

1. Which of the following data from a building automation system best determines heating energy consumption?

- A. air flow
- B. space temperature
- C. steam flow
- D. water temperature

Objective 1C

Task 2

Recall

Answer: C

2. An energy assessor is analyzing a building with exterior walls that have an assembly U value of 0.071 Btu/ft²Fh (0.403 W/m²K). The owner would like to add additional wall elements to reduce the heat transfer through the wall by 60%. To meet this owner's goal, the additional wall elements must have a minimum combined R value of

- A. 21.0 ft²Fh/Btu (3.70 m²K /W).
- B. 22.4 ft²Fh/Btu (3.95 m²K /W).
- C. 23.3 ft²Fh/Btu (4.11 m²K /W).
- D. 35.0 ft²Fh/Btu (6.17 m²K /W).

Objective 2A

Task 2

Analysis

Answer: A

3. Normal voltage to a wood-shop classroom is 460 volts. On school days, the air compressor, which draws 10 amps, operates according to the following schedule:

Time 12 AM 4 AM 6 AM 11 AM 2 PM 9 PM

Scheduled operation on off on off on off

Assuming a power factor of 0.8, which of the following is the best estimate of the value of energy this equipment uses each school day?

- A. 127 kWh
- B. 89 kWh
- C. 74 kWh
- D. 102 kWh

Objective 3H

Task 1

Application

Answer: D