



# ProLine Radiant FoilHeat<sup>™</sup> Floor Warming System

FoilHeat<sup>™</sup> is an ultra thin electric radiant floor heating system primarily for use under carpet, laminate, engineered wood and other floating floors. Some benefits of using FoilHeat include ease of installation, rapid response time, and uniform heating of floor surfaces. The mats consist of thin fluoropolymer insulated heating cable that is sandwiched between two layers of specially reinforced aluminum foil.

#### **Heated Carpet and Laminate Flooring**

ProLine Radiant's FoilHeat cut-and-turn floor heating mat is a unique electric radiant floor heating system that is designed for use under carpet, laminate, engineered wood and other floating floors. The FoilHeat mats can be cut and shaped on site to meet the specific requirements of the project (see photo below). The efficient floor heating system is ideal for heating any size or shape room, from basements and bedrooms to commercial offices, and more.

#### Specifications

Power	Available in 120 V and 240 V
Output rating	12 W/ft. <sup>2</sup>
Thickness	¼ inch (3 mm)
Cable spacing	2 inches (50 mm)
Cold lead	10 feet (3.0 meters)
Connections	2 conductor with ground
Inner insulation	Advanced flouropolymers



FoilHeat mats can be easily cut on site. (Depending on your heating requirement, FoilHeat is available in 120 and 240 volts at 12 watts per square feet.)

#### Features and Benefits

- Simple "roll out" installation
- · Installs between the insulation pad and the floor
- There is virtually no floor buildup because of the grounded, flat aluminum
- No thin-set is required
- The aluminum construction efficiently distributes heat quickly and evenly
- System is completely grounded and safe
- Watertight (Heated carpet floors can be steam cleaned.)
- UL approved
- 12 watts per square foot (41 BTUs per square foot)
- 5-year manufacturer warranty
- NOTE: Any overlay must not exceed an R-value of 1.0.

# FOILHEAT ORDERING INFORMATION

All FoilHeat Mats are 20-inches wide

## 120 V Sizing Guide (12 watts / sq. ft.)

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Heated Area (Sq. ft.)	Part Number	Length (feet)	Width (inches)	Wattage (W)	Amps (A)
10	LM1010	6	20	120	1.0
25	LM1025	15	20	300	2.5
50	LM1050	30	20	600	5.0
70	LM1070	42	20	840	7.0

# 240 V Sizing Guide (12 watts / sq.ft.)

Heated Area (Sq. ft.)	Part Number	Length (feet)	Width (inches)	Wattage (W)	Amps (A)
25	LM2025	15	20	300	1.25
50	LM2050	30	20	600	2.50
95	LM2095	57	20	1140	4.75
140	LM2140	84	20	1680	7.00

\* For other sizes, please contact ProLine.





# **Interior Radiant Heat Controls**

The ProLine Radiant electronic thermostats are specifically designed to control electric radiant floor heating systems for maximum comfort and minimum power consumption. Developed for the modern home, the programmable thermostat features a large back-lit display and simple user interface. The system temperature is controlled by an external or built-in floor sensor.

Each thermostat includes an integrated Ground Fault Circuit Interrupter (GFCI, Class A). The thermostat is an electronic on/off thermostat for controlling the temperature using a sensor placed externally. The heat output is switched on and off with a difference of only  $0.7^{\circ}F(0.4^{\circ}C)$ .

#### Adjustable Temperature Offset

The setpoint can be adjusted to match the actual floor temperature. This ensures a 100 percent accurate measurement and control of your underfloor heating system.

The thermostat can be configured for control of the floor temperature and regulator without a sensor. The advanced thermostat is compatible with existing floor sensors by means of a temperature setting, making it the best thermostat for renovation purposes.

#### **Temperature Scale and Limitation**

#### **General Thermostat Specifications**

On/Off control, easy-to-read digital dis- play, 7-day programmable
120/240 V ±15%, 50/60 Hz
15A maximum (resistive load)
1.800 W at 120 VAC / 3.600 W at 240 VAC
40 to 104°F (5 to 40°C)
32 to 104°F (0 to 40°C)
2-wire, 10-foot lead wire
NTC (12 KΩ) 10 ft. (3 meters)
Class A (5 mA trip level)
0.7°F (0.4°C)
PWM / PI
NEMA 2 (IP21)
4.8, 3.0, 1.0 inch (123, 75, 25 mm)

The floor temperature scale can be adjusted within the

temperature range of +41°+104°F. The thermostat also features a maximum temperature function to protect wood floors and minimum temperature functions for comfort. Designed for ease of use and superior performance, the thermostat and GFCI are dual voltage models suitable for 120/240V, 50/60 Hz power supplies.

