

Quiz 31

1. A thermostat, which is sometimes installed in the return air duct, serves primarily to:

- a. limit temperature of the heated outside air
- b. control the throttle of the steam in the tubes
- c. sense the temperature of the steam in the coils
- d. minimize temperature fluctuations in discharge air
- e. heat recirculated air

2. Air vents are:

- a. not required when an inverted bucket steam trap is used
- b. not required on the steam mains if an inverted bucket steam trap is used at the steam coil
- c. not required at the steam coil if a float and thermostatic trap is used at the steam coil with an atmospheric return and the steam main is adequately vented
- d. not required anywhere if a float and thermostatic trap is used at the steam coil
- e. required only with hot water coils

3. Ethylene glycol used in glycol coils:

- a. has a higher heat transfer efficiency than hot water
- b. has less friction losses in the coil and piping than hot water
- c. requires a smaller pump and less horsepower than hot water
- d. has much lower pressure drops through the coil and piping
- e. have a lower heat transfer efficiency than hot water

4. It is good design practice to select a steam coil size, so that:

- a. 100% of the coil capacity is needed when the air temperature entering the coil is -1°C
- b. at least 40% of the coil capacity is needed when the air temperature entering the coil is -1°C
- c. at least 80% of the coil capacity is needed when the air temperature at the coil inlet is -1°C
- d. at least 10% of the coil capacity is needed when the air temperature at the coil inlet is -5°C

5. The flow arrangement best suited for hot water coils is:

- a. the counter flow arrangement because it is more efficient
- b. the parallel flow arrangement because it gives better protection against freezing
- c. one in which the cold air enters the coil where the coldest water is flowing
- d. the half serpentine
- e. the triple bypass flow arrangement

Quiz 31 Answers:

1 = a, 2 = c, 3 = e, 4 = b, 5 = b