

Specification: Raychem QuickNet Floor Heating System

1 Product Description

General

The Raychem QuickNet floor heating system is designed for comfort heating of tile and stone, as well as laminate and engineered wood floors. The preassembled mats can be installed over wood, with or without backer board, or on concrete. The mat is then embedded in mortar and covered with your particular flooring type following the manufacturer's instructions.

The Heating Mat

The heating mat shall consist of a heating cable woven into an adhesive-backed fiberglass mesh. The heating mat shall be tested by the manufacturer for continuity, resistance, and dielectric integrity before leaving the factory. All heating mats furnished under this section shall be supplied by a single manufacturer. The heating mat shall be certified to U.S. and Canadian standards for floor heating. The mat is rated to produce 12 watts per square foot (129 watts per square meter) at 120 or 240 volts. The heating cable shall incorporate two copper alloy heating elements encapsulated in an inner fluoropolymer layer. This fluoropolymer insulation shall be surrounded by an aluminium/Mylar foil to provide a ground path with 100% coverage. A fluoropolymer outer jacket shall be extruded over the ground foil for abrasion and chemical resistance. End termination splice shall have a diameter of 3/8" and shall be environmentally sealed. Power leads shall be of sufficient length to reach junction boxes as shown on detailed drawings. Power leads shall be a minimum of 10' long, and with wire colors compliant with North American electrical practice.

2 Control / Operation

The floor heating system shall be controlled by a Raychem QuickStat-TC electronic thermostat. The thermostat shall incorporate a thermistor-type floor sensor to monitor floor temperatures, an integral 5-mA Class A Ground Fault Circuit Interrupter (GFCI), a temperature set-back option to reduce energy consumption, and a digital readout.

3 Code Listings / Specifications

The heating mat shall be certified to U.S. and Canadian standards. The heating mat shall be capable of being installed in one step with the mortar bond coat and tile. The self-adhesive heating mat shall be secured to the floor and encapsulated with thinset or a self-leveling compound.

4 Product Warranty

The heating mat shall include an optional 15-year limited warranty extension provided that the system is installed in accordance with the QuickNet System Installation Manual (H57704). This document defines the commissioning tests to be performed and recorded before the heating mat is embedded in mortar, after the heating mat is embedded in mortar and after the finished floor is set.

Product Selection

Catalog number	Heated area		Mat dimensions	Power Output (W)			Current (A)	Resistance (Ohms)
	ft ²	m ²		120 V	208 V	240 V		
120 V QuickNet Standard Kit (with thermostat)								
QUICKNET-010-1	10	0.9	20 in x 6.2 ft	120			1	120
QUICKNET-015-1	15	1.4	20 in x 9.2 ft	180			1.5	80
QUICKNET-020-1	20	1.9	20 in x 12.1 ft	240			2	60
QUICKNET-025-1	25	2.3	20 in x 15.1 ft	300			2.5	48
QUICKNET-030-1	30	2.8	20 in x 18.4 ft	360			3	40
QUICKNET-035-1	35	3.3	20 in x 21.3 ft	420			3.5	35
QUICKNET-040-1	40	3.7	20 in x 24.3 ft	480			4	30
QUICKNET-045-1	45	4.2	20 in x 27.5 ft	540			4.5	27
QUICKNET-050-1	50	4.6	20 in x 30.5 ft	600			5	24
QUICKNET-060-1	60	5.6	20 in x 36.4 ft	720			6	20
QUICKNET-070-1	70	6.5	20 in x 42.7 ft	840			7	17
QUICKNET-080-1	80	7.4	20 in x 48.9 ft	960			8	15
QUICKNET-090-1	90	8.4	20 in x 55 ft	1080			9	13
QUICKNET-100-1	100	9.3	20 in x 61 ft	1200			10	12
120 V Extension Kit (without thermostat)								
QUICKNET-010X-1	10	0.9	20 in x 6.2 ft	120			1	120
QUICKNET-015X-1	15	1.4	20 in x 9.2 ft	180			1.5	80
QUICKNET-020X-1	20	1.9	20 in x 12.1 ft	240			2	60
QUICKNET-025X-1	25	2.3	20 in x 15.1 ft	300			2.5	48
QUICKNET-030X-1	30	2.8	20 in x 18.4 ft	360			3	40
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QUICKNET-080X-1	80	7.4	20 in x 48.9 ft	960			8	15
QUICKNET-090X-1	90	8.4	20 in x 55 ft	1080			9	13
QUICKNET-100X-1	100	9.3	20 in x 61 ft	1200			10	12
208 V or 240 V QuickNet Standard Kit (with thermostat)								
QUICKNET-050-2	50	4.6	20 in x 30.5 ft		450	600	2.5	96
QUICKNET-060-2	60	5.6	20 in x 36.4 ft		540	720	3	80
QUICKNET-080-2	80	7.4	20 in x 48.9 ft		720	960	4	60
QUICKNET-100-2	100	9.3	20 in x 61 ft		900	1200	5	48
208 V or 240 V Extension Kit (without thermostat)								
QUICKNET-050X-2	50	4.6	20 in x 30.5 ft		450	600	2.5	96
QUICKNET-060X-2	60	5.6	20 in x 36.4 ft		540	720	3	80
QUICKNET-080X-2	80	7.4	20 in x 48.9 ft		720	960	4	60



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