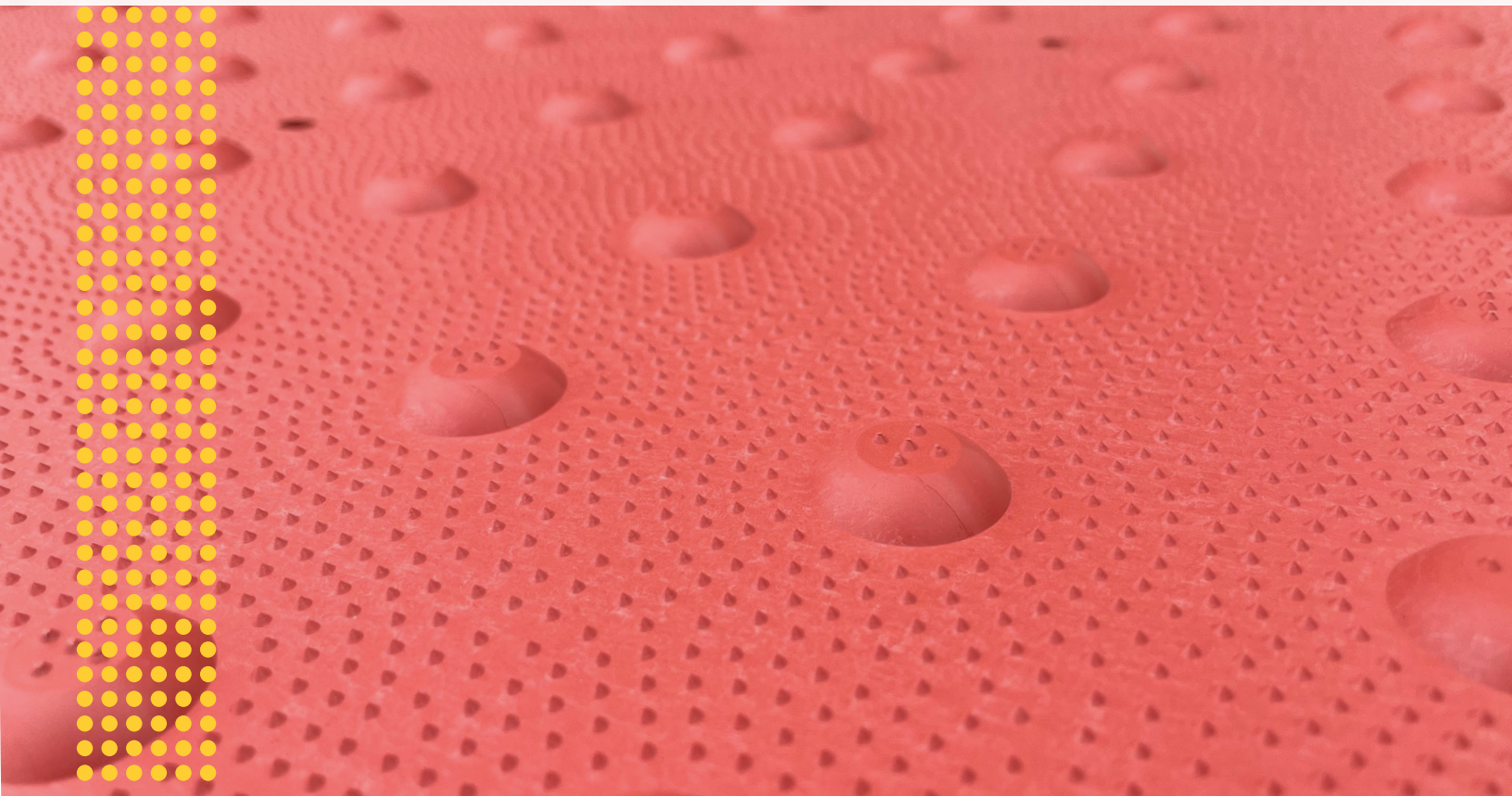


TufTile[®]

