

**Interpretation IC 170-2013-16 of
ANSI/ASHRAE/ASHE Standard 170-2013
Ventilation of Health Care Facilities**

Date Approved: 6/25/2019

Request from: Allen Rosenthal, Consulting Engineer, 126 Atlantic Avenue, Lynbrook, NY 11563.

Reference: This request for interpretation refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2013, Section 7.1 and Table 7.1, regarding Nursing Facilities Resident Rooms.

Background: ASHRAE/ASHE Standard 170 Section 6.4 states the required filtration for spaces within this facility. In particular, Nursing facilities have the following filtration requirements Filter bank #1 MERV 13 filter bank #2 NR (not required). Section 6.4 states "All of the air provided to a space shall be filtered in accordance with Table 6.4, except as otherwise indicated in Section 7.1 for spaces that allow recirculating HVAC room units."

Section 7.1, Table 7.1, addresses space ventilation requirements in terms of pressure relationship, minimum outside air, total air changes per hour, air recirculated by means of room units, etc. For Nursing Facilities Resident rooms have the following criteria:

Pressure relationship to adjacent area: NR

Minimum Outdoor ach: 2

Minimum Total ach: 2

All room Air Exhausted directly to outdoors (j): NR

Air Recirculated by means or Room Units (a): NR

Design Relative Humidity: NR

Design Temperature: 70-75 Degrees F

NR= no requirement

Note a for Table 7.1 states: Except where indicated by "NO" in this column, recirculating room HVAC units (with heating or cooling coils) are acceptable for providing that portion of the minimum total air changes per hour that is permitted by Section 7.1 (subparagraph [a] [5]).

Section 7.1 subparagraph [a] [5] states: For spaces where Table 7.1 permits air to be recirculated by room units, the portion of the minimum total air changes per hour required for a space that is greater than the minimum outdoor air changes per hour required component may be provided by recirculating room HVAC units. Such recirculating room HVAC units shall

- i. not receive non filtered, non conditioned outdoor air;
- ii. serve only a single space; and
- iii. provide a minimum MERV 6 filter for airflow passing over any surface that is designed to condense water. This filter shall be located upstream of any cold surface, so that all of the air passing over the cold surface is filtered.

Interpretation: It is our interpretation from the above requirements that PTAC units (thru the wall packaged terminal units) are permissible to be installed in patient rooms provided the criteria as set forth in Section 7.1 paragraph 5 are complied with.

1. (i) The PTAC units will not be the source of outdoor air introduced to the space.

2. (ii) The PTAC units will serve only a single space.
3. (iii) The PTAC units will be provided with a MERV 6 filter upstream of any cold surface, so that all of the air passing over the cold surface is filtered

Question: Is this interpretation correct?

Answer: Yes

Comments: The air handling unit providing the outside air to the space shall have filtration per Table 6.4. In this application, it is recommended to seal (in addition to closing) any existing outside air dampers that are provided by the PTAC manufacturer.