one room to another through door grilles, openings or halls and ensures required circulation in premises.

Efficient Energy Recovery Ventilation in Winter and Summer

Random cracks or opening a window lets cooler fresh air into the house but at the same time it lets the heated air out. This ventilation method increases both furnace load and your heating bills.

In cold season, Twin Fresh recovers energy from the exhausted air to pre-treat the air entering the house. It not only helps to save on energy cost but it reduces the load placed on the furnace.

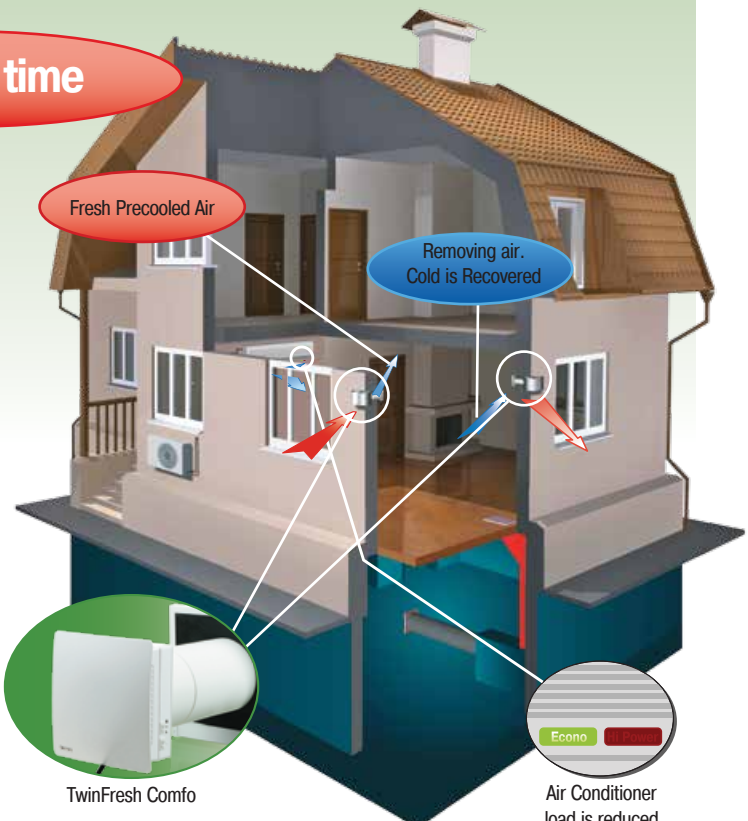
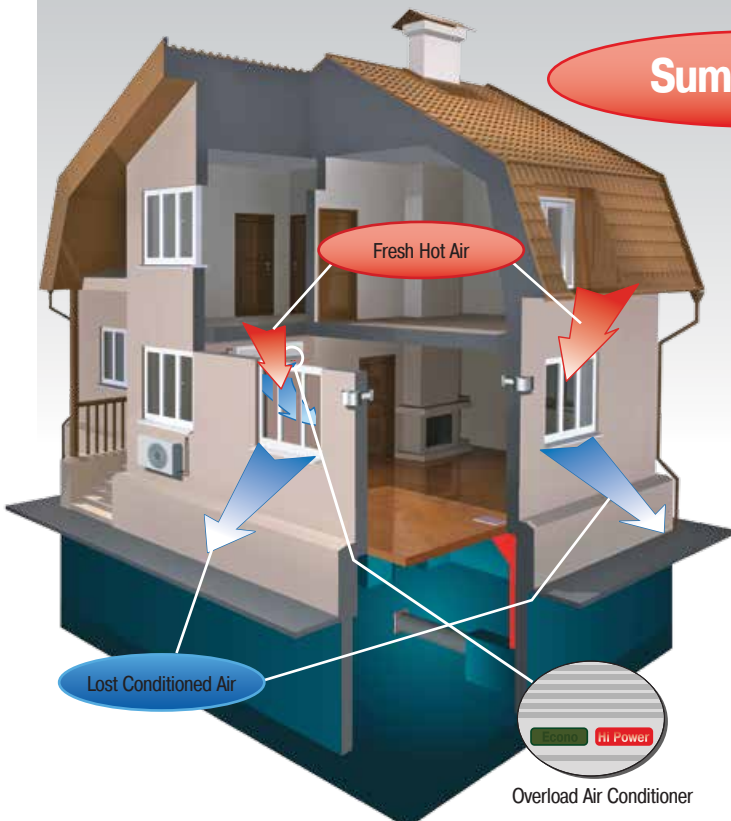


Ventilation Without Energy Recovery

In summer, warm and humid air enters the house through cracks or open windows and the air-conditioned air is exhausted to the outdoors. This increases air conditioner load and your conditioning bills.

Energy Recovery Ventilation

TwinFresh ERV supplies fresh, pre-cooled air for indoors and it extracts stale air outdoors while recovering energy, which lowers the load on the HVAC unit as well as your energy bill.



● TwinFresh Comfo vs Regular ERV



VS.



