

# **INSTALLATION RECOMMENDATIONS**



### **Prior to Installation:**

The DeckTOP Architectural Tiles and connector pieces intended for this installation have been shipped to you on pallets with the mats shrink wrapped and strapped. Once the packing is removed, please inspect the exposed edges for any damage. Next confirm shipment to packing list and notify supplier of any damage or shipment discrepancies.

DeckTOP Architectural Tiles ARE NOT intended for playground application. DeckTOP Architectural Tiles have not been tested for compliance to ASTM F3351 or ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment and should not be installed in applications requiring compliance with this ASTM standard.

DeckTop Architectural Tiles are usually installed by fastening together with plastic dowels allowing some movement of the tiles. Decktop Tiles are rubber and will therefore contract in cold weather and expand in warm weather. Some gapping may occur over time due to this normal expansion and contraction. Such gaps should be closed during normal site maintenance.

Perimeter containment is recommended to minimize gapping due to thermal expansion and contraction and is the sole responsibility of the project owner.

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## **SECTION 1 - Tools and Equipment Necessary for Installation**

- ✓ Safety Gloves
- ✓ Safety Glasses
- ✓ Utility Knife with Heavy Duty Blades
- ✓ Chalk Line
- ✓ Carpenters Square
- ✓ Gold or Silver Paint Type Marking Pens
- ✓ Dead Blow Hammer
- ✓ Trim or Framing Hammer
- ✓ Two Tape Measures, 25' and 50'
- ✓ Sabre Saw and Blades (7-10 TPI wood type blades)
- ✓ Hole Saw (optional, to cut around vent pipes if required)
- ✓ Weatherproof Silicon Sealant
- ✓ Caulk Gun

#### **SECTION 2 - Sub Surface Requirements for DeckTOP Tiles**

Decktop Architectural Tiles are primarily intended for rooftop installation over roof membrane surfaces. Contact EM Concepts ("EMC") or your Decktop dealer for information on installation over other types of substrates.

#### **Roof Membrane Surfaces**

The roof membrane surface should be properly designed to provide adequate drainage. Verify that the roof will accommodate the additional weight of the DeckTOP Architectural Tiles. The manufacturer of the roof membrane should confirm the compatibility of the DeckTOP Architectural Tiles with the roof membrane and whether installing Decktop tiles will affect the roof membrane manufacturer's warranty.

EM Concepts is not responsible for any liabilities resulting from the installation of the DeckTOP Architectural Tiles over an existing roofing membrane.

#### **SECTION 3 SITE LAYOUT**

 Measure and mark the center points of two opposite sides of the proposed installation. Snap a chalk line between these center points. Measure and mark the center of this chalk line. From this point use a carpenter's square to establish a second line perpendicular to the first line. Snap a chalk line on this second perpendicular line. The intersection of these lines should be the center of the planned installation. The perpendicular chalk lines will be used to lay the first courses of tile.

(Laying tiles from the center outward will insure that the installation will be symmetrical, that is any trimming of edge tiles, if required, will be approximately equal on opposite sides of the installation.)

If it is not possible to begin at the center of the installation (e.g. because rooftop equipment is on this spot), snap the chalk lines two feet, or in multiples of two feet, from the center of the installation. The first courses of tile should be laid from the intersection of these chalk lines, with subsequent courses of tile laid so that the tile area specified in the site plan is completely covered. (This may require laying different amounts of tile on opposite sides of the center point of the chalk lines.)

2. Use the right triangle method to check for squareness. Measure and mark one line 3 feet from the center point. Measure and mark a point on the perpendicular layout line 4 feet from the center point. Measure the (diagonal) line between these points. This distance should be exactly 5 feet. Make corrections (to squareness) if necessary

#### **SECTION 4 – Installation**

- 1. Insure that the base surface is clean, dry, and contains no low spots which could pond water.
- 2. Check ambient air temperature. Recommended ambient temperature during installation is 60 to 90 degrees F.

*EMC* is not responsible for gapping or buckling that may occur due to installation outside of recommended temperatures

- 3. DeckTOP Tiles are shipped on pallets and must be laid out individually to allow them to acclimate prior to installation. DeckTop Tiles are made with recycled rubber which will expand and contract with changes in temperature and exposure to sunlight. Tiles may expand beyond the published dimensions in high temperature conditions. The installer may need to measure and hand select tiles during installation to maintain straight course lines.
- 4. Cut tiles to fit around vent pipes or any rooftop equipment that has been installed on the roof prior to tile installation. Tiles may be cut with a hole saw, sabre saw or utility knife and straight edge, using a shipping pallet as a cutting table.
- 5. The initial tile courses should be laid along the two perpendicular course lines established in Section 3 Site Layout. Additional courses follow (abut) these initial tile courses until all tiles are installed.
- 6. Install dowels in each of the three dowel holes on adjacent sides of each towel. Tap the dowels slightly less than half their length (i.e. slightly less than 1 <sup>1</sup>/<sub>2</sub>") into the holes using a trim or framing hammer.

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- 7. Place one of the tiles prepared in 6 above at the intersection of the chalk lines with non-doweled sides facing the intersection of the chalk lines.
- 8. Join the next tile prepared in 6 above to the tile in 7 above, inserting the dowels in the original tile into the holes in the tile being joined. A dead blow hammer may be used to strike the tile close to the doweling point to join the tiles close together. A second installer will need to stand on the original tile to hold it in place during this operation.

Do not use a steel head hammer for this purpose as this may damage the tiles.

- 9. Repeat the procedure in 8 above until all tiles in the initial course line have been assembled. Realign tiles as necessary to follow the chalk lines.
- 10. Prepare enough tiles for the second course using the procedure in 6 above.
- 11. Join the first tile in the second course to the first tile in the first course, inserting the dowels from the first course tile into the holes into the second course tile.
- 12. The second tile in the second course will be dowelled on two sides. First, dowel the tile to the tile just installed in 11 above, sliding the tile under the dowels projecting from the tile in first course. After this has been done and the tiles in the second course are fastened together, complete the last joint (with dowels above) by lifting both tiles and inserting one dowel at a time into the opposite dowel hole. Tightly butt the second tile to its adjoining tiles.
- 13. Repeat this procedure until all tiles and all courses have been joined tightly together.
- 14. If necessary, tiles on the outermost perimeter (i.e. those abutting the containment perimeter) may be cut to fit between the adjacent tile course and

containment perimeter. Tiles may be cut with a sabre saw or utility knife and straight edge, again using a shipping pallet as a cutting table. Cut tile edges should **never** be left exposed or abutting another tile, but rather always being abutted to a containment perimeter.

- 15. Inspect the entire tile installation to ensure that all tiles are snugly abutted and that there are no gaps between tiles, or tiles and the containment perimeter. Close any such gaps as required.
- 16. Fill any gaps between cut tile and vents or equipment with weatherproof silicone construction sealant, taking care that no sealant contacts the roof membrane.
- 17. Roof top installations of DeckTOP Tiles should be installed using SureKONNECT pins. SureKONNECT Pins are approximately 3" long and are made of hard black plastic with ferruled edges, which hold them in place inside the rubber tile once they have been inserted into the pre-drilled holes in the DeckTOP tiles.

#### **SECTION 5 - Disclaimer**

These installation guidelines represent a typical installation and generally accepted installation practices should be followed. Use of trained installation professionals is recommended for best results.

EM Concepts does not warrant any installation work and specifically disclaims liability for any direct or indirect personal injury, property damage or other costs or losses resulting from incorrect or inadequate installations.