# Schluter®-DITRA-HEAT and DITRA-HEAT-DUO

Electric floor warming systems





## Schluter®-DITRA-HEAT

### Warmth, beauty, and resilience underfoot

Ceramic and stone tiles are ideal surface coverings because they are durable, hygienic, and easy to maintain. However, two common concerns with tile are that they are prone to cracking and can be cold to the touch.

The DITRA-HEAT electric floor warming system incorporates uncoupling technology that prevents tiles from cracking, along with loose heating cables that allow you to add heat wherever desired. DITRA-HEAT allows you to protect the integrity of your investment and enjoy the luxury of heated floors.

DITRA-HEAT can also be used under alternative floor coverings such as luxury vinyl tiles (LVT), laminate flooring, and more. Please refer to page 7 for details.

### Advantages of DITRA-HEAT

- Electric floor warming system adds luxury to any room
- Uncoupling technology is directly incorporated into the system to protect tiles from breaking
- Heating zones are easily customizable using loose cable and studded mat
- Easy to install:
  - No need for the use of clips, fasteners, or leveling compounds
  - The cutting grooves on the membrane guide the cutting knife
- Minimal assembly thickness allows easy transitions to lower surface coverings
- Provides all the same attributes as the original award-winning DITRA: uncoupling, waterproofing, vapor management, and load support



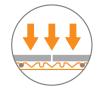
Uncoupling



Waterproofing



Vapor Management



Load Support



Floor Warming

## Easy Peel & Stick Floor Warming

#### **DITRA-HEAT-PS and DITRA-HEAT-DUO-PS**

Available in rolls and sheets, the peel and stick membranes feature a cutback stud structure with anchoring fleece and a self-adhesive backing. They offer all the same benefits as our original DITRA-HEAT and DITRA-HEAT-DUO floor warming membranes, with an easier and faster way to install the membrane without thin-set.





## Schluter®-DITRA-HEAT-DUO

#### Sound Control + Thermal Break

Schluter®-DITRA-HEAT-DUO is an uncoupling and waterproofing membrane with an integrated bonding fleece that provides sound control. Optionally, the system can be customized with floor heating cables to create a warm, luxurious tile floor.

This versatility makes the system an ideal solution for ceramic and stone tile floor installations in many applications, such as multi-story residential construction, hotel guest rooms, and many more.

### Key Features:







Sound Control

Thermal Break

Floor Warming

- Features integrated sound control and thermal break
- · Reduces impact sound transmission through floor-ceiling assemblies, making it ideal for multi-story construction
- Allows for easy integration of heating cables to create a warm tiled floor
- Reduces heat loss to the substrate for up to 70% faster heat-up times over concrete
- Lightweight for easy handling and installation

#### DITRA-HEAT-DUO Also Provides:



Uncoupling







Vapor Management

Load Support



#### Testing

- Provides ΔIIC contribution of 20, when tested per ASTM E2179 in a thin-set assembly with porcelain tile
- IIC value of 67 achieved when DITRA-HEAT-DUO tested according to ASTM E492 over 8"-thick concrete with porcelain tile and a 9" wire suspended ceiling with gypsum board
- IIC value of 60 achieved when DITRA-HEAT-DUO tested according to ASTM E492 over 8"-thick concrete with porcelain tile and RSIC-1 clips with gypsum board
- IIC value of 50 achieved when DITRA-HEAT-DUO tested according to ASTM E492 over 8"-thick concrete with porcelain tile
- Floor service ratings achieved when tested according to ASTM C627 over concrete:
  - Porcelain tile: "Light" commercial use in office space, reception areas, kitchens and bathrooms
  - Marble tile: "Residential" use in kitchens, bathrooms, and foyers

For further test results of floor assemblies and associated IIC ratings, please refer to the DITRA-HEAT Installation Handbook.

## Choosing the Ideal DITRA-HEAT Membrane

All DITRA-HEAT membranes provide floor warming along with the benefits of uncoupling, waterproofing, vapor management, and support for a long lasting installation over virtually any substrate.

#### Schluter®-DITRA-HEAT/-PS

#### Over plywood and OSB substrates

Only 1/4" (5.5 mm)-thick, DITRA-HEAT provides the thinnest possible assembly without sacrificing performance.



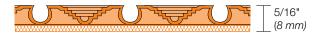
- Schluter ALL-SET®, Schluter FAST-SET® or modified thin-set mortar (Not required with DITRA-HEAT-PS)
- or DITRA-HEAT-PS



#### Schluter®-DITRA-HEAT-DUO/-PS

#### Sound control and thermal break

With its integrated thermal break, DITRA-HEAT-DUO is ideal for concrete substrates, as it increases efficiency and produces warm floors faster, resulting in saved energy costs. This system is also ideal for flooring installations that require sound control, in both commercial and residential applications.



