

ThermoFilm® for Laminate, Carpet, and Vinyl

PRODUCT DESCRIPTION

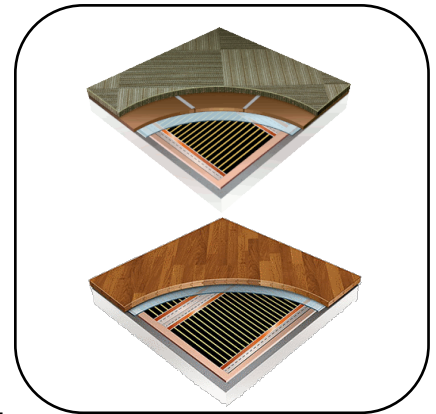
ThermoFilm® is a polymer film heating mat specifically designed for laminate, carpet and vinyl floors. It is a powerful, thin and uniform radiant floor heating system installed over commonly found underlayments such as Cerazorb® synthetic cork and Natura Elite™ premium underlayment.

FEATURES AND BENEFITS

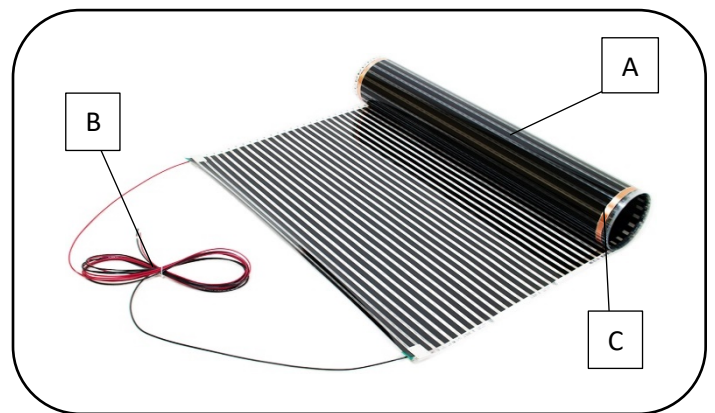
- Provides for a heated floor installation without cement.
- Made with flexible film heating elements that provide 11 Watts per square foot of heat capacity uniformly distributed under the floor.
- Available in length increments of 1 foot which allows for custom fitting your heating area.
- Can be installed with peace of mind directly under laminate and wood floors.
- Combines radiant floor heating with laminate flooring underlayments (purchased separately) that provide:
 - Subfloor thermal insulation (R value depends on the underlayment selected).
 - Laminate floor noise reduction (IIC and FIIC ratings depend on the underlayment selected).
 - Moisture resistance (depending on the underlayment selected).
- Factory-attached 15' lead wires on only one end of the underlayment pad facilitates electrical connections.
- Made from a special polymer which has electrical characteristics.

APPLICATIONS

- Laminate
- Carpet
- Vinyl



CONSTRUCTION



A. Heating Film

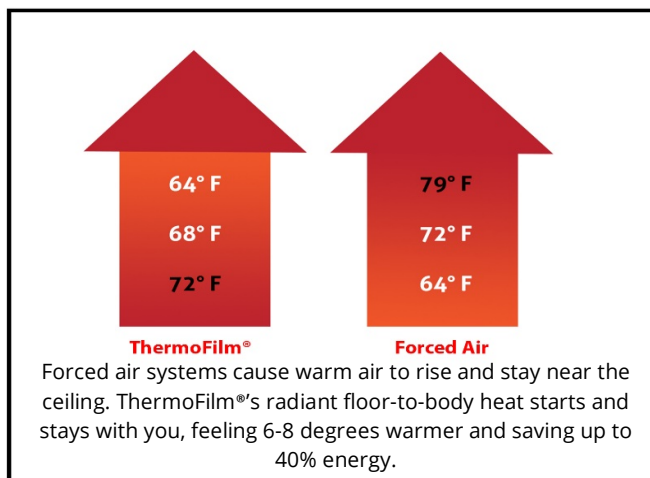
Thin and flexible film with black heating element. Generates heat by precise printing on carbon.

