

Heating is
an expression
of love for
your family



Heating solutions built on warmth, trust, and safety
— because heating is an expression of love for your family.

IR-Technika's Hi Heat is more than just electric floor heating. It delivers safe and comforting warmth that your whole family can enjoy with peace of mind.

Our Promise



Warmth

Hi Heat evenly warms every corner of your home, delivering cozy comfort from head to toe.

It brings the most natural and healthy warmth to the spaces where your loved ones gather.



Trust & Safety

Safety is the core of electric floor heating.

The world's first commercialized integrated grounding heating film (GMC) features a built-in grounding system that effectively blocks leakage current and electromagnetic fields (EMF).

Designed in compliance with international safety standards (IEC 60335) and protected by a Korean patent, it ensures safe and reliable use.



Innovative Technology

We have independently developed EMF (Electromagnetic Field) reduction technology, securing patents in Korea, the United States, China, Russia, and 18 European countries.

Today, our GMC product has already been commercialized, and a new EMF-reducing product will be launched soon.

Global Expertise & Customized Design Solutions



Export Experience in 24 Countries

With extensive experience in diverse climates and environments, we understand customer needs and deliver tailored solutions worldwide.



Customized Design Solutions

We propose the most suitable heating systems for residential, commercial, and industrial applications. With extensive experience in customized on-site production, we respond flexibly to even the most specific customer requirements.

The Value Hi Heat Delivers

A Warm Space for Your Family

The warmth rising from the floor is more than just heat — it is an expression of care for your family.

Safety & Trust

With years of experience and proven technology, we promise heating solutions that everyone can use with complete peace of mind.

Global Quality

With quality and service recognized across diverse environments worldwide, we make your space truly exceptional.

With Hi Heat, heating is no longer just a choice — it is an expression of love for your family.

Experience all the values of warmth, safety, and trust with Hi Heat.



GMC-SERIES

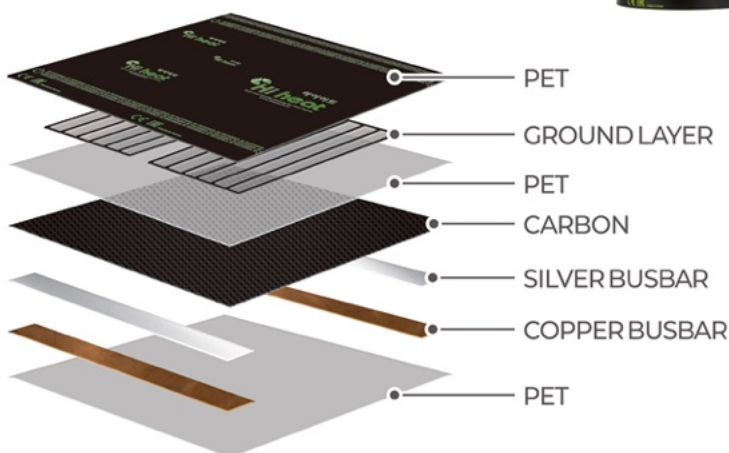
Grounding-Integrated Heating Film

Still using heating films without grounding?
The essence of heating is safety.

The GMC Series is the world's first integrated grounding heating film, taking the safety of electric heating to the next level.

As the first commercialized heating film with built-in grounding, the GMC Series is an innovative product powered by IR-Technika's patented technology.

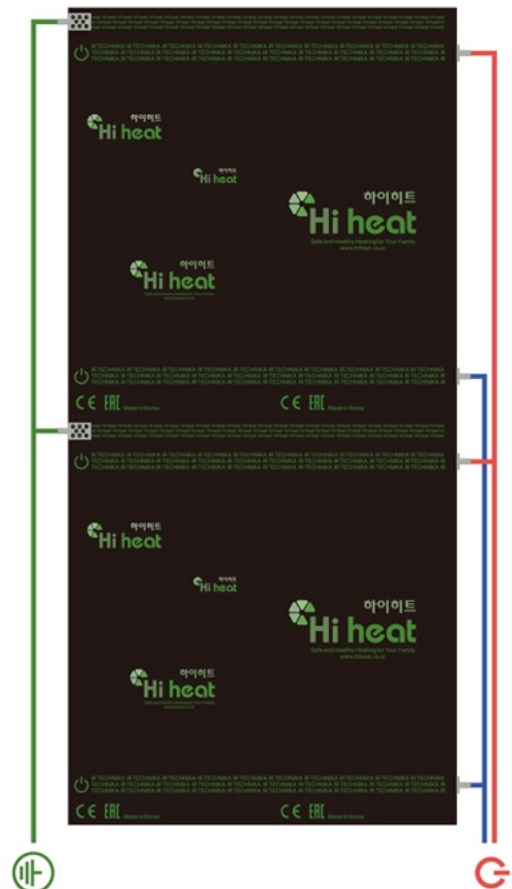
With the grounding system embedded inside, it effectively blocks leakage current and electromagnetic fields (EMF) without the need for a separate grounding sheet — making installation simple and ensuring outstanding safety.



