

Standard 2: Ventilation and Moisture Management

2.1. There shall be a filtered whole-house mechanical fresh air ventilation system in compliance with ASHRAE 62.2.

The whole-house mechanical fresh air ventilation system must bring the following amount of fresh air into the home:
 $(7.5 \text{ CFM})(\text{number of bedrooms} + 1) + (.01 \text{ CFM})(\text{square feet of conditioned space})$

Example: 3 BR, 2000 square foot house requires

$$(7.5 \text{ CFM})(4) + (.01 \text{ CFM})(2000) = \\ 30 \text{ CFM} + 20 \text{ CFM} = \underline{50 \text{ CFM}}$$

Fresh air intakes must be installed at least 18" above finished grade or, if above the roof deck, 12" above the roof deck. They must be at least 10' from plumbing vents, chimneys, combustion appliance vents, dryer vent terminations, and exhaust fan terminations, and be attached to a proper termination.

Solid metal, flexible metal, or lined and insulated flexible duct may be used—any/all materials should be insulated when going through unconditioned space.

The fresh air ventilation system must include a damper and a filter. Filters must be accessible from the conditioned space.

One cost-effective approach is to use an insulated six-inch flex duct. Install one end outside of the home (through the gable end, soffit, foundation wall, etc., placed as suggested above) as near to the return as possible, with a run as straight as possible. Install the other end of the duct inside of the return box with an adjustable damper and filter at that end. The filter should be placed so that it may be seen and changed by the homeowner at the time they change their main return filter. No other controls are necessary; when the air handler fan is running, outside air will be drawn into the system and distributed.

