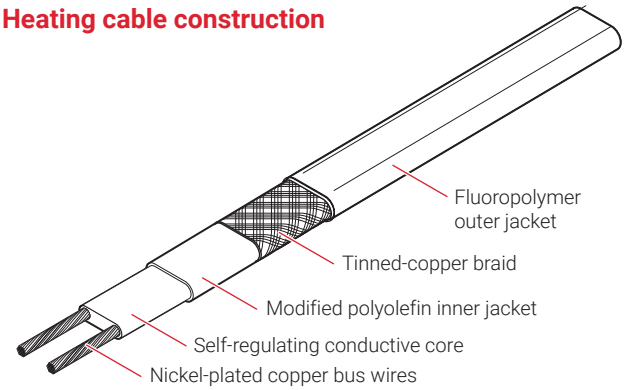
RAYSOL

CONNECT AND PROTECT

Self-regulating heating cable for heat loss replacement, floor heating, radiant space heating, and frost heave prevention applications

Heating cable construction



10 YEAR Product warranty

PRODUCT OVERVIEW

The nVent RAYCHEM RaySol system is designed for the following floor heating applications.

Heat-loss replacement — replaces heat in concrete floors built over garages, loading docks, arcades, and other cold spaces. The cable is typically attached to the bottom of concrete floors.

Comfort floor heating — warms concrete, tile, stone and marble floors in lobbies, foyers, bathrooms, kitchens and gymnasiums. The cable is typically embedded in a thick mortar bed or concrete.

Radiant space heating — provides primary space heating for rooms with concrete floors. The cable is typically embedded in concrete or a thick mortar bed.

Freezer frost heave prevention — prevents heaving in soils under freezers, refrigerated warehouses, and cold rooms. The cable is placed in conduit buried in soil or in the subflooring under the freezer floor.

Efficient and economical to operate — due to it's self-regulating design, a RaySol system will supply the right heat only where and when it is needed. The radiant heat provided by the RaySol heating cable allows you to feel comfortable at lower air temperatures, resulting in lower heating costs.

nVent representatives can provide design assistance and help you install the product that meets your goals for an efficient, cost-effective floor heating system.

CATALOG NUMBER

	RAYSOL-1	RAYSOL-2
VOLTAGE		
	120 V	208–277 V
MINIMUM BEND RADIUS		
	5/8 in (16 mm)	5/8 in (16 mm)

MAXIMUM CIRCUIT LENGTH IN FEET (METERS)

	Circuit breaker rating (A)	Cable operating voltage							
		120 V		208 V		240 V		277 V	
Installed in conduit (at 40°F start-up temperature)	15	180	(54.9)	305	(93.0)	335	(102.1)	375	(114.3)
	20	240	(73.2)	410	(125.0)	450	(137.2)	500	(152.4)
	30	240	(73.2)	410	(125.0)	450	(137.2)	500	(152.4)
	40	240	(73.2)	410	(125.0)	450	(137.2)	500	(152.4)
Surface mounted (at 40°F start-up temperature)	15	120	(36.6)	205	(62.5)	210	(64.0)	215	(65.5)
	20	160	(48.8)	275	(83.8)	285	(86.9)	290	(88.4)
	30	240	(73.2)	410	(125.0)	425	(129.5)	430	(131.1)
	40	240	(73.2)	410	(125.0)	425	(129.5)	430	(131.1)
Embedded in concrete or mortar (at 40°F start-up temperature)	15	80	(24.4)	135	(41.1)	140	(42.7)	145	(44.2)
	20	105	(32.0)	185	(56.4)	185	(56.4)	195	(59.4)
	30	160	(48.8)	275	(83.8)	280	(85.3)	290	(88.4)
	40	170	(51.8)	280	(85.3)	320	(97.5)	360	(109.7)

BUS WIRES

16 AWG nickel-plated copper

BRAID / OUTER JACKET

Tinned-copper braid with fluoropolymer outer jacket

DIMENSIONS

Maximum width	0.56 in (14 mm)
Maximum thickness	0.24 in (6 mm)

NOMINAL WEIGHT

92 lb/1000 ft (137 kg/1000 m)

CONNECTION KITS

nVent RAYCHEM RayClic-E, FTC-P, FTC-XC, and FTC-HST-PLUS connection kits must be used to connect and to terminate RaySol heating cables. Refer to the Freezer Frost Heave Prevention Design Guide (H58139) and the Heat Loss Replacement Design Guide (H58157) for proper connection kit selection.

APPROVALS

9J86 Radiant Heating Cable

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The RaySol system is UL Listed for heat loss replacement, comfort floor heating and radiant space heating applications.

The RaySol system is CSA Certified for comfort floor heating and radiant space heating applications. For heat loss replacement applications where the cable is attached to the bottom of the concrete floor, contact nVent for additional information.

GROUND-FAULT PROTECTION

To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed, and to comply with the requirements of nVent, agency certifications, and national electrical codes, ground-fault equipment protection must be used on each heating cable branch circuit. Arcing may not be stopped by conventional circuit protection. Many nVent RAYCHEM control and monitoring systems meet the ground-fault protection requirement.

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Our powerful portfolio of brands:

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