B. Lead Wires

15' lead wire that connects to energy source such as electrical box.

C. Copper Busses

Copper foil busses placed under film help conduct heat to each side of mat.



THERMOFILM® HEATING MATS ARE AVAILABLE IN 120 AND 240 VOLTS IN THESE SIZES:

*Mats that are 18 inches wide (in 120 and 240 volts) vary in length from 2 feet to 30 feet.

*Mats that are 36 inches wide (in 120 and 240 volts) vary in length from 2 feet to 60 feet.

Find your mat's SKU according to width, voltage, and length.

Formula: Width "TFLM" Voltage - Length in Feet

Example

Mat Width: 18 in.
 Mat Length: 2 ft.
 Mat Voltage: 120 Volts
 SKU : 18TFLM120-2

Volts	Model	Width	Length
120	18TFLM120-2 - 18TFLM120-30	18"	2' – 30'
120	36TFLM120-2 - 36TFLM120-60	36"	2' – 60'
240	18TFLM240-2 - 36TFLM240-30	18"	2' – 30'
240	18TFLM240-2 - 36TFLM240-60	36"	2' – 60'

WARRANTY & MAINTENANCE

When installed according to the installation Manual and proper testing has been performed throughout, the system requires no maintenance for the duration of its warrantied life.

The ThermoSoft® ThermoFilm® mat is warrantied for 10 years against manufacturer's defects. See www.ThermoSoft.com for full warranty details.

TECHNICAL SUPPORT

ThermoSoft® is available at (800)308-8057.

For quotes, layouts and specific technical information, contact us at:

ThermoSoft International Corporation
 701 Corporate Woods Parkway, Vernon Hills, IL 60061
 (800)308-8057
 Support@ThermoSoft.com
www.ThermoSoft.com

SEE ALSO

- ThermoFloor® 4-in-1 Fabric Heating Underlayment with Thermal Cut Off for Laminate, Carpet and Vinyl
- WarmStep® Fabric Heating Mat with Thermal Cut Off for Laminate, Vinyl and Engineered Wood Floors



Scan here to go to the product page



CONTROLS – THERMOSTATS

Code	Description
UWG4-4999	OJ Wi-Fi Touch Screen Thermostat 15A Load, 5mA GFCI, 15' Floor Sensor (120V or 240V Programmable)
UDG4-4999	OJ Thermostat 15A Load, 5mA GFCI, 15' Floor Sensor (120V or 240V Programmable with Touch Screen)
UDG-4999	OJ Thermostat 15A Load, 5mA GFCI, 10' Floor Sensor (120V or 240V Programmable w/Air & Floor Limit)
TH115-AF-GA/U	OJ Thermostat 15A Load, 5mA GFCI, 15' Floor Sensor (120V or 240V Manual)
TH114-AF-GA/U	Aube Thermostat 15A Load, 5mA GFCI, 15' Floor Sensor (120V or 240V Manual)
MTC-2991UFH	OJ Thermostat 15A Load, 10' Floor Sensor (120V Manual)
MTC-1991UFH	OJ Thermostat 15A Load, 10' Floor Sensor (240V Manual)
USG-4000	OJ Power Module 120V or 240V Power Relay with 5mA GFCI. 15A Max Load. For Use ONLY with OJ Electronics' UDG-4999 Thermostats (120V or 240V).
ETF-110/99C	OJ Backup 15' Floor Sensor for OJ Thermostats. Redundant sensor recommended. Install backup sensors one at a time.
AC112-01/U	Aube Backup 15' Floor Sensor for Aube Thermostats. Redundant sensor recommended. Install backup sensors one at a time.

ACCESSORIES

ThermoSoft® has a complete line of accessories specifically designed for use with ThermoFilm® mats. Use only ThermoSoft ThermoFilm® accessories to ensure the performance of the system.

