



# DITRA-HEAT TIP SHEET

DITRA-HEAT is an uncoupling electric floor warming system that directly incorporates uncoupling technology to ensure that floors are not susceptible 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.

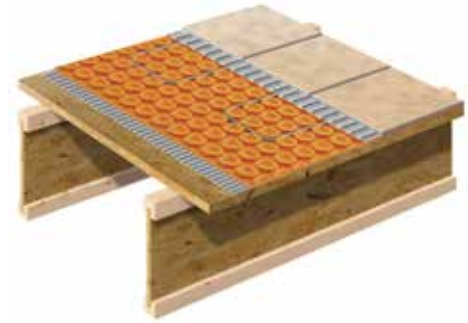
With the proven technology of our DITRA uncoupling membrane incorporated in the design, DITRA-HEAT provides the ideal solution for bringing warmth and comfort to any tiled floor.

- 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
- 120 V and 240 V options available
- Programmable and non-programmable thermostats available



**Please consult the Schluter®-DITRA-HEAT Installation Handbook before beginning your tile project.**

Visit [schluter.com](http://schluter.com) to view or print the DITRA-HEAT Installation Handbook. Project assistance is available by calling Customer Service at 800-267-1923.



## MATERIALS CHECKLIST

### Miscellaneous Materials:

- ☐ Trowels  
(to apply the membrane to the subfloor use a 1/4" x 1/4" square-notched trowel and then select appropriate notch size for tile)
- ☐ Buckets
- ☐ Chalk or ink line
- ☐ Tile saw and/or snap cutter
- ☐ Grout float
- ☐ Tape measure
- ☐ Utility knife
- ☐ Sponges and clean water bucket for grout cleanup
- ☐ Megohmmeter and multimeter  
Note: some megohmmeter are also multimeters
- ☐ 1/2" conduit for running cables through wall cavity
- ☐ Approved thermostat wall mounting box
- ☐ Drill and mixing paddle
- ☐ Marker & pencil
- ☐ Tile spacers
- ☐ Knee pads
- ☐ Rubber mallet
- ☐ Square and level

### Installation Supplies:

- ☐ Tile
- ☐ DITRA-HEAT Membrane - Sheets or Roll
- ☐ DITRA-HEAT Cable(s)
- ☐ DITRA-HEAT Thermostat  
(Floor sensors included in thermostat and cable boxes)
- ☐ KERDI-BAND if waterproofing
- ☐ Appropriate mortar for tile and underlayment – see mortar selection chart
- ☐ Schluter tile trims (floor)
- ☐ Grout



## STEP 1 - PLANNING

- Select amount of DITRA-HEAT membrane to cover area to be tiled.
- Select DITRA-HEAT-E-HK heating cable to cover area to be heated. Measure accurately and include required spacing from walls and fixtures such as vanities (2" - 50 mm), heat sources such as baseboard heaters and ducts (8" - 20 cm), floor drains (6" - 15 cm), and toilet flanges is 2" (50 mm). Consult the DITRA-HEAT calculation sheet and/or product calculator at [schluter.com/ditra-heat/](http://schluter.com/ditra-heat/) for assistance.
- The heating cable **CANNOT** be cut to fit; this would change the cable resistance and can cause a fire. Consider planning a buffer zone (area in floor where heating is not essential) to allow placement of excess cable.
- Select either 120V or 240V heating cable according to power supply; a dedicated circuit is required.

## STEP 2 – INSTALLATION

Consult the DITRA-HEAT Installation Handbook and Installation Video for complete instructions. Electrical components must be installed by a qualified person in accordance with the installation handbook and with the National Electric Code (USA) or Canadian Electric Code Part I (Canada) as applicable. All electric connections must be made by a qualified electrician, according to the electrical and building codes effective in your region.

- Choose the mortar to install the DITRA-HEAT membrane according to substrate (e.g., modified for plywood or OSB) and mix to a fairly fluid consistency, but still able to hold a notch.
- Apply thin-set mortar to floor substrate using a 1/4" x 1/4" square-notched trowel; apply a thin layer with the flat side of the trowel and comb additional mortar using the notched side.
- Apply the DITRA-HEAT membrane before the mortar skins over and solidly embed with a wood float or grout float; if the mortar skins over, remove and reapply fresh mortar.
- Lift up a corner of the membrane to ensure full coverage between the membrane and mortar; re-embed the membrane. If full coverage is not achieved, remove and reapply.

- Perform required heating cable tests before removing cable from spool, after cable installation, and after grouting.
- Install the heating cable in membrane at 3 stud spacing; minimum required spacing from walls or fixtures is 2" (50 mm), other heat sources is 8" (20 cm), floor drains is 6" (15 cm), and toilet flanges is 2" (50 mm).
- Never install cable under vanities, tub platforms, cabinets, walls, etc.; excessive heat could build up and cause a fire.
- Turn the cable or provide u-shaped "jog" every 10 ft (3 m).
- Install floor temperature sensors between cable runs at least 24" (61 cm) from wall; cut the membrane where sensors are placed and temporarily secure sensors to floor with hot glue if required.
- One sensor is connected to the thermostat, the other sensor lead is kept in the thermostat junction box as backup in case of damage to the first; do not connect both at same time.
- Install tile over membrane using unmodified thin-set mortar. Fill DITRA-HEAT membrane cavities using unmodified mortar. Comb additional mortar using a notched trowel appropriate for the tile size.
- Solidly embed the tile before the mortar skins over. If this occurs remove and reapply fresh mortar.
- Periodically remove and check a tile for full contact between the tile and mortar; back buttering tiles (applying skim coat of mortar on the underside) helps improve coverage.

## STEP 3 – OPERATION

- Allow mortar to cure for 7 days after grouting before putting the floor warming into service.
- Do not place furniture or mats over the floor temperature sensor as they could act as insulation and lower the temperature of the floor warming system therefore causing the floor to feel cooler.
- Area rugs are not recommended over the DITRA-HEAT system.
- Futons, mattresses, floor-level furniture, pillows, etc. must not be placed directly onto the heated floor. These objects will prevent heat diffusion (i.e., air circulation) and could result in damage.