

Radiant electric cable **Floor Heat**



Electric Floor Heat



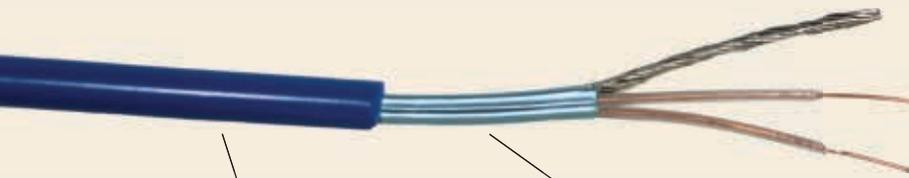
Introducing the highest quality, easiest to install in-floor heating solution available.

- ✓ Professional-grade quality components
- ✓ Effective beneath engineered wood, tile and stone
- ✓ Emits zero EMF (electromagnetic fields)
- ✓ Innovative strapping system speeds installation
- ✓ Approved for wet and dry locations
- ✓ Twenty-year limited warranty



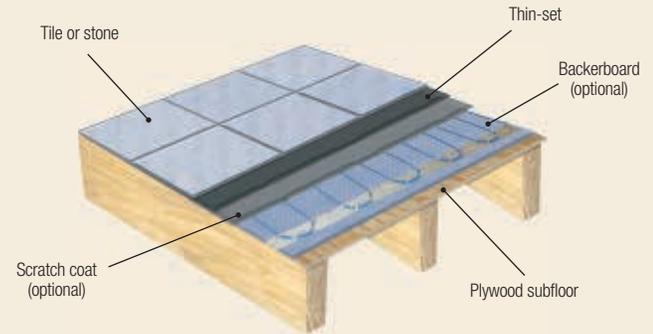
Technical Information

Cable Type	Twin heating conductors with ground
Conductor Insulation	Fluoropolymer
Outer Jacket Insulation	Rugged PVC jacket
Cable Diameter	1/8" to 1/6" (3.2mm to 4.2mm)
Heating Cable Length	From 40' (12.2 m) to 960' (292.6 m)
Minimum Bending Radius	1" (25.4mm)
Voltage Ratings	120V and 240V. (240V cables are approved for 208V applications, power output wattage is reduced by 25%.)
Output Rating (linear)	3 watts per linear ft, 9.9 watts per linear meter
Output Rating (area)	2" Spacing 18 watts/ft ² , 194 watts/m ² 3" Spacing 12 watts/ft ² , 129 watts/m ² 4" Spacing 9 watts/ft ² , 97 watts/m ²
Cold lead for Power Connection	2-wire 16 AWG plus ground braid; 10ft (3m) length

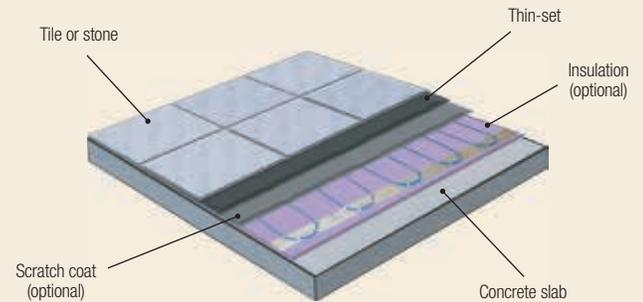


The flexible PVC outer jacket unrolls flat for a fast tangle-free installation.

The aluminum sheath completely eliminates electromagnetic fields.



Recommended cable spacing: *Three-inches when installed over wood sub-floor.*



Recommended cable spacing: *Two-inches when installed over concrete slab; three-inches when installed over insulated concrete slab.*



Cable box contents: *Each cable box includes a reel of cable, two nail plates, single-hole straps and installation manual. Fast-Set Strapping is sold separately.*



Selecting the cable size and proper spacing:

The King electric floor heating system contains two components: The heating cable and the innovative Fast-Set strapping system.

The amount of cable required is based on the square footage of the room and the cable spacing. For concrete slabs, two-inch spacing is recommended; if the slab is insulated use three-inch spacing. For plywood subfloors, three-inch spacing is standard. Four-inch spacing is recommended in warm climates where only a minor temperature rise is required.

After determining the required square footage required based on cable spacing, choose a cable kit which is under the total. This will allow for a small unheated boarder along the perimeter walls which will evenly space the cable to cover the entire floor.

