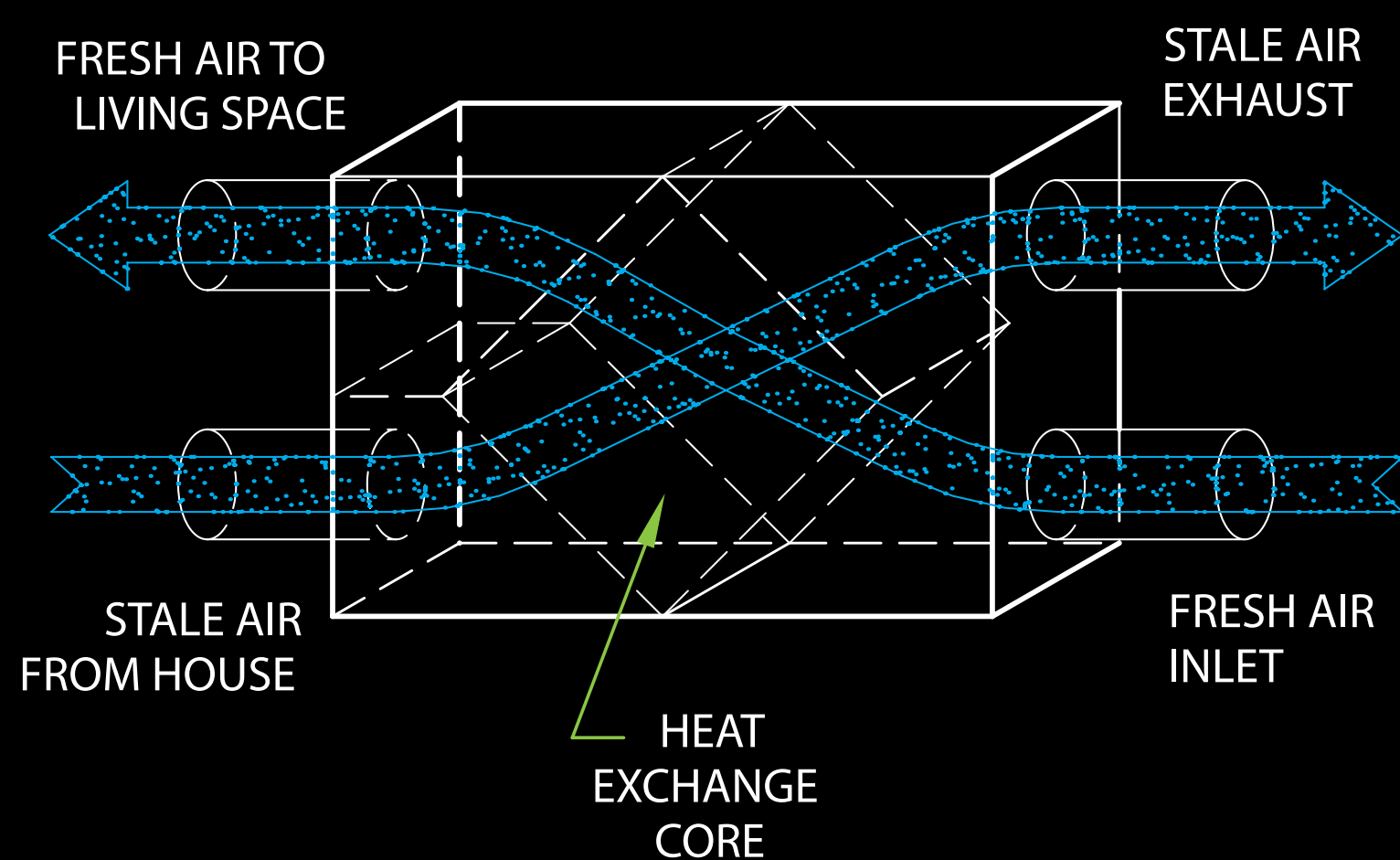




HEAT RECOVERY VENTILATION SYSTEM

How It Works



Mechanical ventilation is an essential feature of any energy-efficient home. Because tight construction is a key component of energy efficiency, this home has an air sealing package designed to prevent the exchange of air between indoors and out. However, without the fresh air that typically enters a home through unintentional leakage points, such as around windows and at framing junctures, the air inside a tightly sealed home can feel stale and be unhealthy.

The whole-house, balanced heat recovery ventilation system in this home draws in outdoor air and expels stale indoor air to remove pollutants and keep the air inside fresh and comfortable. The outgoing and incoming airstreams pass through a heat exchanger, where 70 to 80 percent of the outgoing energy is recovered. A mechanical ventilation system is superior to natural infiltration because it supplies a precise amount of fresh air through ducts, rather than random leaky areas around the house where it can pick up dirt and/or condense and create moisture problems, and exhausts the same amount of air. Further, by recovering most of the energy in the outgoing airstream, heat recovery ventilation reduces the impact on energy bills associated with air exchange.

10 pts.

The heat recovery ventilation system in this home receives **10 points** under **Section 5.2** (Manage Potential Pollutants in the Home) of the **NAHB Model Green Home Building Guidelines**.