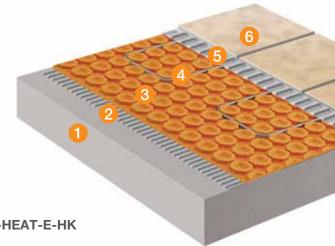
- Concrete and gypsum
- Schluter SET®, Schluter ALL-SET®, Schluter FAST-SET®

or unmodified thin-set mortar (Not required with DITRA-HEAT-DUO-PS)

Schluter®-DITRA-HEAT-DUO or DITRA-HEAT-DUO-PS

Uncoupling membrane with integrated thermal break and sound control

- Schluter®-DITRA-HEAT-E-HK Heating cables
- Schluter SET®, Schluter ALL-SET®, Schluter FAST-SET® or unmodified thin-set mortar
- 6 Ceramic, porcelain, or stone\* tile (\*Refer to the DITRA-HEAT Handbook)



Refer to the DITRA-HEAT Installation Handbook for complete details and requirements.

#### Schluter®-DITRA-HEAT / DITRA-HEAT-DUO

#### For alternative floor coverings

DITRA-HEAT can also be used under alternative floor coverings such as: vinyl, luxury vinyl tiles (LVT), luxury vinyl planks (LVP), wood plastic composite (WPC), stone plastic composite (SPC) tiles and planks, engineered wood and laminate flooring. Under these types of flooring material, certain limitations need to be considered. Verify with the floor covering manufacturer that the selected product is suitable for radiant floor warming applications.

Please refer to the AFC Bulletin on Schluter.com or in the DITRA-HEAT Installation Handbook.

- 1 Thin-set mortar per appropriate detail (not required for -PS)
- 2 Schluter®-DITRA-HEAT, DITRA-HEAT-PS, DITRA-HEAT-DUO, or DITRA-HEAT-DUO-PS Uncoupling membrane with floor warming
- 3 Schluter®-DITRA-HEAT-E-HK Heating cables
- 4 Cementitious self-leveling underlayment
- 5 Floor covering adhesive or foam underlayment, if required, per manufacturer
- 6 Engineered wood, vinyl, WPC, LVT/LVP, SPC, or laminate



## Components

#### **DITRA-HEAT Membranes**

Available in both mat and roll formats, the DITRA-HEAT membranes are designed to secure the system heating cables in place while serving as universal substrates for tile coverings.

Similar to DITRA, the original uncoupling membrane, the DITRA-HEAT membranes neutralize the differential movement stresses between the substrate and the tile covering to prevent cracked grout and tile while also providing effective waterproofing, vapor management, and load support. DITRA-HEAT-DUO and DITRA-HEAT-DUO-PS feature a thicker bonding fleece which provides both sound control and a thermal break.



#### **DITRA-HEAT** membranes for installation with thin-set mortar

#### Schluter®-DITRA-HEAT

Uncoupling and waterproofing membrane

Roll	DH5 12M	0.98 m x 12.76 m = 12.5 m <sup>2</sup> 3' 2-5/8" x 41' 10-3/4" = 134.5 ft <sup>2</sup>
Sheet	DH5 MA	0.98 m x 0.8 m = 0.78 m² 3' 2-5/8" x 2' 7-3/8" = 8.4 ft²

#### Schluter®-DITRA-HEAT-DUO

Uncoupling and waterproofing membrane with sound control and thermal break

Roll	DHD8 10M	0.98 m x 10.2 m = 10 m <sup>2</sup> 3' 2-5/8" x 33' 6-1/2" = 108 ft <sup>2</sup>
Sheet	DHD8 MA	0.98 m x 0.8 m = 0.78 m <sup>2</sup> 3' 2-5/8" x 2' 7-3/8" = 8.4 ft²



#### Peel & Stick DITRA-HEAT-PS membranes

#### Schluter®-DITRA-HEAT-PS

Peel and stick uncoupling and waterproofing membrane

Roll	DHPS5 12M	0.98 m x 12.76 m = 12.5 m <sup>2</sup> <b>3' 2-5/8" x 41' 10-3/4" = 134.5 ft</b> <sup>2</sup>
Sheet	DHPS5 MA	0.98 m x 0.8 m = 0.78 m² <b>3' 2-5/8" x 2' 7-3/8" = 8.4</b> ft²

#### Schluter®-DITRA-HEAT-DUO-PS

Peel and stick uncoupling and waterproofing membrane with sound control and thermal break

Roll	DHDPS8 10M	0.98 m x 10.2 m = 10 m <sup>2</sup> 3' 2-5/8" x 33' 6-1/2" = 108 ft <sup>2</sup>
Sheet	DHDPS8 MA	0.98 m × 0.8 m = 0.78 m² <b>3' 2-5/8" x 2' 7-3/8" = 8.4</b> ft²



#### **Heating Cable**

The twisted pair heating cables are specifically designed to be used with the DITRA-HEAT membranes. There is no need for clips, fasteners, or self-levelers as the cables are easily snapped into place. Available in 120 and 240 Volt formats, the cables can be installed without returning to the thermostat and produce virtually no electromagnetic fields.



