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## ADDENDA

ANSI/ASHRAE Addendum f to ANSI/ASHRAE Standard 62.1-2022

# Ventilation and Acceptable Indoor Air Quality

Approved by ASHRAE and the American National Standards Institute on September 30, 2025.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/continuous-maintenance).

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#### **FOREWORD**

Addendum f improves the resiliency of a building by improving the ability to adjust ventilation quickly and easily in response to air quality related emergency conditions. It adds a minimum requirement for the control system to include an economizer shutdown mode to ensure that not more than the minimum airflow is provided in the event that the outdoor air is more contaminated than is typical (e.g., during a wildfire event). It also requires, at minimum, a demand control ventilation shutdown mode to ensure that not less than the minimum airflow is provided in the event that there are unusual sources within the building that require dilution. An additional infection risk management mode is added to comply with the ASHRAE Standard 241 building readiness plan.

All emergency modes require a control systems notification to alert operators that the system is in an emergency control mode. This mode also includes a requirement for an automatic return to normal operation based on a timer control to avoid accidentally leaving the systems in one of the emergency modes after the emergency situation has passed. This timer would have a maximum setting of 72 hours, but does not preclude the time being extended, only that it requires reinitiation. The method of initiation is not a requirement (e.g., initiation may be manual or may be via sensed value); it is only required to automatically reset.

The committee notes that ventilation controls for air quality emergencies were published as Addendum k to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020. This addendum to ANSI/ASHRAE Standard 62.1-2022 borrows from Addendum k but differs in part due to Standard 62.1's mission to provide the minimum, rather than enhanced, requirements of ventilation, indoor air quality, and operation.

*Informative Note:* In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (for deletions) unless the instructions specifically mention some other means of indicating the changes.

#### Addendum f to Standard 62.1-2022

#### Add new Section 5.21 as follows.

- <u>5.21 Ventilation System Emergency Control Modes</u>. The building control system shall include modes of operation that adjust ventilation rates for emergency conditions. The control system shall allow initiation of the following modes:
- a. Economizer shutdown: Disable economizer controls such that systems operate with minimum outdoor airflow only.
- <u>b.</u> Outdoor air intake increase: Demand controlled ventilation (DCV) shall be disabled. The outdoor air intake flow  $(V_{\underline{ot}})$  and the exhaust rates shall be set to the maximum rates designated by the designer for system operation in this mode.
- **Informative Note:** An example emergency during which the economizer shutdown mode of operation may be used is a nearby wildfire causing poor outdoor air quality. An example emergency during which the ventilation increase mode of operation may be used is a temporary period of unusual indoor contaminant source.
- **5.21.1 Infection Risk Management Mode (IRMM).** When compliance with ASHRAE Standard 241 requires a change to the ventilation system operation, that mode of operation shall be designated as a ventilation system emergency control mode.
- **5.21.2 Outdoor Pollution Mode.** When compliance with a guideline or standard for outdoor air pollution requires a change to the ventilation system operation, that mode of operation shall be designated as a ventilation system emergency control mode.
- *Informative Note:* Refer to ASHRAE Guideline 44 for wildfires. Refer to ASHRAE Guideline 36 for other outdoor pollution events.
- <u>5.21.3</u> Ventilation system emergency controls modes shall include a timer-based reset that automatically restores normal operation after a user-adjustable period that shall be limited to not more than 72 hours. The initiation of these modes shall trigger a control system notification.

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ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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