The amount of Fast-Set strapping required is determined by the chart below below and is ordered separately.

120v

120V MODEL	LENGTH		HEATED AREA SPACING (SQ. FT.)			WATTS	AMPS	OHMS	FAST-SET STRAPPING LINEAR FT.
	FT.	M	2"	3"	4"				
FC12120	40	12.2	5	10	15	120	1.0	120.0	20 ft.
FC12180	60	18.3	10	15	20	180	1.5	80.0	20 ft.
FC12240	80	24.4	15	20	25	240	2.0	60.0	20 ft.
FC12300	100	30.5	18	25	35	300	2.5	48.0	20 ft.
FC12360	120	36.6	20	30	40	360	3.0	40.0	40 ft.
FC12480	160	48.8	25	40	55	480	4.0	30.0	40 ft.
FC12600	200	61.0	35	50	65	600	5.0	24.0	40 ft.
FC12720	240	73.2	40	60	80	720	6.0	20.0	60 ft.
FC12840	280	85.3	45	70	95	840	7.0	17.1	60 ft.
FC12960	320	97.5	55	80	105	960	8.0	15.0	60 ft.
FC121080	360	109.7	60	90	120	1080	9.0	13.3	80 ft.
FC121200	400	121.9	65	100	135	1200	10.0	12.0	80 ft.

240v

240V MODEL	LENGTH		HEATED AREA SPACING (SQ. FT.)			WATTS	AMPS	OHMS	FAST-SET STRAPPING LINER FT.
	FT.	M	2"	3"	4"				
FC24240	80	24.4	15	20	25	240	1.0	240.0	20 ft.
FC24360	120	36.6	20	30	40	360	1.5	160.0	40 ft.
FC24480	160	48.8	25	40	55	480	2.0	120.0	40 ft.
FC24600	200	61.0	35	50	65	600	2.5	96.0	40 ft.
FC24720	240	73.2	40	60	80	720	3.0	80.0	60 ft.
FC24840	280	85.3	45	70	95	840	3.5	68.6	60 ft.
FC24960	320	97.5	55	80	105	690	4.0	60.0	60 ft.
FC241080	360	109.7	60	90	120	1080	4.5	53.3	80 ft.
FC241200	400	121.9	65	100	135	1200	5.0	48.0	80 ft.
FC241320	440	134.1	75	110	145	1320	5.5	43.6	80 ft.
FC241440	480	146.3	80	120	160	1440	6.0	40.0	100 ft.
FC241680	560	170.7	95	140	190	1680	7.0	34.3	100 ft.
FC241920	640	195.1	105	160	210	1920	8.0	30.0	100 ft.
FC242160	720	219.5	120	180	240	2160	9.0	26.7	120 ft.
FC242400	800	243.8	135	200	265	2400	10.0	24.0	120 ft.
FC242880	960	292.6	160	240	320	2880	12.0	20.0	120 ft.

- **240V cables** are approved for 208V applications, power output (wattage) is reduced by 25%.
- **Cable box contents:** Reel of cable, two nail plates, single hole straps and the installation manual.
- **Fast-Set strapping is sold separately,** not included with cable.

Electric Floor Heat

Floor Heating Thermostats

MODEL	DESCRIPTION	VOLTS	AMPS	GFCI
OTH770-GA	Non Programmable, electronic	120/208/240	15	5 ma
TH114-AF-GA	Non-Programmable, electronic	120/208/240	15	5 ma
TH115-AF-GA	Programmable, 7 days, 4 settings/day, electronic	120/208/240	15	5 ma
TH115-AF-12VDC	Master unit, used with CT230-GA, Programmable 7days, 4 settings/day, electronic	120/208/240	.075	5 ma
CT230-GA	Slave module, used with TH115-AF-12VDC	120/208/240	15	5 ma

King electronic thermostats are designed to achieve maximum comfort from King cable heating systems. Common feature to all models include:

- ✓ Three choices of temperature control: ambient air temperature, floor temperature or ambient air with floor limits.
- ✓ Advanced microprocessor optimizes performance by proportionally controlling the wattage to the cable saving energy and maintaining very accurate temperature control within $\pm 1^{\circ}\text{F}$, 0.5°C .
- ✓ Designed for maximum safety, they all include a ground-fault circuit interrupter (GFCI).
- ✓ A single touch activates the backlight display indicating the current set point.
- ✓ They are multi-volt and can be installed on 120, 208, and 240 volt circuits.



