

**reflectance:** the ratio of the light reflected by a surface to the light incident upon it.

**reheating:** raising the temperature of air that has been previously cooled either by mechanical refrigeration or an economizer system.

**repair:** the reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

**replacement air:** outdoor air that is used to replace air removed from a building through an exhaust system. Replacement air may be derived from one or more of the following: makeup air, supply air, transfer air, and infiltration. However, the ultimate source of all replacement air is outdoor air. When replacement air exceeds exhaust, the result is exfiltration.

**resistance, electric:** the property of an electric circuit or of any object used as part of an electric circuit that determines for a given circuit the rate at which electric energy is converted into heat or radiant energy and that has a value such that the product of the resistance and the square of the current gives the rate of conversion of energy.

**reset:** automatic adjustment of the controller setpoint to a higher or lower value.

**residential:** spaces in buildings used primarily for living and sleeping. Residential spaces include, but are not limited to, dwelling units, hotel/motel guest rooms, dormitories, nursing homes, patient rooms in hospitals, lodging houses, fraternity/sorority houses, hostels, prisons, and fire stations.

**roof:** the upper portion of the building envelope, including opaque areas and fenestration, that is horizontal or tilted at an angle of less than 60° from horizontal. For the purposes of determining building envelope requirements, the classifications are defined as follows:

**attic and other roofs:** all other roofs, including roofs with insulation entirely below (inside of) the roof structure (i.e., attics, cathedral ceilings, and single-rafter ceilings), roofs with insulation both above and below the roof structure, and roofs without insulation but excluding metal building roofs.

**metal building roof:** a roof that:

1. is constructed with a metal, structural, weathering surface,
2. has no ventilated cavity, and
3. has the insulation entirely below deck (i.e., does not include composite concrete and metal deck construction nor a roof framing system that is separated from the superstructure by a wood substrate) and whose structure consists of one or more of the following configurations:
  - a. metal roofing in direct contact with the steel framing members
  - b. metal roofing separated from the steel framing members by insulation
  - c. insulated metal roofing panels installed as described in a or b

**roof with insulation entirely above deck:** a roof with all insulation

1. installed above (outside of) the roof structure and
2. continuous (i.e., uninterrupted by framing members).

**single-rafter roof:** a subcategory of attic roofs where the roof above and the ceiling below are both attached to the same wood rafter and where insulation is located in the space between these wood rafters.

**roof area, gross:** the area of the roof measured from the exterior faces of walls or from the centerline of party walls. (See roof and wall.)

**rooftop monitors:** vertical fenestration integral to the roof

**room air conditioner:** an encased assembly designed as a unit to be mounted in a window or through a wall or as a console. It is designed primarily to provide direct delivery of conditioned air to an enclosed space, room, or zone. It includes a prime source of refrigeration for cooling and dehumidification and a means for circulating and cleaning air. It may also include a means for ventilating and heating.

**room cavity ratio (RCR):** a factor that characterizes room configuration as a ratio between the walls and ceiling and is based upon room dimensions as follows:

**seal class A:** a ductwork sealing category that requires sealing all transverse joints, longitudinal seams, and duct wall penetrations. Duct wall penetrations are openings made by pipes, holes, conduit, tie rods, or wires. Longitudinal seams are joints oriented in the direction of airflow. Transverse joints are connections of two duct sections oriented perpendicular to airflow.

**seasonal coefficient of performance—cooling (SCOP<sub>C</sub>):** the total cooling output of an air conditioner during its normal annual usage period for cooling divided by the total electric energy input during the same period in consistent units (analogous to the SEER but in I-P or other consistent units).

**seasonal coefficient of performance—heating (SCOP<sub>H</sub>):** the total heating output of a heat pump during its normal annual usage period for heating divided by the total electric energy input during the same period in consistent units (analogous to the HSPF but in I-P or other consistent units).

**seasonal energy efficiency ratio (SEER):** the total cooling output of an air conditioner during its normal annual usage period for cooling (in Btu) divided by the total electric energy input during the same period (in Wh).

**secondary sidelighted area:** the total secondary sidelighted area is the combined secondary sidelighted area without double counting overlapping areas. The floor area for each secondary sidelighted area is directly adjacent to a primary sidelighted area with an area equal to the product of the secondary sidelighted area width and the secondary sidelighted area depth. See Figure 3.4.

The secondary sidelighted area width is the width of the window plus, on each side, the smallest of: