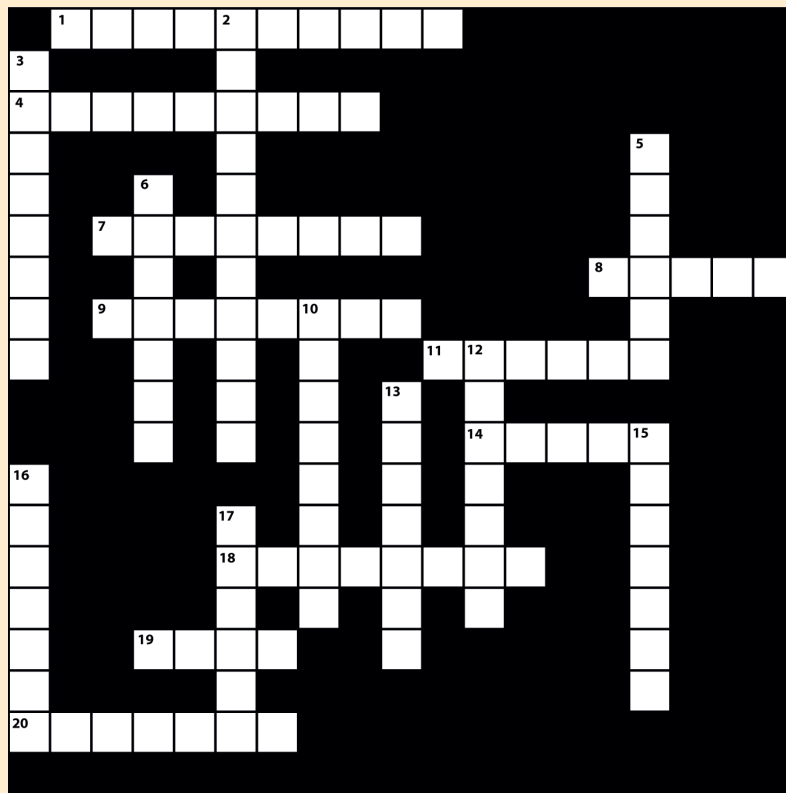


Take the HVAC CHALLENGE™

BY STEVEN G. LIESCHEIDT, P.E., CSI-CCS, CCPR

▶ Health Care Facilities



ACROSS

1. This type of room in a hospital can be general, pathology, serology, histology, cytology, bacteriology, biochemistry, or other specialty uses.
4. These rooms serve seriously ill patients from postoperative to coronary patients and can have a temperature range from 70°F to 75° and an rh of 30% minimum and 60% maximum.
7. This type of care facility is for recuperation of hospital patients who no longer require hospital facilities but do require the therapeutic and rehabilitative services of skilled nurses.
8. This type of workroom in a hospital should be under positive pressure, with a minimum of 2 ach of outside air and a minimum of 4 ach of total air with no air recirculated within room units.
9. These are highly infectious and transported within air, and examples include *Mycobacterium tuberculosis* and *Legionella pneumophila*.
11. This term may refer to any building, from the ubiquitous residential doctor's office

14. Some of these, such as Aspergillus, can be fatal to advanced leukemia, bone marrow transplant, and other immunocompromised patients.
18. No area of a hospital requires more careful control of the aseptic condition of the environment than this type of suite.
19. A minimum of this filter rating value of 17 should be used on air supplies serving protective-environment rooms for clinical treatment of patients with a high susceptibility to infection due to leukemia, burns, bone marrow transplants, organ transplants, or human immunodeficiency virus.
20. This type of nursing home is for people who require assistance in daily activities.

DOWN

2. This type of care home is generally for elderly people who are unable to cope with regular housekeeping chores but have no acute ailments and are able to care for all their personal needs.
3. This type of infection isolation room in a

hospital should be under negative pressure and have a minimum of 12 ach of total air and have all air exhausted to the outside and no air recirculated within the room units.

5. This type of corridor in a hospital should be under negative pressure with a minimum of 2 ach of outside air and a minimum of 2 ach of total air.
6. These outlets should be located a minimum of 10 ft above ground level and away from doors, occupied areas, and operable windows.
10. These rooms are used in conjunction with operating rooms and should be maintained at an rh of 45% to 55%.
12. This type of airflow has shown promise in rooms used for treating patients who are highly susceptible to infection.
13. These intakes should be located as far as practical but not less than 25 ft from combustion equipment stack exhaust outlets.
15. This type of storage room in a hospital should be under positive pressure with a minimum of 2 ach of outside air and 4 ach of total air.
16. These are transported by and virulent within air, and examples are Varicella and Rubella.
17. This organization published Standard 62 – "Ventilation for Acceptable Indoor Air Quality."

To brush up on the facts behind this month's clues, refer to Chapter 7 ("Health Care Facilities") in the 2007 ASHRAE Handbook – Applications.



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Now, check out the answers for this month's "HVAC Challenge" on page 81 or check out answers from past puzzles on www.esmagazine.com.

Solution to September's HVAC Challenge™

