



When and Where to Use ERVs



Is your ventilation managing latent load?

Energy Recovery Ventilators (ERVs) stand out as the premier choice for optimizing both comfort and energy efficiency when compared to Heat Recovery Ventilators (HRVs) and other ventilation systems. ERVs offer a holistic solution, effectively managing both temperature and humidity levels, bringing substantial benefits in various climatic conditions.

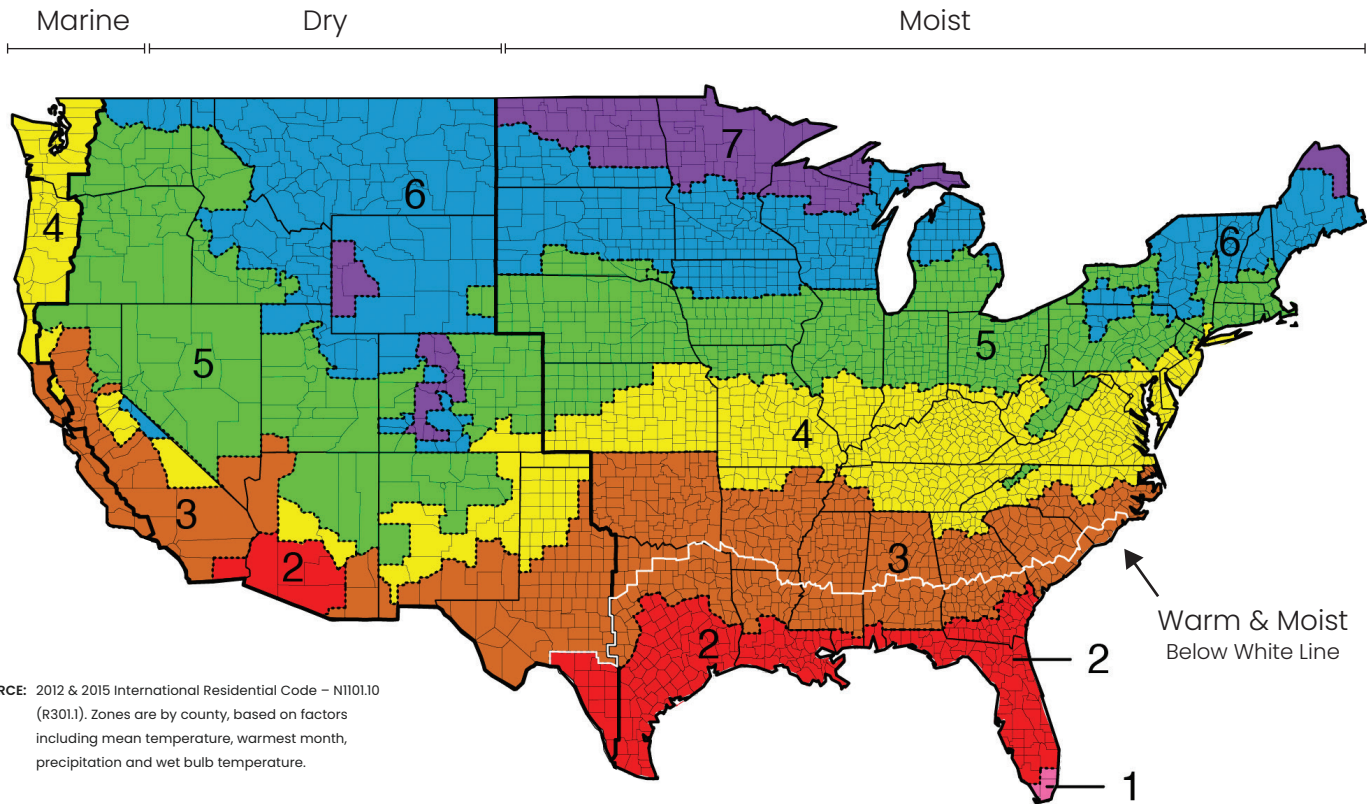
In hot and dry climates, as well as in cold environments, HRVs can inadvertently turn a home into an arid environment, depleting what little moisture the home naturally holds. This can lead to discomfort and potential health issues for the occupants. ERVs, however, shine in these scenarios. They preserve and regulate moisture levels as needed, ensuring that the indoor atmosphere remains comfortable and healthy.

Find a solution for every application.

Different climate conditions demand specific approaches to ventilation. In certain regions, a straightforward supply ventilation system, with lockouts, can effectively regulate heat and humidity from incoming air. However, in highly humid areas like the southeastern United States and coastal regions, it becomes imperative to employ a ventilating-dehumidifier to prevent excessive indoor moisture levels.

For a quick reference on which solution suits your specific application, consult our application chart on the back. We're here to help you find the right solution for your ventilation needs.

**ERV Solution From
the IAQ Leader**



SOURCE: 2012 & 2015 International Residential Code – N1101.10 (R301.1). Zones are by county, based on factors including mean temperature, warmest month, precipitation and wet bulb temperature.

ZONE	CLIMATE TYPE	MAJOR CITIES	PRIMARY SOLUTION ¹	CONTROL RECCOMENDATION
1	Hot & Moist	Miami	Ventilating Dehumidifier	Intermittent Control with Dehumidification
2	Hot & Moist	Orlando, Mobile, New Orleans, Houston, Austin, San Antonio	Ventilating Dehumidifier	Intermittent Control with Dehumidification
2	Hot & Dry	Phoenix, Tucson	ERV or Supply Ventilation	Intermittent Control with Lockouts
3	Warm & Moist	Charlotte, Charleston, Atlanta, Little Rock, Oklahoma City, DFW	ERV or Supply Ventilation	Intermittent Control with Lockouts
3	Warm & Dry	El Paso, Las Vegas, Los Angeles, Sacramento	ERV or Supply Ventilation	Continuous Control
3	Warm & Marine	San Francisco, San Jose	ERV or Supply Ventilation	Continuous Control
4	Mixed & Moist	Philadelphia, Washington DC, Baltimore, Nashville, St. Louis, Wichita, Louisville	ERV or Supply Ventilation	Continuous Control
4	Mixed & Dry	Albuquerque, Amarillo	ERV or Supply Ventilation	Continuous Control
4	Mixed & Marine	Portland, Seattle	ERV or Supply Ventilation	Continuous Control
5	Cool & Moist	Boston, Pittsburgh, Columbus, Indianapolis, Detroit, Chicago, Des Moines, Omaha	ERV or Supply Ventilation	Intermittent Control with Lockouts
5	Cool & Dry	Denver, Salt Lake City, Boise, Reno	ERV or Supply Ventilation	Continuous Control
6	Cold & Moist	Toronto, Vancouver, Milwaukee, Madison, Minneapolis-St Paul, Sioux Falls	ERV or Supply Ventilation	Intermittent Control with Lockouts
6	Cold & Dry	Helena, Cheyenne	ERV or Supply Ventilation	Intermittent Control with Lockouts
7	Extreme Cold & Moist	Fargo, Duluth, Calgary, Edmonton	ERV or Supply Ventilation	Intermittent Control with Lockouts

¹Primary AprilAire recommended supply ventilation solution for optimal performance and building code adherence.

² HVAC application considerations based upon moist versus dry air, and proper mixing into the ductwork.