TwinFresh Comfo		Regular ERV
No	Ductwork required	Yes
No	Dust collection inside a ductwork	Yes
No	Complicated wiring of the controls	Yes
No	Balancing is required	Yes
No	Professional installers are needed	Yes
No	Additional interior works to hide ducts	Yes
No	Separate room for installation	Yes
No	Antifreeze protection for core required	Yes
< 24 W	Power consumption for a 4 bedroom house	> 100 W
≤ 90 %	Sensible Recovery Effectiveness	≤ 80 %
0.2-1	Sones/Sound level	3

● Benefits:

Pending patent on ceramic ERV core:

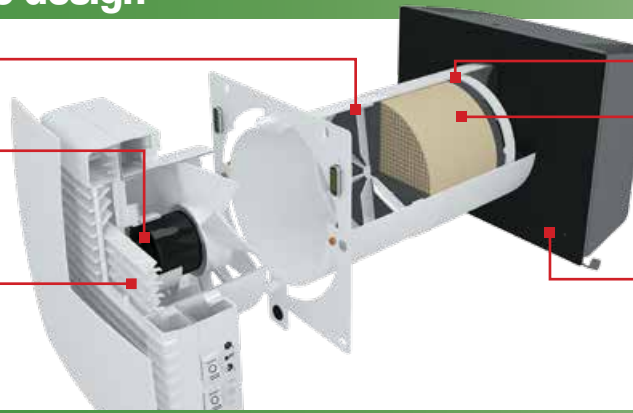
- Sensible Recovery Effectiveness is 90%
- Recovers heat and moisture to reduce heating costs in winter and air conditioning costs in summer.
- Frost free, no defrost needed
- EC-motor
- Efficacy 5.7 CFM/W – Twice as high as the Energy Star requirement
- Whisper quiet operation, as low as 0.1 SONES
- Aluminium or stainless steel outer hood:
- Modern design that fits any interior and exterior.
- 100% corrosion proof.
- Plug-&-Play installation:
- No special skills required for installation
- No balancing needed
- Through the wall installation. Compact unit design
- Multifunctional Wireless Remote Control
- Almost no maintenance required
- Washable filter and core. MERV6 and Antibacterial air purification
- Wireless remote control
- Rated for 24 hours operation

TwinFresh Comfo design

MERV6 air filter
Antibacterial treatment

Reversible axial EC fan
5.7 [CFM/W]

Front grille with
automatic shutters
(for all models)

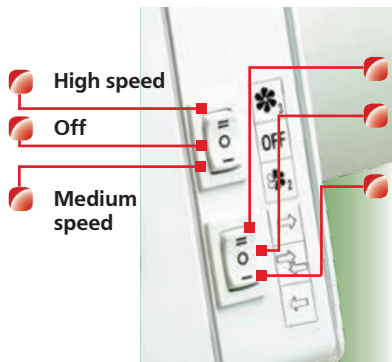


Telescopic duct, dia 6"

Ceramic ERV core with ARE
91% @ 32 F
Antibacterial treatment
No defrost needed

Outer hood

TwinFresh Comfo control and operation modes



High speed

Off

Medium speed

Ventilation

Energy recovery
ventilation

Air supply

Turning ventilator on/off

Speed switch

Passive air supply:

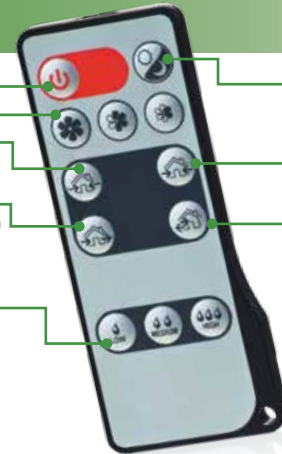
The louvre shutters are opened,
but the fan stands still.

Ventilation:

All the ventilators in the network operate in
permanent air extract or air supply mode.

Humidity control mode
selection:

The ventilator automation enables setting
one of three humidity set points (45, 55
or 65 %). The ventilator will operate to
increase or decrease the indoor humidity
level to maintain comfortable environment
for you.



High mode:

The ventilator is switched to low
speed on a signal from built-in
light sensor.

Supply mode:

The fan continuously supplies fresh
air to the room.

Ventilation with
energy recovery

The ventilator switches from
supply and extract modes and
vice versa in a set time period to
enable the transfer of heat energy
in winter and control of moisture
in summer.

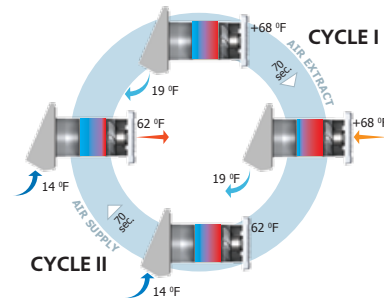
Operation of TwinFresh Comfo Ventilators

The ventilator is designed for both extract and supply ventilation with energy recovery function.

CYCLE I. While warm, stale air is extracted from a room it passes through the ceramic energy core where the heat and moisture is being accumulated.

After the ceramic core heats up, the ventilator automatically switches to supply mode.

CYCLE II. As the clean, fresh air from outside passes through the ceramic energy core, it absorbs moisture and it warms up due to the accumulated heat. As temperature of the accumulator drops down, the fan switches to extract mode and the cycle is renewed. The ventilator changes its operation mode for supply or extract ventilation every 70 seconds.



Technical data

TwinFresh Comfo models	Speed	Voltage	Power [W]	Current [A]	CFM	RPM	Sones @3m	ARE @32°F	Transported air temp. [°F]
RA1-50-2	1	120 V 60 Hz	3.8	0.024	8	610	0.1	91 %	From -13 up to 122
	2		3.96	0.026	16	800	0.3		
	3		5.61	0.039	32	1450	1		



TwinFresh Comfo RA1-50-2