

Standard 62.2-2022



ANSI/ASHRAE Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*

Purpose

Defines 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 people's homes is clean and safe by limiting sources of pollutants and requiring sufficient mechanical ventilation and filtration to address 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 pollution¹. 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 on air quality in residences. The standard is referenced in the residential ventilation code requirements in 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. The standard offers two methods for compliance: a prescriptive approach (Ventilation Rate Procedure) and a performance approach (Indoor Air Quality Procedure).

Government Use:

- Used by the U.S. Department of Energy's Weatherization Assistance Program (WAP) in implementing the program.
- Standard 62.2 is referenced in 19 state codes.
- Goes beyond consideration of carbon dioxide, and covers chemical, physical, and biological contaminants.
- Referenced by the Centers for Disease Control, the U.S. Environmental Protection Agency's Indoor AirPlus program and other resources², the Surgeon General's Call to Action to Promote Healthy Homes, and home energy rating standards (e.g. Residential Energy Services Network [RESNET]).
- Required under the U.S. Department of Housing and Urban Development's Manufactured Home Construction and Safety Standards.³

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.

¹ World Health Organization. November 28, 2022. Household air pollution. <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health>

² EPA. 2016. Energy Savings Plus Health: *Indoor Air Quality Guidelines for Multifamily Building Upgrades*.

³ Notice in the Federal Register, 2024: <https://www.federalregister.gov/documents/2024/09/16/2024-20545/manufactured-home-construction-and-safety-standards>