



**BSR/ASHRAE/ASHE Addendum p
to ANSI/ASHRAE/ASHE Standard 170-2017**

Public Review Draft

**Proposed Addendum p to
Standard 170-2017, Ventilation of
Health Care Facilities**

**Second Public Review (February 2019)
(Draft Shows Proposed Independent Substantive
Changes to Previous Public Review Draft)**

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FOREWORD

A summary of proposed Addendum p original changes:

1. *Create a column indicating spaces where unoccupied turndown is acceptable.*
2. *Incorporate Table 6.4 into Table 7.1 to remove confusion so that filter requirements will be uniformly applied.*
3. *Revise space names to align with names appearing in FGI 2014 and indicating the appropriate sections in FGI 2014 where that space is referenced.*

Based on commenter feedback the following additional changes are proposed:

1. *In paragraph 7.1(a)(3) the term “humidity” is changed to the phrase “design relative humidity”*
2. *Some spaces previously marked as not permitting unoccupied turndown are being changed to permit unoccupied turndown.*
3. *Some of the proposed new spaces would not be added to the standard.*
4. *Addendum a are proposed changes to the filter column created in this addendum and represents and updated approach to filtration in healthcare facilities. Users of the standard are encouraged to direct filter comments to Addendum a because the new values in addendum a will replace the column values added in Addendum p.*

[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous draft are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed substantive changes.]

Addendum p to 170-2013

Revise Section 7.1.a.3 as shown below. The remainder of Section 7.1 is unchanged.

7.1 General Requirements. The following general requirements shall apply for space ventilation:

- a. Spaces shall be ventilated according to Table 7.1.

[...]

3. For design purposes, the minimum number of total air changes indicated shall be either supplied for positive pressure rooms or exhausted for negative pressure rooms. Spaces that are required in Table 7.1 to be at a negative pressure relationship and are not required to be exhausted shall utilize the supply airflow rate to compute the minimum total air changes per hour required. Except where indicated by a “No” in the Unoccupied Turndown column, the number of air

changes shall be permitted to be reduced and temperature and design relative humidity altered when the space is unoccupied, provided that the required pressure relationship to adjoining spaces is maintained while the space is unoccupied and that the minimum number of air changes, temperature and design relative humidity indicated are re-established anytime the space becomes occupied (Refer to Informative Appendix A for additional information.). Air change rates in excess of the minimum values are expected in some cases in order to maintain room temperature and design relative humidity conditions based upon the space cooling or heating load.

[...]

Revise Table 7.1 and its notes as shown below. Table 7.1 and the notes may be modified by addenda to Standard 170-2017 currently published for free on the ASHRAE website at <http://www.ashrae.org/standards-research--technology/standards-addenda>.

TABLE 7.1 Design Parameters For Inpatient Spaces

Function of Space (aa)	Pressure Relationship to Adjacent Areas (n)	Minimum Outdoor ach	Minimum Total ach	All Room Air Exhausted Directly to Outdoors (j)	Air Recirculated by Means of Room Units (a)	Unoccupied Turndown	Minimum Filter Efficiencies (bb)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
NURSING UNITS AND OTHER PATIENT CARE AREAS									
Emergency Department public waiting area (2.2-3.1.3.4)	Negative	2	12	Yes (q)	NR	<u>Yes (ee)</u> No	8/14	max 60	70-75/21-24
Emergency service Triage area (2.2-3.1.3.3)	Negative	2	12	Yes (q)	NR	<u>Yes</u> No	8/14	max 60	70-75/21-24
Emergency department human decontamination (2.2-3.1.3.6(8))	Negative	2	12	Yes	No	<u>Yes</u> No	8/14	NR	NR
Radiology waiting rooms	Negative	2	12	Yes (q), (w)	NR	<u>Yes (ee)</u> No	8/14	max 60	70-75/21-24
Emergency department exam/treatment room (2.2-3.1.3.6) (p)	NR	2	6	NR	NR	<u>Yes</u> No	8/14	max 60	70-75/21-24
Patient toilet room (2.1-2.2.6)	Negative	NR	10	Yes	No	<u>Yes</u> No	8/NR	NR	NR
Environmental Services Room (2.1-2.6.12)	Negative	NR	10	Yes	No	<u>No</u>	8/NR	NR	NR
Patient Care Area Corridor	NR	NR	2	NR	NR	<u>Yes</u> No	8/14	NR	NR
DIAGNOSTIC AND TREATMENT									
CT scanner room (2.2-3.4.2.1) Imaging (diagnostic and treatment)	NR	2	6	NR	NR	Yes	8/14	max 60	72-78/22-26
Radiography room (2.2-3.4.3.2)	NR	2	6	NR	NR	Yes	8/14	max 60	72-78/22-26
Radiography/fluoroscopy room (2.2-3.4.3.3)	NR	2	6	NR	NR	Yes	8/14	max 60	72-78/22-26
Mammography room (2.2-3.4.3.4)	NR	2	6	NR	NR	Yes	8/14	max 60	72-78/22-26
MRI scanner room (2.2-3.4.4)	NR	2	6	NR	NR	Yes	8/14	max 60	72-78/22-26
Ultrasound examination or procedure room (2.2-3.4.5)	NR	2	6	NR	NR	Yes	8/14	max 60	72-78/22-26
Interventional imaging recovery patient care area (2.2-3.5.3)	NR	2	6	NR	No	Yes	8/14	max 60	70-75/21-24
Radiosurgery treatment room (2.2-3.7.3.2)	NR	2	6	NR	NR	Yes	8/14	max 60	70-75/21-24
Proton therapy treatment room (2.2-3.7.4.2)	NR	2	6	NR	NR	Yes	8/14	max 60	70-75/21-24
Dialyzer reprocessing room	Negative	NR	10	Yes	No	<u>Yes</u> No	8/NR	NR	NR
Nuclear medicine hot lab	Negative	NR	6	Yes	No	<u>Yes</u> No	8/NR	NR	70-75/21-24
PATIENT SUPPORT FACILITIES									
Medication preparation room used to compound sterile preparations (b) (2.1-2.6.6.2e)	Positive	2	4	NR	NR	<u>No</u>	8/14	max 60	70-75/21-24
Pharmacy Services: Sterile Work Areas (b) (2.1-4.2.3)	Positive	2	4	NR	NR	<u>No</u>	8/14	max 60	70-75/21-24
Toilet room (2.1-4.3.9.1)	Negative	NR	10	Yes	No	<u>Yes</u> No	8/NR	NR	72-78/22-26NR
OTHER GENERAL SUPPORT FACILITIES									
Soiled lined holding room (2.2-3.4.3.2)	Negative	NR	10	Yes	No	<u>No</u>	8/NR	NR	NR
Toilet (2.1-5.2.2.4.1)	Negative	NR	10	Yes	No	<u>Yes</u> No	8/NR	NR	72-78/22-26NR
SUPPORT AREAS FOR NURSING UNITS AND OTHER PATIENT CARE AREAS									
Clean linen storage room (2.1-5.2.3.2)	Positive	NR	2	NR	NR	<u>Yes</u> No	8/14	NR	72-78/22-26
Clean workroom (2.1-2.6.9.1)	Positive	2	NR	NR	NR	<u>Yes</u> No	8/14	NR	NR
Clean supply room (2.1-2.6.9.2)	Positive	NR	NR	NR	NR	<u>Yes</u> No	8/14	NR	NR

Note: NR = no requirement

ee. Include time-delay controls such that turndown does not occur for the first 20 minutes after the space becomes unoccupied.