



Airflow Matters – Information You Should Know



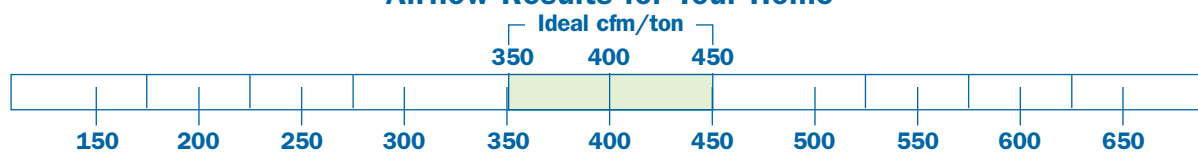
The Quality Installation Verification (QIV) analysis checks for proper refrigerant charge and airflow of the central air conditioner or heat pump systems. A COOL SMART trained air-conditioning technician has performed several critical measurements of your system that have been analyzed by an impartial computerized system. The computerized analysis has provided the results related to airflow below.

Why Airflow and Refrigerant Charge are Important to Your System

Correctly charged and sized central air conditioners and heat pumps with proper airflow:

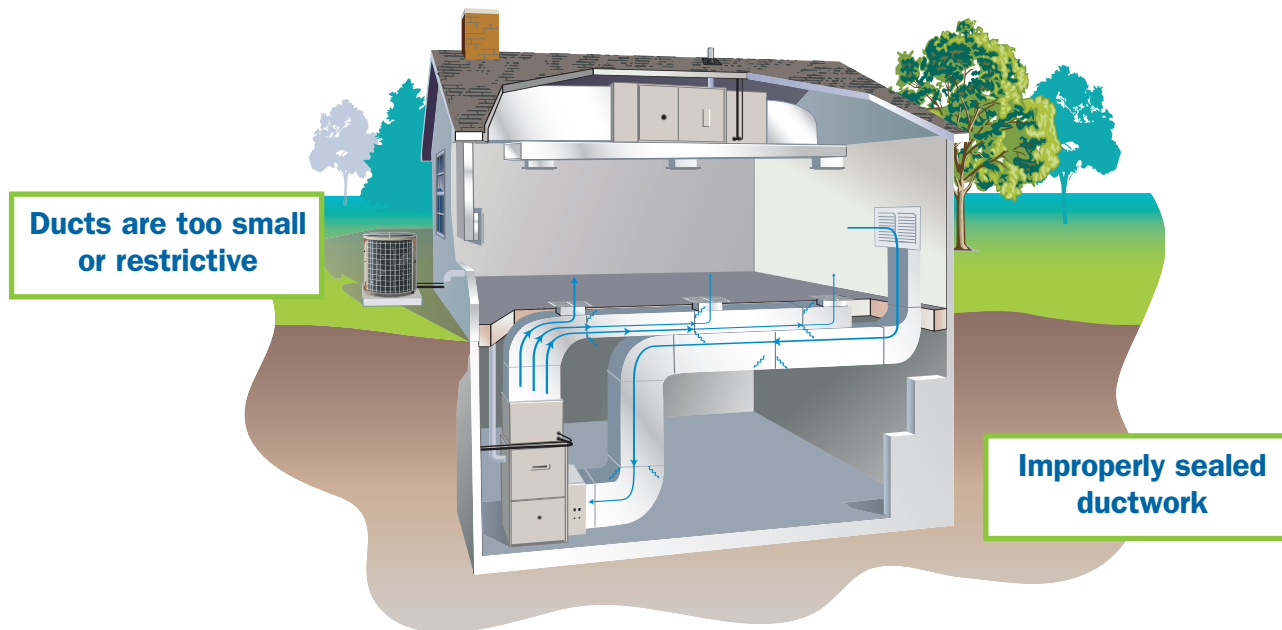
- Improve dehumidification and provide a higher level of comfort
- Operate more efficiently
- Last longer with fewer repairs
- Save on energy costs

Airflow Results for Your Home



Your contractor has marked the results of the air flow test of your system on the graph above.

Airflow Problems: Ducts are an integral part of a forced-air heating or cooling system. Their purpose is to circulate air to heat and cool your home evenly. Unfortunately, most duct systems are leaky and complex – meaning reduced airflow across the evaporator coil, and wasting 10–30% or more of your heating and cooling energy through these leaks. Your system has been identified as having one or more of these duct related issues. We recommend you discuss a course of corrective action with your HVAC contractor who has the tools to properly diagnose and correct these problems.



Contact Information

call: 800-473-1105 • email: info@mycoolsmart.com • visit: www.mycoolsmart.com
or write: COOL SMART, Conservation Services Group, 40 Washington Street, Westborough, MA 01581

Educational Websites

www.energystar.gov/ducts • <http://ducts.lbl.gov/> • www.homeenergy.org (keyword “ducts”)

Airflow Improvement Questions and Answers

Q1) How do I know if my ducts need repairs?

- A1) The following can be signs that your ducts need repair and sealing:
- Rooms are too warm or too cold
 - High summer and winter utility bills
 - Little or no airflow from registers in some rooms
 - Air filter gets dirty quickly – needs to be changed more than once a month – indicating leaks in return ducts.
 - Streaks of dust at registers or duct connections
 - No insulation on visible ducts (those in an attic or crawl space)
 - Flexible ducts are tangled or kinked

Q2) What improvements should my contractor make to correct my system's airflow?

- A2)
- Check, measure, and identify leaks with diagnostic equipment.
 - Repair or replace damaged, disconnected, or undersized ducts. Straighten out flexible ducts that are tangled or crushed.
 - Seal leaks and connections with mastic, metal tape, or an aerosol-based sealant. Duct tape should never be used because it will not last. Test airflow after sealing ducts.
 - Seal all registers and grills tightly to the ducts.
 - Insulate ducts in unconditioned areas, like attics and crawl spaces, with duct insulation that carries an R-value of 6 or higher.
 - Include a new filter as part of any duct system improvements.
 - Ensure there is a return duct in every room that has a supply duct (local codes apply).

Checking airflow may be done during the installation of your new system or as a special visit or during normally scheduled maintenance, tune up or repairwork.

