



### EASYHEAT<sup>®</sup> Warm Tiles<sup>®</sup> Floor Warming Cable System Tile and Stone Over Concrete

EASYHEAT has developed a revolutionary new way to view installation details. These animated tutorials are for reference purposes only. Always follow the Installation Instructions included in every Floor Warming Kit to ensure a professional quality installation. We hope you enjoy our Industry First – the Warm Tiles Tutorials.

### 1 SUBFLOOR: Cured concrete slab

All surfaces should be between  $40^{\circ}$  F ( $4^{\circ}$  C) and  $90^{\circ}$  F

(32° C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI Specification AN – 3.8 "Requirements for Expansion joints" or TCA Detail EJ171 "Expansion Joints". Do not cover expansion joints with mortar.

Rough or uneven concrete surfaces should be made smooth with a Portland cement underlayment to provide a wood float (or better) finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. New concrete slabs must be plum and true to within ¼" (6 mm) in 10' (3 m). Latex Portland cement mortars do not require a minimum cure time for concrete slabs.

# **2** STRAPPING:

Cable strapping glued or screwed to substrate

Install the strapping onto the floor by following your

preplanned sketch. Outside runs of strapping should be positioned so the tab clips will close towards the outside of all cable turns. Fasten the first end of the strapping to concrete substrates using the Warm Tiles tape kit. Alternative installation methods include hot melt glue guns or tapcons. Ensure the strapping is adhered tightly to the floor. Install strapping on all perimeter runs of the room first. Install subsequent runs of strapping at 18" to 24" (45.7cm to 60.9cm) intervals between the perimeter runs.

# **3** CABLE:

EASYHEAT® Warm Tiles® Floor Warming Cable attached to substrate with strapping at alternating 3" (7.62 cm), 1 1/2" (3.81 cm), 3" (7.62" cm) intervals When routing heating cable to the beginning of the strapping, use clips to attach heating cable to the subfloor.

Wind the cable at appropriate intervals and snap into the strapping slots. Then carefully turn the cable and snap into the next appropriate slot. Do not extend cable beyond the edge of the strapping. Close the first one or two hinged clips on strapping in order to hold the cable secure before proceeding to the next strapping run. Subsequent clips should be left open until cable placement is completed. Once the cable layout is completed, close all hinged clips, including the hinged clips not used, to securely fasten the cable to the floor, and flatten the height of the system prior to application of the thin-set. Use additional clips provided to fasten down any part of the cable that is not snug to floor.

### **4** SCRATCH COAT:

# EASYHEAT® Warm Tiles® Floor Warming Cable imbedded in thin-set mortar or self-leveling underlayment

Comb on mortar with the flat side of the trowel, taking care not to nick the heating cables. Completely cover cables and strapping with thin-set mortar. Let thin-set dry following recommended times on thin-set package. If using self-leveling underlayment, follow directions on manufacturer package.

# 5 THIN-SET:

### Thin-set mortar

Once the mortar has cured, install your tile or stone using standard tiling procedures for concrete and plywood sub-floors according to the Tile Council of America for the United States or by the Terrazzo, Tile and Marble Association of Canada.

# **6** FINISH:

### **Final Floor Finish**

Grout floor finish at 70° F ( $21^{\circ}$  C) following a minimum cure time of thin-set by referring to the manufacturer package.