

Glossary

British thermal unit (BTU) - The amount of heat that must be added to one pound of water to raise its temperature one degree Fahrenheit. $1 \text{ BTU} = 1055.06 \text{ J} = 2.931 \cdot 10^{-4} \text{ kWh}$.

Cooling capacity - The quantity of heat that a cooling appliance is capable of removing from a room.

Cooling load - The rate at which heat must be extracted from a space in order to maintain the desired temperature within the space.

Energy efficiency ratio (EER) - A ratio calculated by dividing the cooling capacity in watts by the power input in watts.

Heating load - The instantaneous heating rate required to keep the building “in balance” at a specific minimum comfort temperature level e.g. a design temperature of 21.0°C . (Without taking into account the effectiveness of the heating system). Expressed in W or W/m^2 .

Variable refrigerant flow (VRF) - A VRF air-conditioning system is essentially a sophisticated split system (System made up of two basic components: one or more indoor room cooling units, and an outdoor refrigeration unit which dumps heat taken from the building. The indoor and outdoor units are linked by pipes which transport refrigerant between the units.). The difference is the ability of most VRF systems to provide heating or cooling from each of the indoor units on an individual basis.