

PTC Heating Film

Far-infrared radiant heating · Self-regulating PTC technology

SELF-REGULATING

20-YEAR WARRANTY

PRODUCT OVERVIEW

PTC Film is an electric, energy-efficient heating solution that uses infrared technology to warm a space by installing a thin heating film beneath the floor. It emits far-infrared radiation to directly warm objects and people, rather than the air.

The PTC heating layer is designed to respond to temperature: as temperature rises, electrical resistance increases, reducing current flow and helping lower the risk of local overheating.

With a 20-year warranty and 50-year product lifespan, PTC Film is designed for reliable residential and commercial heating applications where added temperature response and safety are priorities.

TECHNICAL SPECIFICATIONS

Heating technology	Far-infrared radiation
Self-regulation	PTC carbon matrix
Voltage	110V / 220V AC
Power density	30-400 W/m²
IR wavelength	3-1,000 µm
Max. heat resistance	70°C
Product lifespan	50 years
Warranty	20 years

LAYER STRUCTURE

PTC Film (outer)	Protective outer coating
Copper busbar	Primary conductor
Silver busbar	Current distribution
Carbon + PTC layer	Self-regulating heating element
PET Film (base)	Base substrate / insulation

MODEL RANGE

Standard roll length: 100 m · Standard film thickness: 0.338 mm

Model	Width	Thickness	Roll length	Weight	Wattage Max.	Heat limit
HV-PTC-305	500 mm	0.338 mm	100 m	25.5 kg	220 W/m²	70°C
HV-PTC-308	800 mm	0.338 mm	100 m	39.5 kg	220 W/m²	70°C
HV-PTC-310	1000 mm	0.338 mm	100 m	48.7 kg	220 W/m²	70°C

KEY BENEFITS

01 Self-regulating temperature response	02 Reduced local overheating risk	03 Energy-efficient far-infrared heating
04 Thin, space-saving film construction	05 Easy installation under floor, wall, ceiling	06 Low maintenance and silent operation

COMPATIBLE APPLICATIONS & MATERIALS

Underfloor	Wall	Ceiling	Laminate	Engineered wood	Vinyl	SPC	Tile	Concrete
------------	------	---------	----------	-----------------	-------	-----	------	----------

SMART TEMPERATURE RESPONSE

20-Year Warranty

Backed by a 50-year product lifespan - engineered for safer, responsive radiant heating.

SELF-REGULATING

50-year product lifespan