ADA DETECTABLE WARNING PRODUCTS

POLYMER SURFACE-APPLIED CALIFORNIA



TufTile.com

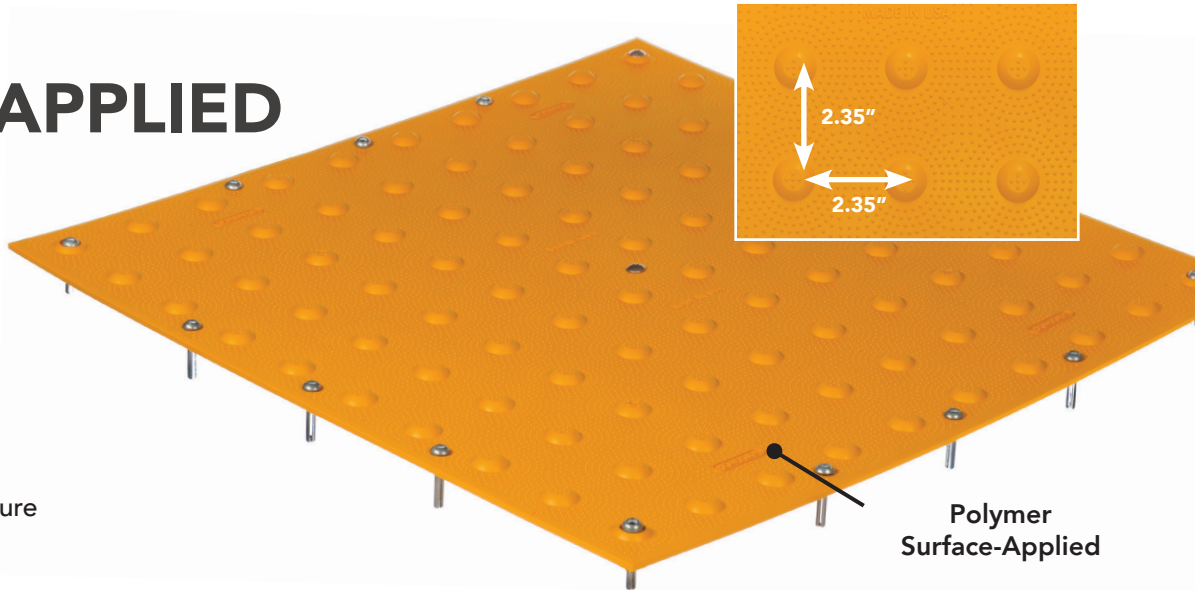
☎ 1-888-960-8897

📍 905 Telser Road, Lake Zurich, IL 60047

POLYMER SURFACE-APPLIED



1-1/2" corrosion-resistant stainless-steel drive pins secure tiles tightly to the concrete.



No Blooming, No Cracking, No Fading

POLYMER BENEFITS

Low-profile beveled edges provide a compliant transition from surrounding surfaces.

PREMIUM PERFORMANCE

Engineered to withstand high volume pedestrian traffic.

SUPERIOR COLOR

Proprietary resin system ensures homogenous color throughout the tile.

5-YEAR WARRANTY

For full warranty information visit www.tuftile.com.

PRODUCT ASSORTMENT

Available in five standard tile sizes and 20 radius capabilities 9R-70R.

STOCK ITEM

Able to meet any standard size and color order.

ADA COMPLIANT

Complies with ADA Accessibility Guidelines (ADAAG) for Public Rights-Of-Way (July 26, 2011).



Colors Available



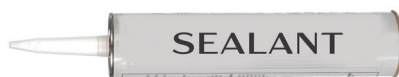
Packaging Specifications

Polymer Surface-Applied

Tile Size	Tile Weight/lbs.	Units/Carton	Cartons/Pallet	Pallet Weight/lbs	Wedge Size	Wedge Weight/lb
2'x1'	2.5	20	10	665	15R Wedge	1
2'x2'	5.1	10	10	645	20R Wedge	1
2'x3'	7.5	10	7	665	25R Wedge	1
2'x4'	10	10	4	511	30R Wedge	1
2'x5'	13	10	4	477		

