

## New Standards: ASHRAE 62.2

62.2 is getting more widespread adoption  
Replacing 62-89 at RESNET, BPI, weatherization  
Much more detail on Thursday @ 10:30  
With Rick Karg and Paul Francisco

## Source Control

Minimum exhaust air flows:

- Kitchen: **100 cfm intermittent** or 5 ACH continuous
- Bathroom: **50 cfm intermittent** or 20 cfm continuous

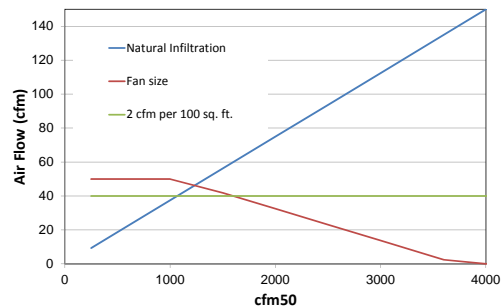
NEW Option to increase whole house rates instead of installing a new exhaust fan: current fan flow + window credits

## 2. Whole House Ventilation

- Depends on house size + number of people
  - 1 cfm per 100 sq. ft. + 7.5 cfm per person
  - Number of people = number of bedrooms + 1
- Sound requirements < 1 sone
- Can be continuous or intermittent
- Can be reduced for leaky homes (must be measured)

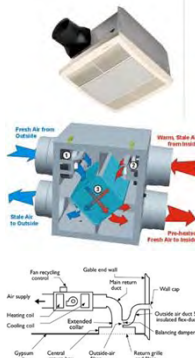
## ASHRAE 62.2 House Leakage Credit

2000 sq. ft. 3 bedrooms



## Ventilation Systems

1. Continuous Bath Exhaust
2. Heat Recovery Ventilator (aka balanced ventilation)
3. Energy Recovery Ventilator – like an HRV, but recovers moisture as well as heat
4. Integrated supply - aka hole in the return



## 62.2 – what's next?

- Rewrite for simplicity
- Multifamily recommendations
- ERV restrictions
- Attached garage requirements

## New Standards: RESNET

Technical coordination with BPI

## RESNET Ch.8 Performance Testing

### 1. Envelope tightness (CFM 50)

- 3 tests: single point, multipoint, multiple single-point
- Lists of envelope requirements for uniform testing
- Std. & reduced level of accuracy (depends on baseline pressures)
- Conversion to ACH50, SLA, NLA

## RESNET Ch.8 Performance Testing

### 2. Duct leak testing

- To Outside: step-by-step RESNET, ASHRAE 152, ASTM E1554 (pressurization & deltaQ)
- Total (only if <10% of system flow): step-by-step RESNET, ASHRAE 152
- System flow using pressure matching or flowplate or defaults
- Includes building preparation for uniform testing

## RESNET Ch.8 Performance Testing

### 3. Ventilation Air Flows

- Exhaust: powered flow hood or air flow resistance meter
- Supply: powered flow hood or bag filling

## RESNET Ch. 8 - IR

- Make IR testing more repeatable and uniform:
  - Imaging requirements for equipment
  - Recommendations for temperature differences, windspeeds, solar effects
  - Identify: insulation defects, air leakage, thermal bypass/bridging

## RESNET Guidelines for Combustion Appliance Testing and Writing Scopes of Work

- Allows use of BPI protocols
- Identifies procedures and equipment for:
  - Gas leaks
  - Worst case depressurization: 50 Pa direct vent, 15 Pa pellet stoves w/ex. Fan, 5 Pa atmospherically vented
  - CO: measure after 5 minutes, if over 100 ppm (200 for ovens) repair or replace

### RESNET – what's next

- HVAC systems: ACCA QI Standards 5 & 9: installation verification protocols and specifications
- Dehumidifiers
- Cold-climate heat pump (air + ground source)