



Why do Trane thermostats have a minimum heating set point temperature of 55F?

I would like to set my thermostat heating set point below 55F when I am away.

Minimum Return Air Temperature for Gas Furnaces

Thermostat set point temperatures below 55F shorten the life of the gas furnace heat exchanger. As return air temperature to a gas furnace drops below 55F, excessive condensation forms on the inside of the furnace's primary heat exchanger. This condensation is an acidic product of combustion which leads to development of holes, due to corrosion, in the heat exchanger. Industry standards for furnaces state that furnace return air temperature should not be set below 55F to prevent furnace heat exchanger corrosion.

Minimum Return Air Temperature for Heat Pumps

Setting the thermostat temperature of a heat pump system, in the heating mode of operation below 55F increases the likelihood that the heat pump outdoor unit will be unable to defrost completely which significantly increases energy usage. A ball of ice may form around the outdoor coil making the auxiliary heat source, typically electric strip heaters, the primary source of heat when the heat pump is needed most.

