

Standard 62.2-2022



ANSI/ASHRAE Standard 62.1-2022, *Ventilation and Acceptable Ventilation and Acceptable Indoor Air Quality in Residential Buildings*

Purpose

Defines the minimum requirements for mechanical and natural ventilation systems and the building envelope intended to provide acceptable indoor air quality (IAQ) in residential buildings.

Significance

IAQ impacts people's health, comfort, well-being, learning outcomes and work performance. Standard 62.2 helps ensure that the air inside homes is clean and safe by limiting sources of pollutants and requiring enough mechanical ventilation to provide dilution for unavoidable contaminants. The health impacts of poor IAQ include cardiovascular and respiratory illness, and there are approximately 3.2 million deaths per year attributable to household air pollution.¹ The standard ensures that heating, ventilating, and air-conditioning systems work together to effectively ventilate homes and minimize indoor pollution.

This is the only standard in the United States focused primarily on air quality in residences. The standard is the basis for residential ventilation code requirements in the International Code Council's (ICC) International Residential Code – Mechanical and the International Association of Plumbing and Mechanical Officials' (IAPMO) Uniform Mechanical Code.

Scope

The standard applies to residential spaces intended for human occupancy within single-family houses and multi-family structures, including manufactured and modular houses. The standard applies to both new and existing buildings. It does not apply to transient housing such as hotels, motels, nursing homes, dormitories or jails. It covers properties and performance of residential ventilation systems (e.g., flow ratings for fans, controls, and labeling).

The standard requires whole-house mechanical ventilation systems that operate continuously or intermittently. Natural filtration may also be included. It includes requirements for ventilation equipment, windows, air handlers and combustion equipment.

Highlights

- ✓ Used by DOE's Weatherization assistance program (WAP) in implementing the program.
- ✓ Standard 62.2 is referenced in 19 state codes.
- ✓ Goes beyond consideration of CO₂, covering chemical, physical, and biological contaminants.
- ✓ Referenced by Centers for Disease Control, the U.S. Environmental Protection Agency's Indoor AirPlus program and other resources², U.S. Department of Housing and Urban Development, The Surgeon General's Call to Action to Promote Healthy Homes, home energy rating standards (e.g. Residential Energy Services Network [RESNET]), and in several state building codes (e.g. California and Minnesota).
- ✓ Offers two methods of compliance: a prescriptive approach (Ventilation Rate Procedure) and a performance approach (Indoor Air Quality Procedure).

¹ World Health Organization. November 28, 2022. Household air pollution.

Changes and Improvements from Standard 62.2-2019

- ✓ Improved organization and clarity of existing provisions.
- ✓ Increased the stringency of requirements for attached dwelling units.
- ✓ Added requirement for certain mechanical ventilation systems for attached dwelling units on enclosed corridors.
- ✓ Updated definitions for “air density adjustments,” and removed some items related to transient occupancies.