

Appendix C: Radiant surface temperature charts

Radiant floor

Surface temperatures

Floor surface temperature = (BTU/h/ft² ÷ 2) + room setpoint

Room setpoint	75°F	80.0	82.5	85.0	87.5	90.0	92.5	95.0	97.5	100.0	102.5
	72°F	77.0	79.5	82.0	84.5	87.0	89.5	92.0	94.5	97.0	99.5
	70°F	75.0	77.5	80.0	82.5	85.0	87.5	90.0	92.5	95.0	97.5
	68°F	73.0	75.5	78.0	80.5	83.0	85.5	88.0	90.5	93.0	95.5
	65°F	70.0	72.5	75.0	77.5	80.0	82.5	85.0	87.5	90.0	92.5
	60°F	65.0	67.5	70.0	72.5	75.0	77.5	80.0	82.5	85.0	87.5
		10.0	15.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0
BTU/h/ft ²											

Exceeds the maximum recommended surface temperature for hardwood floors

Exceeds the maximum recommended surface temperature for all floors

Figure C-1: Radiant floor surface temperature chart

Radiant ceiling

Surface temperatures

Ceiling surface temperature = (BTU/h/ft² ÷ 1.1) + room setpoint

Room setpoint	75°F	84.1	88.6	93.2	97.7	100.0	102.3	106.8	114.4
	72°F	81.1	85.6	90.2	94.7	97.0	99.3	103.8	108.4
	70°F	79.1	83.6	88.2	92.7	95.0	97.3	101.8	106.4
	68°F	77.1	81.6	86.2	90.7	93.0	95.3	99.8	104.4
	65°F	74.1	78.6	83.2	87.7	90.0	92.3	96.8	101.4
	60°F	69.1	73.6	78.2	82.7	85.0	87.3	91.8	96.4
		10.0	15.0	20.0	25.0	27.5	30.0	35.0	40.0
BTU/h/ft ²									

Exceeds the maximum recommended surface temperature for 8-foot ceilings
Maximum is 110°F for ceilings higher than 8 feet, but lower than 12 feet.

Figure C-2: Radiant ceiling surface temperature chart