Code	Description
CR5MM-2448	Cerazorb 24" X 48" X 3/16" Synthetic Cork Underlayment for Tile and Stone
FLX-MB100	Moisture Barrier Top Rated 6 Mil (.006") Low Density Polyethylene Film. Size: 2.5 ft x 40 ft (100 S.F.)
TH-180408X5	Protect-a-Heat™ Fiberboard Tempered MDF Hardboard Underlayment. Size: 24" X 48" X 1/8" (40 S.F.)
DT-105	Easy Tear TacTape 1" Wide, 10 Yards Long Duct Tape
DT-17860	Easy Tear Duct Tape 1-7/8" Wide, 60 Yards Long Tape
INSTALRM	InstAlarm Monitor for Short or Open Circuits During Installation. Available in Following Kits: TT Deluxe Install Kit (IK-TAMKGS), TT Safe Install Kit (IK-TAM), TF Install Toolkit (IK-DAMK), TT Basic Install Toolkit (IK-TA)
FLX-BLOCK	Wago Connector 222-415 Terminal Blocks for Multiple Floor Heating Mat Connections
MULTIMTR	Digital Multimeter for Monitoring Electrical Resistance During Installation. Available in Following Kits: TT Deluxe Install Kit (IK-TAMKGS), TT Safe Install Kit (IK-TAM), TF Install Toolkit (IK-DAMK)
KNPD-318	Ultra-Light Kneepads for Preventing Mat Damage. Available in Following Kits: TT Deluxe Install Kit (IK-TAMKGS), TF Install Toolkit (IK-DAMK)
ETF-110/99C	OJ Backup Floor Sensor 15' for OJ Thermostats
AC112-01/U	Aube Backup Floor Sensor 15' for Aube Thermostats
IUP	Non-Heated Underlayment Padding for Fill-In Areas – Multiple Sizes Available
EK-X	ThermoFilm® Lead Wire Extension Kits Available



HEATING MAT SELECTION GUIDE

1. Select Mat Voltage and Length

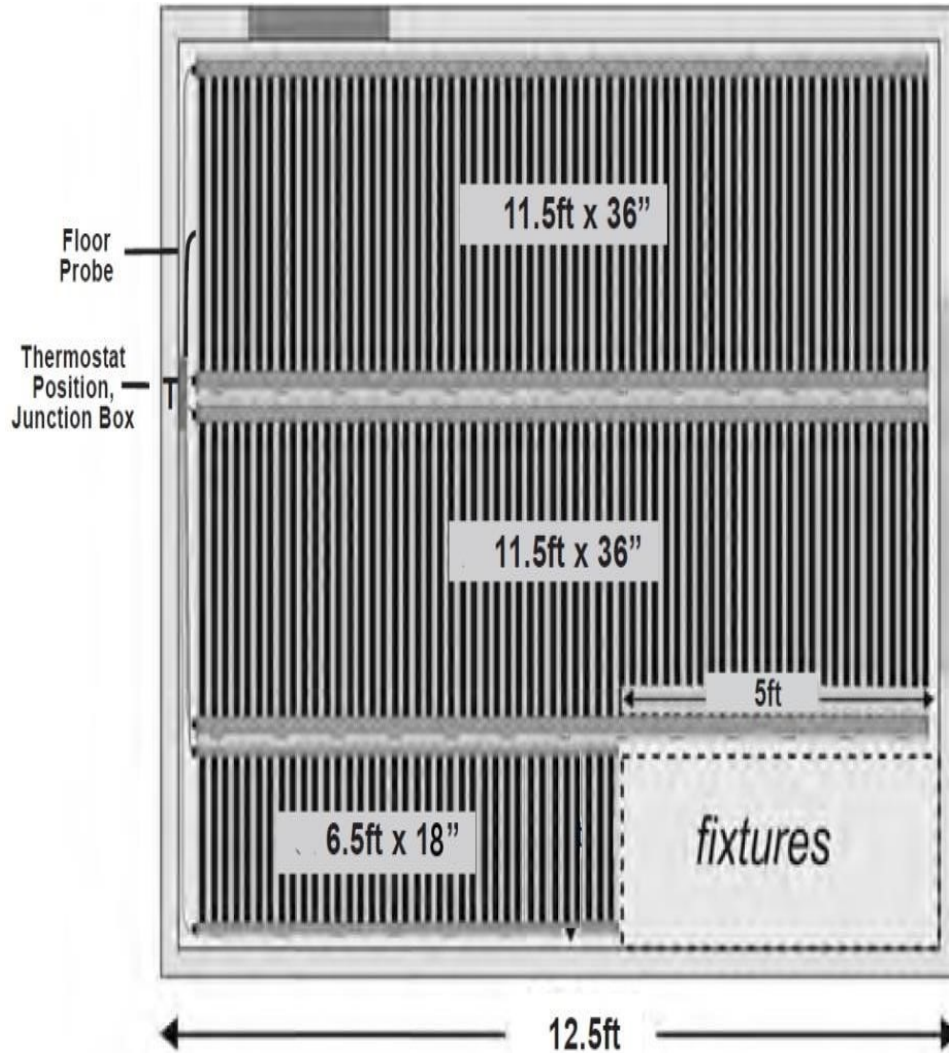
Using the model chart, determine mat voltage and size.

