

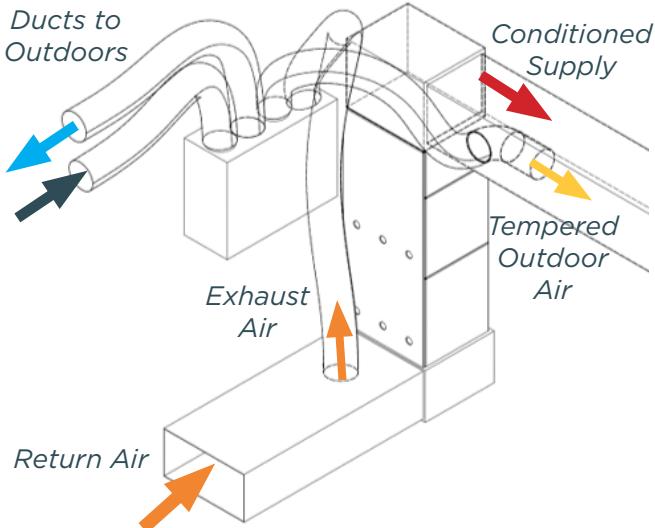
In Development:

Integrated Energy Recovery Ventilator



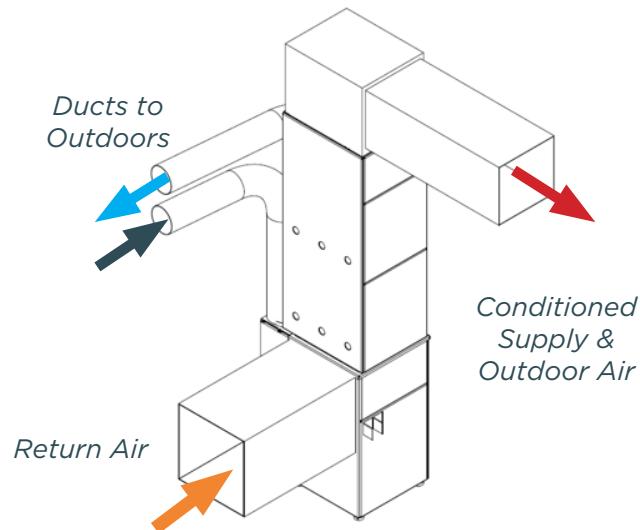
Far too often we see frustrating and difficult ERV installations that fail to meet ventilation requirements. With support from the DOE Building America program and industry partners, Steven Winter Associates is working to address this issue by developing an integrated ventilation system that makes balanced ventilation easier in homes.

Designed to fit into mechanical closets, the small-footprint ventilator will integrate with efficient forced-air systems. ECM fans maintain ventilation rates regardless of heating and cooling operation over a wide range of system configurations.



Traditional ERV Add-On

- Larger footprint and maintenance access requirements
- More difficult to install
- Inconsistent flow rates as ERV competes w/ AHU
- Defrost cycles: off, recirculation, exhaust-only, or electric resistance
- Can only commission at a single AHU speed



Integrated ERV

- Compact, small footprint
- Minimized connections
- Consistently maintains desired flowrates (even during frost prevention)
- Low electrical power
- Wide range of flow rates

Key Technical Partners:

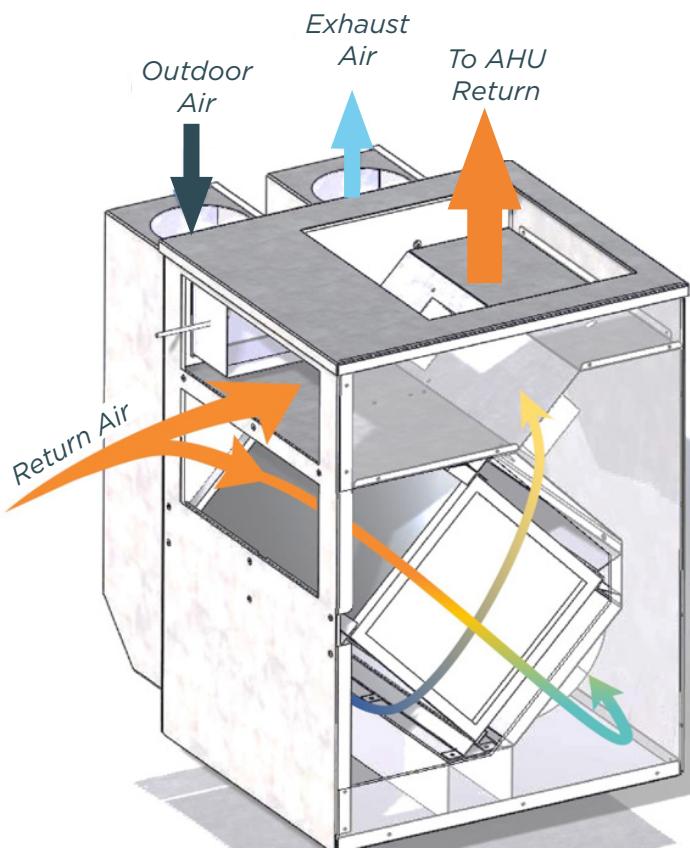


Therma-Stor[®] LLC

core
ENERGY RECOVERY SOLUTIONS

**MITSUBISHI ELECTRIC
TRANE HVAC US**

Integrated Energy Recovery Ventilator



Patent Pending

40-120
Large CFM Range

Single Unit Specification:
delivers ventilation flow rates
from 40 cfm up to 120 cfm.



Energy Recovery: 70%
sensible effectiveness, 50%
total recovery efficiency at
120 cfm.



Enhanced Frost Prevention:
During very cold weather,
ventilation flow rates are
continuously maintained by
mixing return air into the OA
stream. There is no need for
recirculation, unbalanced
ventilation, or power hungry
electric preheat.

MERV 13

High Filtration: Designed for
at least MERV 13 filtration of
outdoor air.



Low Power: Prototypes
delivered 120 cfm of
ventilation with 40-80 Watts,
including the AHU.



Steven Winter
Associates, Inc.



Prototype testing in occupied
homes is scheduled for Q1 2019.

Send feedback or inquiries to
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