

VOC Testing in Non-Residential Applications

I often get asked about the difference between residential and commercial buildings in terms of VOCs. Non-residential buildings (small and large offices, retail spaces, larger industrial or commercial buildings) often have multiple uses as well as a number of variables that can affect the air quality and make source identification more difficult. A typical office has the usual office furniture and equipment (desks, computers, printers/copiers, filing, conference areas) and it may also be attached to a warehouse/storage facility, production area, or be located in an attached retail area (e.g., strip mall). These neighboring activities or businesses can often have a significant effect on the air quality, especially if they share ventilation systems, and can be difficult to investigate. Most commercial spaces also have a more comprehensive ventilation system than homes that provides more air changes per hour and improves the air quality, although many of these systems are turned down during off business hours leading to a build-up of VOCs when the business opens. The occupant activities are also different, with janitorial staff coming through the building and using a variety of products that the employees may not be aware of. The employees also bring in their own VOCs, including dry cleaning solvents, perfume/cologne, and hand sanitizers.

Our answer to these situations in the past has been our IAQ Check Basic or IAQ Check. We have expanded these offerings and are now providing an enhanced report, the IAQ Commercial Survey™. This enhanced report now includes a graphical representation of the TVOC and TMVOC, a commercial Contamination Index (for predicting VOC sources), an enhanced discussion of TMVOC and a breakdown of percentage contributions of the VOCs from either Building or Occupant sources. If you have any questions about IAQ Commercial Survey™ or would like to see an example report, please contact us at 989-772-5088 or prism@pati-air.com.

About Prism Analytical Technologies, Inc.

Prism Analytical Technologies, Inc. is a leading consultative air testing laboratory in the United States that is devoted to the chemical identification and analysis of contaminants in the air. We are a recognized leader in the development and deployment of ambient air testing methodologies for Fortune 100 and 500 companies, industrial hygienists, and environmental consultants. Prism's science-based technologies and wide range of air testing support help clients solve indoor air quality, process control, industrial, and environmental challenges.