Specifications

Model	Thick ness (mm)	Length (m)	Width (mm)	Output (W/M)
GMC	505	75	500	110, 75, 60
	508		800	180, 120, 100
	510		1,000	220, 150, 120

Connection Diagram



Key Features

01. Integrated Grounding Structure

Unlike conventional heating films that require external grounding, GMC integrates the grounding function directly into the film, ensuring both installation convenience and safety.

02. Enhanced EMF Shielding Performance

Effectively blocks low-frequency electromagnetic fields (ELF-EMF) generated by electric currents, maintaining a comfortable indoor environment.

03. Anti-Static and Leakage Current Safety Design

The shield structure reduces static electricity and safely discharges any leakage current through grounding.

04. Registered Korean Patent

GMC technology has been granted a Korean patent (Patent No. 10-2691856) and represents IR-Technika's commitment to safety.



Why GMC?

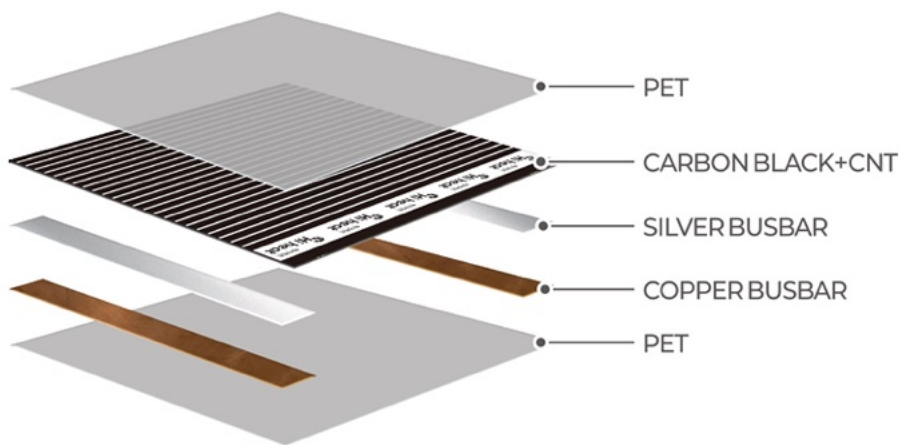
Technology that goes beyond the limits of conventional heating films. A floor heating solution that customers can trust with peace of mind. With the GMC Integrated Grounding Heating Film, experience both warmth and safety together. For your family's floor heating, the new standard in heating films is Hi Heat GMC.

M&T-SERIES

M&T Series Heating Film

A customized electric floor heating solution that combines practicality and safety.

The M&T Series is a versatile heating film designed to fit various spaces and applications. With a dual-layer PET film structure, premium materials, and Hi Heat's unique conductive busbar design, it delivers outstanding insulation, durability, and electrical safety.



Specifications

Model		Thick ness (mm)	Length (m)	Width (mm)	Output (W/M)
M(T)	305	0.338	100	500	110, 75, 60
	308			800	180, 120, 100
	310			1,000	220, 150, 120



Key Features

01.

Customized Design Solutions

- Available in various widths: 50cm, 80cm, 100cm
- Custom production supported up to 120cm

02.

Safe Structure

- Dual-layer PET film for enhanced insulation and durability
- Silver and Copper busbars for improved current stability
- Carbon Black and CNT (Carbon Nanotube) technology for greater electrical stability and extended lifespan

03.

Series Characteristics

- **M Series**
Uses PET film with insulating chips, milky-white (haze) appearance, enhanced electrical safety
- **T Series**
Uses optical-grade PET film, transparent design, economical price

Safety & Reliability



Wide busbars maximize current stability and safety



CNT technology prevents local overheating and extends product lifespan

Recommended Applications



Residential spaces (apartments, houses, studios, etc.)



Commercial spaces (offices, shops, accommodations, etc.)



Flexible adaptation to various floor structures and environments



With the M&T Series heating film, experience the value of practicality, safety, and customized heating.

PTC-SERIES

PTC Heating Film

A next-generation floor heating solution with self-temperature control and enhanced safety.

The PTC Series is a premium heating film applying PTC (Positive Temperature Coefficient) characteristics. It automatically adjusts power consumption according to temperature, preventing overheating while maximizing energy efficiency and safety.



Key Features

01.

PTC Function

- As the temperature rises, resistance increases and power consumption automatically decreases
- Prevents local overheating and ensures safety even during long-term continuous use

02.

Automatic Power Control

- The heating film automatically adjusts its power output according to indoor temperature changes.

03.

Excellent Durability & Reliability

- High-quality PET film, silver & copper busbars, Carbon Black, and CNT (Carbon Nanotube) technology
- Maintains stable performance even after long-term use

04.

Wide Range of Applications

- Suitable for residential, commercial, and industrial environments

Safety & Reliability



PTC characteristics minimize the risk of overheating, ensuring safe use even under flooring materials or carpets



CNT technology prevents local overheating and extends product lifespan

Recommended Applications



Residential spaces
(apartments, houses, studios, etc.)



