## Schluter<sup>®</sup>-DITRA-HEAT

Electric floor warming system with integrated uncoupling technology





PROFILE OF INNOVATION



## Bare Feet **1** WANTED

DITRA-HEAT is the first electric floor warming system with integrated uncoupling technology to ensure that floors are both comfortable, and resistant to cracked tiles and grout. Cables can be placed wherever heat is desired for customized heating zones, and no leveling compounds are required, which makes for a quick and easy installation.

- Heating and uncoupling in a single layer
- No self-levelers required to encapsulate heating cables (no need to wait for curing)
- Place the heating cables exactly where they are needed, without clips or fasteners
- Combines the flexibility of loose cable with the ease of installation of a mat system
- Minimizes assembly thickness for easy transitions to lower surface coverings

#### NEW!

#### **DITRA-HEAT-DUO**



Uncoupling membrane with integrated sound control and thermal break.

#### DITRA-HEAT-E-WiFi



Access your floor heating system, anywhere, anytime.

## Easy To Install



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



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 at www.schluter.com or www.schluter.ca



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 and power output

#### Heat your whole floor ...



#### Or heat a specific area...



With DITRA-HEAT, it's your tile floor, warmed the way you want it.



## Measuring Guide

Membrane is selected according to the size of the area to be *tiled*.

Heating cable is selected according to the size of the area to be *heated*. Be sure to measure the heated area accurately.

The allowable heated area is limited by the minimum required spacing from fixed elements such as:

- Walls/partitions/fixed cabinets = 2" (50 mm)
- Heat sources (baseboard heaters, fireplaces, etc.) = 8" (200 mm)
- Plumbing drains and forced air heating ducts = 4" (100 mm)
- Centerline of toilet drains = 7" (180 mm)

Select a heating cable closest to, <u>but not exceeding</u> the area determined in step 3 below. Do not select a heating cable according to the size of the area to be tiled; this will be too much heating cable. Only select a heating cable according to the size of the area to be heated, and to your choice of cable spacing depending upon the specific application.

#### Using Multiple Cables

Multiple DITRA-HEAT-E-HK heating cables can be connected in parallel and controlled by a single DITRA-HEAT-E thermostat if the total current is less than 15 amps. This work must be performed by a qualified electrician in accordance with applicable electrical and building codes.

#### IMPORTANT: HEATING CABLES CANNOT BE CUT TO FIT

Never install the heating cable under vanities without air space underneath, bathtub platforms, free standing bathtubs with no airspace beneath, kitchen cabinets or in storage or clothing closets. Excessive heat will build up in these confined spaces and may cause cable overheating.

Please refer to the Schluter<sup>-</sup>-DITRA-HEAT Installation Handbook for complete installation details and warranty criteria.



#### Step 🚹 Draw Room

Draw the room on a sheet of paper.

#### Step 2 Calculate Membrane Required

Measure areas where the membrane will be installed. The total will tell you how much DITRA-HEAT or DITRA-HEAT-DUO membrane is required.

Area	Dimensions (Inches)	Total
A <sub>1</sub>		
A <sub>2</sub>		
A <sub>3</sub>		
$A_4$		
Divide total by 144 to get measurement in ft <sup>a</sup>		÷ 144

#### Step 3 Calculate Cable Size(s)

Measure areas where the heating cable is to be installed. The total tells you the maximum DITRA-HEAT-E-HK heating cable amount.

Area	Dimensions (Inches)	Total
B <sub>1</sub>		
B <sub>2</sub>		
B <sub>3</sub>		
B <sub>4</sub>		
Divide total by 144 to get measurement in ft <sup>a</sup>		÷ 144



Once you have your measurements, try our DITRA-HEAT calculator to determine which components you need to complete your floor warming project. schluter.com

## Example



#### DITRA-HEAT or DITRA-HEAT-DUO

#### Membrane

Area	Dimensions	Total
A <sub>1</sub>	64" x 48"	<b>3072 in</b> <sup>2</sup>
<b>A</b> <sub>2</sub>	80" x 72"	<b>5760 in</b> <sup>2</sup>
A <sub>3</sub>	-	-
$A_4$	-	-
Divide total by 144 to get measurement in ft		<b>8832 in</b> <sup>2</sup> ÷ 144
Grand Total Membrane		61.5 ft <sup>2</sup>



### DITRA-HEAT-E-HK



Area	Dimensions	Total
B <sub>1</sub>	15" x 48"	720 in <sup>2</sup>
B <sub>2</sub>	28" x 68"	1904 in <sup>2</sup>
B <sub>3</sub>	48" x 72"	3456 in <sup>2</sup>
B <sub>4</sub>	25" x 24"	600 in <sup>2</sup>
Divide total by 144 to get measurement in ft		<b>6680 in</b> <sup>2</sup> ÷ 144
Grand Total Heating Cable		46.5 ft

## Components



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

The DITRA-HEAT and DITRA-HEAT-DUO membranes are available in both mat and roll formats. They are each designed to secure the system heating cables and serve as a universal substrate for tile coverings. DITRA-HEAT-DUO also features an integrated thermal break designed to provide up to 70% faster heat-up times over concrete substrates and reduce impact sound transmission through floor-ceiling assemblies.

DITRA-HEAT membrane: U.S. Patent Nos. 8,950,141; 9,428,920; 9,797,146 and U.S. DES. PAT. No. D706,459. Other patents pending.



#### Heating Cable

The twisted pair heating cable is available in 120 and 240 Volt formats. The cables can be installed without returning to the thermostat and produce virtually no electromagnetic fields.



#### **Digital Thermostats**

The digital thermostat controls the floor temperature and is offered in touchscreen, programmable with or without WiFi capability, and non-programmable formats. A power module can be used in large floor applications where the heating load exceeds 15 amps.





Schluter<sup>a</sup>-Systems offers practical kits for common room configurations that include all necessary system components in the right dimensions.





# 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





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