

Ubertile[®] Shower System Radiant Heat in a Shower Information Guide



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The information within this guide is for reference only and does not supersede requirements from other product manufacturers or building codes. Consult and follow manufacturers specific installation and saftey instructions.

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All tasks performed by the product user are at the own risk and liability of the user.

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1.1H - FAQ's

Is the Ubertile® Shower System compatible with radiant heating?

Yes, radiant heating (both electric and hydronic) can be used with the Ubertile Shower System.

Ubertile Presloped Shower Pans, Wall Panels, Curbs, Benches, etc, are manufactured with waterproof XPS and PET foam cores which are inherent insulators, therefor suitable to be used with electric and/or hydronic heating.

Example: XPS foam has an R value of ~4.5 per inch which allows the heating system to direct its heat upwards for efficient operation.



Basic Exclusions:

• Not all local building jurisdictions allow electric heating inside a shower, for this reason check your local building code as requirements differ from region to region.

• The electric heating system used must be rated specifically for use in a shower. Depending on the brand of cable, additional waterproofing ontop of the heating cables **may** or **may not** be required prior to tiling. Consult manufacturer of heating cable for details.



• Do not exceed +65°C which is the service temperature of XPS Foam. Most infloor heating systems run at a maximum +28°C so this should never be an issue.

2.1H - Installation Tips and Tricks

Temperature probe placement:

Be mindful when selecting the location for the temperature sensor, as warm water from the shower head will give false "warm" readings to the thermostat, causing the thermostat to turn on / off prematurely.

Some installers prefer to install the temperature probe **outside** of the shower, while others prefer to place the probe **inside the shower in a location that will not receive direct water spray**, therefor giving an accurate reading of the floor temperature.



Location of the "hot - cold" splice

Most electric radiant heat manufacturers require the "hot – cold" splice to be located **OUTSIDE** of the shower (ie on the bathroom floor).



2.1H - Installation Tips and Tricks (continued)

How to get power INTO the shower?

To understand "how" to do this properly you must first understand "why":

Electric heating cables have a calculated resistance to operate a specific temperature based on the supplied power.

When the resistance is determined by the cable manufacturer it is presumed the heating cables will be fully encapsulated in thinset at a specific depth (for example $\frac{1}{4}$ / 6mm) spaced evenly apart at a set distance (example $\frac{4}{7}$ / 100mm apart).

If you alter the spacing between the wires or cover the wires with an insulator (like foam) you will alter the operating temperature of the wire, damaging the wire.

When running cables into the shower, Do NOT bury or cover the heating cables with insulators such as a shower curb.



To run the cables into the shower, cut a small recessed track into the curb (example using a router or utility knife) at the same approximate depth and width as the track which holds the standard wires in place (example 1/4" / 6mm depth).

The wires in this track will then be covered in thinset to ensure they operate at their intended temperature.



2.1H - Installation Tips and Tricks (continued)

How many zones?

It is recommended to run the shower on its own dedicated zone, separate of the bathroom heating zone.



Can you heat a Bench / Seat?

Yes.

• This method is NOT compatible with "hanging seats", rather this method only works with "floor mounted seats" as the power cable must transition from the shower floor up the bench vertical surface to reach the top bench surface.

- In addition to the above requirement, this method is only comptaible with seats that are:
 - Full Foam (ie Ubertile full foam bench / seats)
 - 2" Uberboard which has been constructed into a bench / seat.

The reason for the above requirement is because you must **cut a small recessed track into the seat** (example using a router or utility knife) at the same approximate depth and width as the track which holds the cables in place (example 1/4" / 6mm depth).

Note: 1/2" thick Uberboard is not thick enough to allow a track to be routered into it.

The cables in the recessed track are then covered in thinset to ensure they operate at their intended temperature.

• Be mindful when making the vertical to horizontal transition with the cable to avoid "kinking" or bending the wire beyond its allowable radius or damage to the wire will result.

2.2.4H) Can you heat a shower wall?

Yes.

• This method is only compatible with wall mounted Uberboard panels with a thickness of 1" or greater as the power cable must transition from a horizontal surface (ie top of shower seat) up the walls vertical surface via a recessed track cut into the Uberboard wall panel.

Note: 1/2" thick Uberboard is not thick enough to allow a track to be routered into it.

To get the cable onto the wall, **cut a small recessed track into theUberboard wall panel** (example using a router or utility knife) at the same approximate depth and width as the track which holds the cables in place (example 1/4" / 6mm depth).

The cables in the recessed track are then covered in thinset to ensure they operate at their intended temperature.

• Be mindful when making the vertical to horizontal transition with the cable to avoid "kinking" or bending the wire beyond its allowable radius or damage to the wire will result.

• To reduce the chance of kinking the cable, reduce the bend radius by lengthening the bend as shown below.





How do I keep the wires from moving around while I spread thinset?

Use dabs of "hot glue" to keep the cable in place.