#### **Thermostats and Power Modules**

There are four thermostat options to choose from: programmable touchscreen (RT), a Smart programmable with Wi-Fi capability (RS1), programmable touchscreen with Wi-Fi capability (WiFi), and digital non-programmable (R). All thermostats support both the 120 and 240 Volt cables and feature a built-in Ground Fault Circuit Interrupter (GFCI) of the Class A type.

When heating a large expanse of tile, the DITRA-HEAT-E-RR power module extends the power output when used in conjunction with the DITRA-HEAT-E-WiFi, DITRA-HEAT-E-RT, or DITRA-HEAT-E-R thermostats. The DITRA-HEAT-E-RRS power module works with the DITRA-HEAT-E-RS1 thermostat.

Note: Two floor temperature sensors are provided with the heating cables. These can be installed at the same time as the cable.





## Smart Thermostat

## Easy smart home integration







## Installation Overview

#### Thin-set Version



1 Apply DITRA-HEAT or DITRA-HEAT-DUO to the floor, fleece side down. Solidly embed the matting into the mortar.

#### Peel & Stick Version



Simply peel and stick the DITRA-HEAT-PS or DITRA-HEAT-DUO-PS membrane to install.



Embed the heating cables between studs, at spacing of 3 studs or at a continuously alternating 3 stud - 2 stud sequence, depending on your application. For details, see the DITRA-HEAT Installation Handbook in the Floor Warming section on schluter.com.

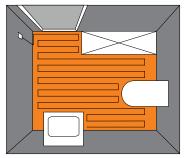


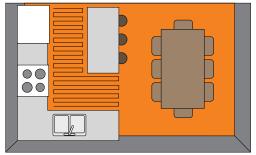
3 Using Schluter SET®, ALL-SET®, FAST-SET®, or unmodified thin-set mortar, tile can be installed over DITRA-HEAT and DITRA-HEAT-DUO immediately; no need for self-levelers.

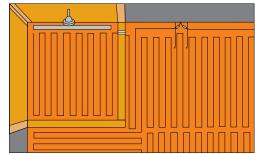


## Customizable Heating Zones

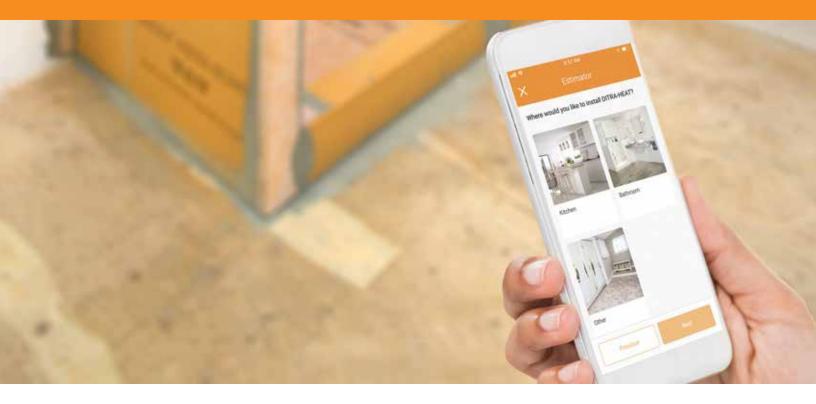
DITRA-HEAT membranes can be easily cut to the size and shape of a given room. Simply place cables wherever heat is desired to achieve customized heating zones, or throughout the room to heat the entire floor.







## DITRA-HEAT Estimator Tool



## Estimator Tool Helps with DITRA-HEAT Project Planning

Available on both Schluter.com and on the Schluter®-App, the DITRA-HEAT Estimator asks a series of questions to help determine which DITRA-HEAT products are needed to complete any Schluter heated tile project.

Tailor the DITRA-HEAT product requirements by refining some of the project specifications, like subfloor and flooring materials, areas to be heated, and even drain types for shower applications. Options for voltage recommendations and thermostat are also provided.

Once all selections have been made, a list of recommended products is displayed to help you proceed with your heated floor project.

Try out the DITRA-HEAT Estimator today!



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#### We stand behind our products.



## Membrane + Cables = **System Warranty!**

DITRA-HEAT is a complete system involving components that are designed to work together. As such, DITRA-HEAT-E-HK cables must be used in conjunction with the DITRA-HEAT membrane to benefit from the full system warranty.

For full warranty details, please visit: schluter.com/warranty

Visit **schluter.com** for everything you need to know about DITRA-HEAT, including:







**Videos** 

**Estimator** 

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