* Note: Pallet weight will vary if top-loaded with wedges

Surface-Applied Fastening System



Sealant



1/4"
Carbide Tipped
Masonry Bit

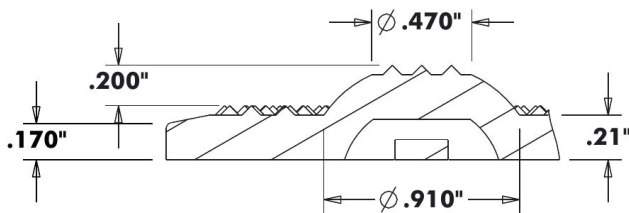


1-1/2"
Drive Pin

PHYSICAL CHARACTERISTICS POLYMER

Dome Geometry

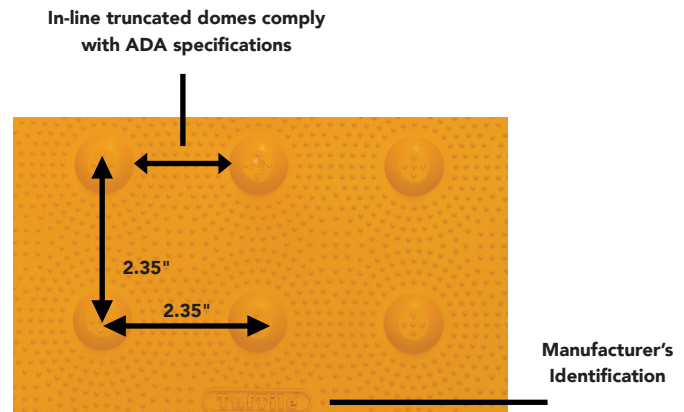
ADA (R305.1.1) specifies truncated domes shall have a base diameter of 0.9" minimum, a top diameter of 50% of the base diameter minimum, and height of 0.2".



SECTION A-A

Dome Spacing

ADA (R305.1.2) specifies truncated domes shall have a center-center of 1.6" to 2.4".



Polymer Wet-Set (REPLACEABLE) / Surface Applied (REPLACEABLE)

ASTM C 501	Abrasion Resistance	124 (lower number = better wear properties)
ASTM C 1028	Slip Resistance	Dry - 1.28, Wet - 1.23
ASTM D 570	Water Absorption	0.04%
ASTM D 1308	Chemical Stain Effects: 70 hrs / 70°C, Motor Oil, Antifreeze, Coffee	No Effect
ASTM B 117	Salt Sray (200 hrs)	No Change
ASTM D 790	Flexural Strength	3901 psi
ASTM D 638	Tensile Strength	2885 psi
ASTM D 695	Compressive Properties	11,100 psi
RCRA-C	Non-Hazardous Classification	Non-Hazardous
ASTM D 1709 (modified)	(Dart Drop Impact Test: 48lb steel dart with spherical head and 1.8" diameter radius dropped from 2 feet equaling 100 ft/lbs of force)	Nubs flattened on tile, tile did not crack

BUY AMERICA ACT CERTIFICATION

By law, America manufactured products must be used in all Federal Transportation projects and all state and local government projects that use Federal Transportation funds.

The Buy America provision of the law explicitly requires steel, cast iron, and polymer-based products manufactured in United States mills, foundries, and other production facilities are used in Federal Transportation infrastructure projects. Under the various "Buy America" definitions, the following are those that we comply with:

- American Recovery and Reinvestment Act of 2009, Section 1605 – Buy America Act
- Infrastructure Investment and Jobs Act (IIJA; P.L. 117-58) November 2021
- Federal Highway Administration, 23 U.S.C. § 313 – Buy America; 23 C.F.R. § 635.410
- Federal Transit Administration, 49 U.S.C. § 5323(j)(1); 49 C.F.R. Part 661
- Federal Aviation Administration, 49 U.S.C. §50101

TufTile galvanized steel, cast iron, and polymer detectable warning tiles and radius-wedges are manufactured in the United States from United States made materials in accordance with Buy America, 23 C.F.R § 635.410 requirements.

A handwritten signature in cursive script that reads "Ted Meyers".

Ted Meyers
President

POLYMER SAFETY DATA SHEET (SDS)



SECTION I: MATERIAL IDENTIFICATION

PRODUCT NAME: Thermoplastic Polymer
CHEMICAL FAMILY: Polyolefin
MANUFACTURER: TufTile®
CONTACT ADDRESS: 905 Telser Rd., Lake Zurich, IL 60047
PHONE: (888) 960-8897

SECTION II: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components: None
Composition: Proprietary Polyolefin
Melting Temperature: 293 Degrees Fahrenheit

SECTION III: PHYSICAL CHARACTERISTICS

Emergency Overview: This material is NOT HAZARDOUS by OSHA Hazard
Appearance and Odor: Solid Mass, No Odor
Specific Gravity: 1.1-1.25
Freezing Point: N/A
Solubility in Water: N/A
% Volatile by Volume: N/A
Boiling Point: N/A
pH: N/A

SECTION IV: FIRE AND EXPLOSION INFORMATION

Flammability: Class A Rating
Means of Extinction: Water or Chemical Fire Extinguisher
Special Procedures: None
Explosion Data: None Known
Sensitivity of Mechanical impact: None
Hazardous Combustion: None Known
Auto ignition Temp: 410 Degrees Celsius
Sensitivity to Static: N/A

SECTION V: HEALTH HAZARD DATA

Permissible Exposure: N/A for product (See Section II above)

SECTION VI: REACTIVITY DATA

Chemical Stability: Yes
Reactivity: N/A

SECTION VII: SPILL OR LEAK PROCEDURES

Spill: None (Solid Mass Product)
Waste Disposal: Recycle or deposit in landfill in accordance to local, state and federal regulations

