



## **1**SUBFLOOR:

All surfaces should be between 40° F (4° C) and 90° 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.

#### **PLYWOOD:**

# Double layer 5/8" (15.85 mm) exterior grade plywood substrate 16" (40.64 cm) o.c

When installing EASYHEAT<sup>®</sup> Warm Tiles<sup>®</sup> Floor Warming Self-Adhesive Mat (SAM) over a plywood surface, be sure that the substrate is strong enough to support a tile or stone floor finish. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/720 for stone installation where L = span length.

## Installation Tutorial

#### EASYHEAT® Warm Tiles® Floor Warming Self-Adhesive Mat (SAM)

#### Anti-Fracture Systems over Suitable Substrates

EASYHEAT has developed a revolutionary new way to view installation details for crack suppression, anti-fracture and waterproofing systems. Suitable substrates such as double layer plywood, cement backerboard over plywood and concrete slabs are represented in a generic sequence. Additionally, crack suppression, anti-fracture and waterproofing systems are available in many different configurations, so the installation sequences are also presented generically. These animated tutorials are for reference purposes only. Always follow the manufacturer installation instructions included in every Floor Warming kit and the crack suppression, anti-fracture and waterproofing system you purchase to ensure a professional quality installation.

#### **BACKERBOARD:**

1/2" (12.70 mm) cement backerboard over single layer 5/8" (15.85 mm) exterior grade plywood 16" (40.64 cm) o.c.

Install cement backerboard per installation instructions provided by manufacturer. Be sure that the substrate is strong enough to support a tile or stone floor finish. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/720 for stone installation where L = span length.

## **CONCRETE:**

#### Cured concrete slab

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 MAT:

## EASYHEAT<sup>®</sup> Warm Tiles<sup>®</sup> Floor Warming Self-Adhesive Mat (SAM) adhered to substrate with self-adhesive mesh.

The adhesive on the bottom side of the mesh will secure the mat to the substrate. Press the mesh evenly across the substrate to ensure there are no sections that have popped up. If there are raised sections or pop-ups, smooth out by pressing the mesh against the floor, or staple/hot-glue the mesh section. Never staple the heating cable.

## **3**SCRATCH COAT:

### EASYHEAT<sup>®</sup> Warm Tiles<sup>®</sup> Floor Warming Self-Adhesive Mat (SAM) 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 mat 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.

## **4**ANTI-FRACTURE SYSTEM:

Your floor warming system must be installed below the anti-fracture system to achieve full protection from stress cracks, contaminates and movement from the substrate below. Follow manufacturers installation instructions for the anti-fracture system you have purchased.

## **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° C) following a minimum cure time of thin-set by referring to the manufacturer package.