# FLOOR HEATING CONTROLS AND ACCESSORIES ORDERING INFORMATION

#### **Floor Heating Thermostats**

Item Code	Description
PL-dual-99	Programmable thermostat with air sensor (and floor temperature limiter)
PL-dual-99T	Programmable touch screen thermostat
PL-dual-99TW	Wi-Fi enabled touch screen thermostat
PL-4991	Non-programmable thermostat with floor sensor
PL-4000	Power module with GFCI

#### Floor Heating Accessories

Item Code	Description
PL-RKTC	Repair kit floor (includes crimp connectors, repair wire, heat shrink tubes)
PL-RKFH	Repair kit foil (includes crimp connectors, repair wire, heat shrink tubes)
PL-Buzzer	Little Buzzer - continuity alarm
TC-Strap	Plastic cable strapping, 1-foot increments
PL-Sensor	Replacement floor sensor for thermostat

# WiFi Touch Screen Programmable Thermostat (PL-dual-99TW)

The touch thermostat for electric floor heating features a sleek design and intuitive control for easy installation. This advanced programmable thermostat\* delivers optimal comfort and minimum energy consumption. Includes floor sensor with 10-foot (3-meter) cable.

- Universal compatibility with existing floor heating sensors
- New 'Easy Scheduling' method and simple on-the-fly changes
- 3.5-inch color screen with easy interactive touch control
- Track power consumption and easily save to a PC
- Thermostat settings can be exported to web page for support
- Suitable for tile, stone, laminate, concrete and wooden floors
- Power Supply: 120-240 VAC 50/60 Hz; 15A maximum resistive load
- Class A (5mA trip level) GFCI

## LED WiFi Programmable Thermostat (PL-LED-99W)

The programmable thermostat with dual sensors is an "all-in-one" programmable thermostat for electric underfloor heating control where optimal comfort temperature and minimum energy consumption is required.

- Bluetooth<sup>®</sup>, WiFi and Cloud connected
- · Voice control compatible with Amazon Alexa and with Google Assistant-enabled devices
- Easy and intuitive setup by a wizard
- Capacitive touch allows direct control of thermostat
- Simple on-thermostat control. Adjust set-point, change operation mode, turn on/off
- · Display readouts of temperature, set point, time, heating status, errors, and WiFi status
- Regionalization (language, unit, time, and date)
- Allows up to 10 different schedules and overrides (manual mode, hold for X hours, vacation mode, frost protection, and eco mode)
- LED display. Light intensity is increased during use, and dimmed or turned off when not being used.
- Adaptive function, open window function, application type, sensor adaption, user lock, and calibration
- Fast, secure connection and operation, using TLS 1.3 encrypted data
- GFCI protected (with test button)

### PRO Digital/Non-programmable Thermostat with Floor Sensor (PL-4991)

Optimal comfort in controlling electrical underfloor heating. Built on efficiency, intuitive operation and with a stylish design. Includes floor sensor with 10-foot (3-meter) cable.

- Simple user interface and thoughtful installation design / Easy to use
- Screw terminals for safe and easy installation
- Multi voltage: 120-240 VAC (includes 208 VAC)
- Output relay: 15A
- Large back-lit display for easy reading
- Class A GFCI: suitable for wet room installation

#### PRO Power Module Relay (PL-4000)

For large floor heating applications, the Power Module Relay can be extended with additional Power Relay Modules. The PRO Relay module features a built-in Class A GFCI and increases output by 15 amps per module. Output can thus be increased by 15A per module.

- Easy to use
- Screw terminals for safe and easy installation
- For use only with the CT Programmable Thermostat
- Multi voltage: 120-240 VAC (includes 208 VAC)
- Output relay: 15A
- Class A GFCI: suitable for wet room installation







