

# Gases ---- we breathe 'em

## Who are we?

### Technical Committee 2.3

## What do we do?

**Pretty much anything related to gaseous contaminants and air cleaning systems for removing them from air**

#### **ASHRAE Standards for the HVAC industry:**

We are the parent committee for Standards 145.1, 145.2, and 145.4 and Guideline 27

These provide procedures for testing media and air cleaning devices, and guidance on use of gas sampling and measurement methods

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#### **Your ASHRAE Handbooks:**

We keep Chapter 11 (Fundamentals) and Chapter 47 (HVAC Applications) up-to-date

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We run conference program sessions at the Winter and Summer Meetings

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#### **ASHRAE Research Projects:**

We prepare work statements for ASHRAE approval, and manage funded projects.

Results appear in ASHRAE publications and feed into our Handbook chapter, Standards, and Guidelines.

Recently completed:

**1720-RP** (lead TC), **1780-RP** (Co-sponsor)

In progress:

**1869-RP** (lead TC), **1928-RP** (Co-sponsor), **1913-TRP** (Co-sponsor)

If you want more details - See the other side →

## Our official name

TC 2.3, Gaseous Air Contaminants and Gas Contaminant Removal Equipment

## Our scope

TC 2.3 is concerned with the nature of trace gaseous contaminants; the measurement of their properties; their effects on living things and materials; the means of removing unwanted gaseous contaminants from gases; and the effectiveness, energy usage, and economy of such purification equipment.

## Number of voting members

Usually 15

## Active sub-committees

Research, Standards, Program, Handbook, and Planning

## Research Projects

**1720-RP** "Validation of gas-phase air-cleaner performance test method (Standard 145.2) by laboratory testing of commercially available filtration devices"

**1780-RP** "Test Method to Evaluate Cross-contamination of Gaseous Contaminant within Total Energy Recovery Devices"

**1869-RP** "Evaluation of Indoor Air Contaminants with respect to Development of a Revised Indoor Air Quality Procedure (IAQP) Design Compound and Design Target Lists for Standard 62.1"

**1928-RP** "Improving efficiency test methods to measure air cleaner performance against airborne particulate contaminants in a recirculating system"

**1913-TRP** "Study of the Level of Filtration Required to Maintain Electronic Equipment Reliability in Regions of High Sea Salt Concentrations"

**A Work Statement** on the effect of particles on loading on gas-phase filters is in preparation

## Standards and Guidelines

**Standard 145.1:** Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media

**Standard 145.2:** Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices

**Standard 145.4 (In Development):** Method of Test for Assessing the Gas-Phase Performance of Air Cleaning Devices and Systems in a Duct-Chamber Apparatus

**Guideline 27:** Measurement Procedures for Gaseous Contaminants in Commercial Buildings

**Guideline 35 (In Development):** Method for Determining the Energy Consumption Caused by Air Cleaning and Filtration Devices

## ASHRAE Handbooks

**Chapter 11 (Fundamentals):** Air Contaminants

**Chapter 47 (HVAC Applications):** Air Cleaners for Gaseous Contaminants

## TC 2.3 Website

<https://tc0203.ashraetcs.org/>