

## Comparison of HRV and Exhaust Ventilation System Flowrates

Sample House: 3 bedrooms, 2 1/2 bathrooms, 1500 sf  
House Volume: 26300 cf

### With Heat-Recovery Ventilation System:

Supply: 25 cfm to main living area  
20 cfm to each bedroom  
Exhaust: 25 cfm from kitchen  
20 cfm from each bathroom  
Total Flow: 85 cfm, continuous  
122400 cf per day

Average Air-change Rate: 0.19 ACH (air changes per hour)  
**Total House Air exchanges in 24 hours: 4.7**

### With Exhaust-Only Ventilation System:

Supply: Via incidental envelope leakage (i.e. through windows, attic, crawl-space)  
No assurance of distribution to all spaces of the home  
Exhaust: 150 cfm from range hood, 1 hour per day  
80 cfm from each bathroom, 1 hour per day  
200 cfm from clothes dryer, 1 hour per day  
Total Flow: 25800 cf per day

Average Air-change Rate: 0.04 ACH (air changes per hour)  
**Total House Air exchanges in 24 hours: 1.0**