Commercial spaces
(offices, shops, accommodations, etc.)



Safe for use under flooring, carpets, and in diverse environments

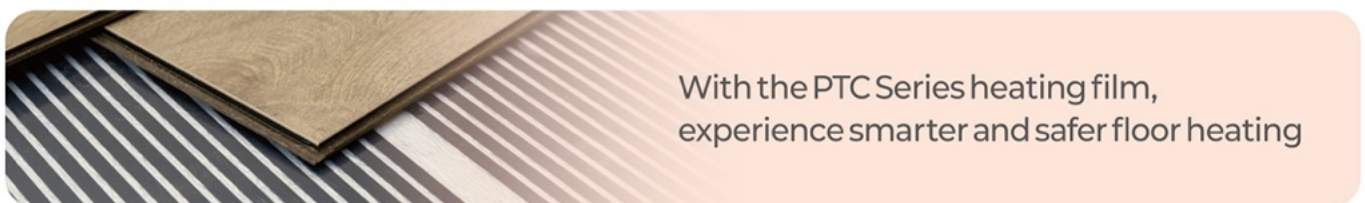
Specifications

PM: PTC & Milky White (Haze) / PT: PTC & Transparent

Model		Thickness (mm)	Length (m)	Width (mm)	Output (W/M)	PTC Rate
PM (PT)	305	0.338	100	500	110 15°C-120w/ 60°C-95w	20%
	308			800	180 15°C-180w/ 60°C-150w	15%
	310			1,000	220 15°C-220w/ 60°C-195w	10%

Differences from M&T-Series

	M&T-Series	PTC-Series
Power Consumption	Continuous fixed power consumption	Automatically decreases as temperature rises
Safety	Risk of overheating possible	Built-in local overheating prevention
Application	Standard floor heating use only	Safe for use even under carpets or enclosed spaces



With the PTC Series heating film, experience smarter and safer floor heating

High-Temperature Special Heating Film

EH-SERIES

TH-SERIES



Powerful heating for small spaces — the optimal solution for special environments.

The EH-Series (EEA Laminated) and TH-Series (Teflon Laminated) deliver significantly higher heat resistance and output compared to conventional heating films, making them ideal for applications such as dry saunas, snow-melting mats, and auxiliary heaters.

- EEA (Ethylene-Ethyl Acrylate) lamination
 - Heat resistance up to approx. 80°C
 - Same structure as the M(T)-Series, but with EEA adhesive
 - High-power design: 400W per m²
 - EHM: Milky white (haze), EHT: Transparent
 - Applications: small dry saunas, snow-melting mats, auxiliary heating devices
- Teflon (PTFE) Laminated
 - Extremely high heat resistance (over 200°C due to Teflon properties)
 - Ultra-high power: 800W per m²
 - Applications: extreme temperature environments, industrial use, special auxiliary heating, snow-melting

Key Characteristics and Differences by Material

Materials	Heat Resistance	Heat Resistance
EVA (Ethylene-Vinyl Acetate)	~ 60~70°C	Widely used in general heating film lamination. Excellent flexibility and adhesion. Suitable for low-cost floor heating
PE (Polyethylene)	~ 60~80°C	Excellent water and chemical resistance. Used in general insulation and heating films. Economical in price.
EEA (Ethylene-Ethyl Acrylate)	~ 80°C	Superior heat and chemical resistance compared to EVA. Suitable for high-temperature environments and high-power heating films.
Teflon (PTFE)	over 200°C	Exceptional heat and chemical resistance. Anti-slip and non-stick properties. Ideal for industrial and extreme environment applications.

Selection Guide

EH-SERIES

Below 80°C, High power 400W/m², Ideal for small saunas, snow-melting, and auxiliary heating
Recommended for special environments requiring high temperatures

TH-SERIES

Over 200°C, Ultra-high power 800W/m²,
Optimal for extreme temperatures and industrial applications

Application Examples



Dry saunas
(small),



snow-melting
mats



heating elements
for auxiliary
devices



special industrial
sites, and
laboratories

The EH-Series and TH-Series are high-temperature heating solutions designed for special purposes, delivering far greater heat resistance and output than conventional heating films.

Depending on the application and environment, the optimal product can be selected by considering the properties of various materials such as EVA, PE, EEA, and Teflon.

Experience powerful heating for special environments, backed by Hi Heat's trusted technology.

CERTIFICATIONS & PATENTS



Trademark Rights



Trademark Rights



Promising Export SME



CE-LVD



CE-EMC



RoHS



EAC



Patent-EMF



Patent-Grounding



Patent-EMF (USA)



Patent-EMF (Europe, 18)



Patent-EMF (Russia)



Patent-EMF (China)



KR-EU Certified
Exporter of Origin



hiheat.co.kr



Hi Heat is a Korean product recognized for its quality and exported to countries around the world.

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