2. Calculate Heating Mat Quantity

According to the heated space's layout and dimensions, calculate how many mats are needed to properly fit the area. Remember to subtract space of items fixed on the ground such as toilets, dressers and appliances.

3. Determine Circuits/Circuit Protection

Refer to User Manual for specifics and directions. Always consult a licensed electrician.



To calculate the mats needed:

- Calculate room width
- Divide by chosen mat width (18 in. or 36 in.). This figure will determine how many rolls you will need.
- To find length of each mat, measure from thermostat's wall to where floor heat ends (up to fixtures, couches, or opposite wall).

Example:

- Bedroom Width: 8 ft. total
- Mat width: 36 in. (3 ft.) total
- $8/3=2.6$ (this means 2 mats at 36 in. will fit)
- Remainder of room (.6) comes out to 18 in., so use an 18 in. mat to supplement the rest of space.
- Roll out to fixtures and walls to determine each mat's individual length (thermostat wall to opposite wall is 11.5 feet, so chosen mat length is 11 ft. for 36 in. mats; remainder of room is 6.5 ft up to unheated fixtures, so chosen mat length is 6 ft. for 18 in. mat)

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- 2 x 36 in. mats – 11 ft. long (36TFLM120-11)
- 1 x 18 in. mat – 6 ft. long (18TFLM120-6)

For installation:

- Lay mats side by side along width of room
- Unroll up to each obstacle



IMPORTANT NOTES ON CABLE SELECTION

- Do not tape over or overlap black heated area of mats or heat while rolled up.
- If your square footage is larger than available mat sizes, combine smaller mats to achieve full coverage.
- Should ThermoFilm® require to be shortened, this can easily be done by cutting along the dotted line using a sharp knife and straight edge or scissors and insulating the ends of the copper strips using the insulating green polyester tape discs or 0.75"-1.0" wide electrical tape. Care should be taken not to cut close to the edge of the black heated area. Repeat the procedure for remaining elements, butting adjacent elements edge to edge.
- Moisture barrier is required between wood/laminate flooring and ThermoFilm® (a second moisture barrier is required for concrete subfloors if thermal insulation barrier is not waterproof).
- Always remember to cover the total floor area with insulation (even unheated areas).
- Use of plain (not foil-faced) underlayment padding, minimum thickness ¼" with a minimum thermal resistance value of .97 ft².hr.°F/BTU is recommended (R=1).
- ThermoFilm® must only be installed indoors and must not be installed in "hazardous" or "wet" areas, as defined in the National Electric Code.
- For more information, call (800)308-8057 or visit www.ThermoSoft.com.

