



THE TRIPLE WIN: Healthier Air, Lower Energy Costs, and Greater Comfort

A Case Study

BACKGROUND

"We were originally called there for an energy audit. They were looking to get the upstairs more comfortable in their two-story home. While conducting the energy audit, we found that the air quality needed attention. The home had no mechanical means for bringing in outside air." -Brynn Cooksey, AirDoctors

The 30-minute test displayed high CO₂ and high Particulate Matter, so a multi-day IAQ test was conducted to get more information. The multi-day testing revealed daytime CO₂ levels up to 1400 ppm, well over the recommended range.

"We recommended an ERV to bring in fresh air, MERV 16 filter, duct sealing, and a custom zoning system for more control with respect to floor-to-floor temperatures and greater comfort."

The duct sealing was done for multiple benefits: reduces pollutants from unconditioned areas, saving energy and to help them get more from their existing heating/cooling and humidifier/dehumidifier.

This family is extremely pleased with the results of this work and will enjoy the benefits of this triple win for many years.

--Brynn Cooksey, AirDoctors



BUILDING FEATURES

Location:

Ann Arbor, MI

Year & Style:

1975 2-story w/attached garage

Number of Bedrooms:

Three

Square Footage:

1680 sq ft

Heating System:

5-year-old 96% AFUE
Gas Furnace

BRYNN C. COOKSEY SR.

CEM, CMS, RCT, CESCQ

General Manager

Certified HVACR Specialist

Certified Energy Manager



Air Doctors Heating and

Cooling Co., LLC

Office: 734-740-2961

Web: www.airdoctorshvacservice.com

18311 W 10 Mile Rd. STE 101

Southfield, MI 48075



THE TRIPLE WIN: Healthier Air, Lower Energy Costs, and Greater Comfort

A Case Study

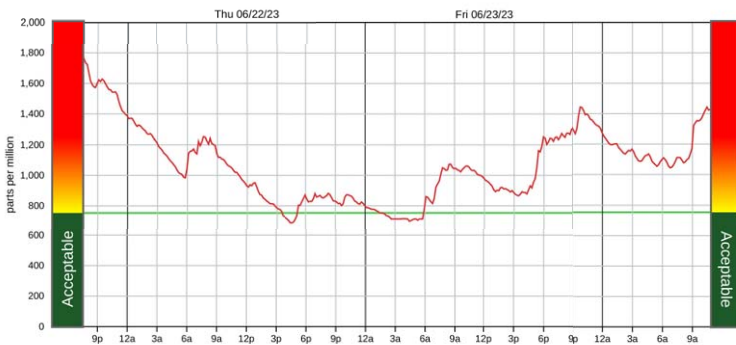


CARBON DIOXIDE (CO₂)

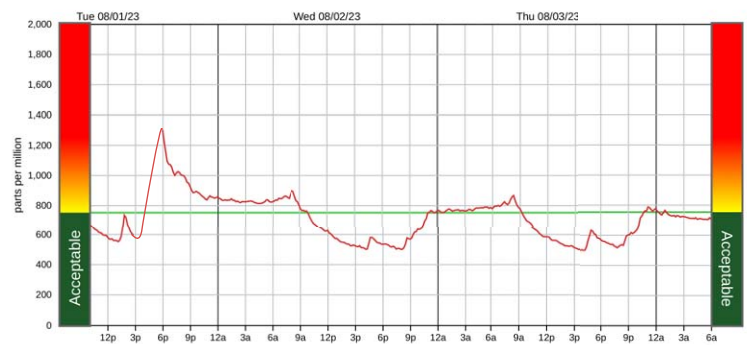
BEFORE

*ppm = parts per million

AFTER



Highest Daily Average: 1557 ppm
Highest Hourly Average: 1622 ppm
Overall Average: 1063 ppm



Highest Daily Average: 801 ppm
Highest Hourly Average: 1151 ppm
Overall Average: 702 ppm

AFTER PHOTOS



(Left) Custom zoning controls were installed in the ductwork to control the flow of air through different zones.

(Right) A heat recovery ventilator was hung on the wall to the right of the furnace.