TH115

- Programmable
- 7 day, 4 settings
- Automatic or manual modes
- White
- On/Standby switch
- Range: 5C(40F) to 40C (86F)
- Displays temp in C or F
- Vacation mode
- GFCI indicator
- Includes floor sensor



CT230 slave

The CT230 slave unit is specifically designed for large floor heating applications where the load exceeds 15 amps. Each unit powers a section of the floor and are equipped with GFCI protection. These slave units are controlled by the master thermostat (TH115-AF-12VDC) and can be linked together to provide single control of large heated floor. No display or settings dial, all settings and programs are done the by master thermostat.



OTH770

- Non programmable
- White
- On/Standby switch
- Range: 5C(40F) to 40C (86F)
- Displays temp in C or F
- Vacation mode
- GFCI indicator
- Includes floor sensor

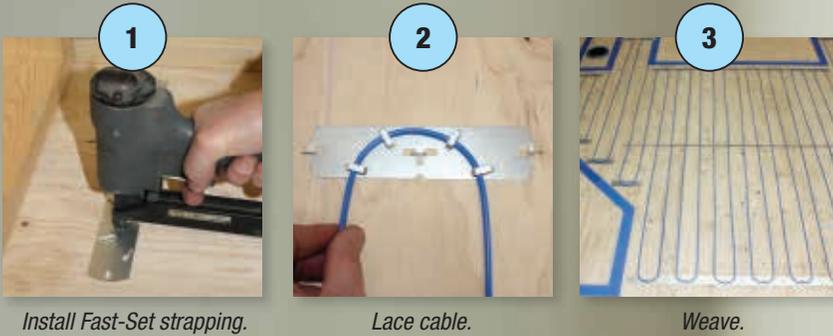


TH114

- Non programmable
- White
- On/Standby switch
- Range: 5C/40F to 30C/86F
- Displays temp in C or F
- Vacation mode
- GFCI indicator
- Includes floor sensor



Easy installation: A King exclusive.



1 Install Fast-Set strapping.

2 Lace cable.

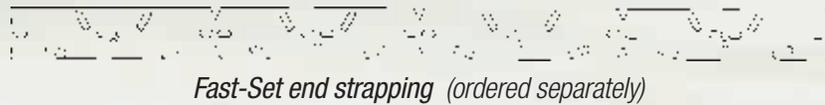
3 Weave.

MODEL	DESCRIPTION
FCS2	2" spacing, 20 linear ft of floor strapping
FCS3	3" spacing, 20 linear ft of floor strapping
FCS4	4" spacing, 20 linear ft of floor strapping

ACCESSORIES	
FCS11	Cable monitor
FCS13	Cable repair kit
AC112-01/U	Replacement floor sensor

Fast-Set Strapping System

The Fast-Set strapping system makes easy work of installing the floor heating cable, resulting in a reduction of the overall system cost. Fast-Set strapping is made from 26 gauge (.020" thickness) galvanized steel with precision formed tabs that hold the cable down during the installation process. Lacing the cable is fast and easy because the tabs allow the installer to maintain tension on the cable as it goes back and forth through the end straps. This ensures that the cable won't float up when self-leveling compound is being applied. Mounting holes are evenly spaced on 6" centers to facilitate quick and secure fastening to the floor.



Fast-Set end strapping (ordered separately)



Fast-Set center strapping (ordered separately)

The strapping is not rolled up in a coil like other brands, it is instead boxed flat in 24 inch sections and therefore always lays flat on the floor. Each box contains 7 end straps and 3 center straps for a total of 20 ft and is ordered separately.

Important: use the King Cable Monitor during installation to verify the cable is not accidentally damaged any time during the installation process.





King: a technology leader.

Since 1958 King Electrical Manufacturing Company has been a leader in the heating industry, with several innovative patents. In this age of corporate conglomeration, big business, and a global economy, King is still proudly family-owned.

In our over 50 years of business we have seen exciting changes in the comfort and convenience of heating products. Technology has improved to create exciting new possibilities for innovations in heating systems. King continues to emphasize research and development, product quality, and genuine pride to ensure that our customers enjoy the best heating solutions possible.

Residential, commercial or industrial electric heat: at King we anticipate your needs and provide you with the best products and solutions!



Designed and
manufactured in the
United States.