SECTION VIII: PROTECTIVE EQUIPMENT TO BE USED:

Protective Gloves: Wear resistant gloves
Eye Protection: Wear safety glasses when cutting panels

SECTION IX: LEGAL DISCLAIMER

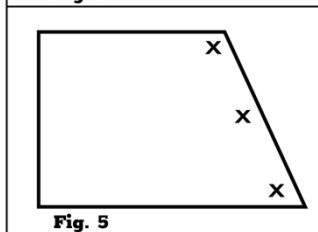
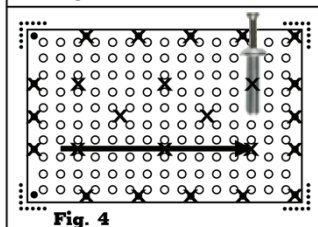
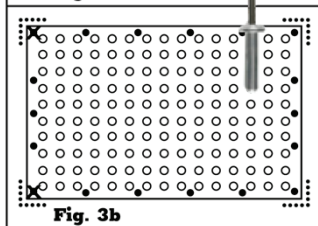
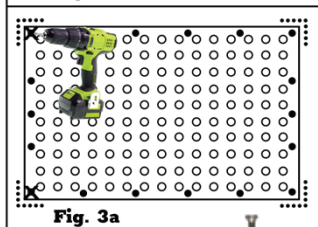
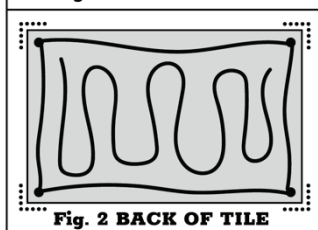
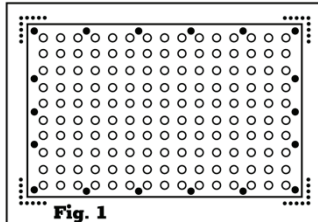
The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.



POLYMER SURFACE APPLIED (REPLACEABLE) INSTALLATION INSTRUCTIONS

Read installation instructions thoroughly before you begin.

For Federal compliance documents [click here](#).



1. Surface must be clean and free of debris before beginning. A wire brush or cup grinder may be needed to address any imperfections.
2. Place tile on surface where it is to be installed and mark the corners. (Fig. 1)
3. Remove and apply sealant to the back side of the tile as required. (Fig. 2)
NOTE: Use sealant according to manufacturer's recommendation.
4. Place tile in marked location. Using a 1/4" masonry bit, drill 2" minimum deep holes (Fig. 3a) and insert 2 drive pin fasteners. (Fig. 3b) **NOTE: Do not drive pins in yet as they are to keep tile in place while drilling remaining holes.**
5. Continue drilling holes in the anchor locations going across the tile. (For surface applied use center most holes in the field.) Once all holes are drilled, clean the tile with a broom or industrial shop vac before inserting the remaining drive pins. [Click here](#) for information on OSHA standard §1926.1153 Respirable Crystalline Silica.
6. Insert drive pins in all remaining holes and hammer them in moving across the tile in one direction. (Fig. 4) **NOTE: Only drive the pin so that it is even with the head of the anchor.**

IMPORTANT: WHEN INSTALLING MULTIPLE LINEAR TILES, A 1/8" SPACE IS REQUIRED TO ALLOW FOR EXPANSION.



NOTE: If a tile is cut, new holes need to be drilled and anchors inserted along the edge. (Fig. 5)

Installation is now complete.

Radius TufTile® Installation

Place tiles and radius wedge pieces on the surface. Once you're satisfied with the layout, continue with steps 2-6 above.

NOTE: Any adjustments needed should be done before fastening the tiles.

[Click here](#) for more information including an installation video tutorial.

Contact us at 888-960-8897 with questions.

COMPUESTO DE POLÍMERO APLICACIÓN SUPERFICIAL (REEMPLAZABLE) INSTRUCCIONES DE INSTALACIÓN

Lea por completo las instrucciones de instalación antes de empezar.

[Haga clic aquí](#) para los documentos de cumplimiento federal.

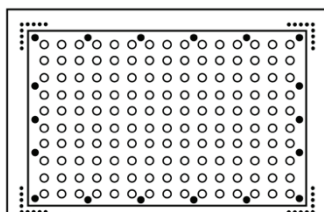


Fig. 1

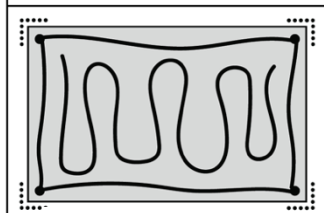


Fig. 2 Lado posterior

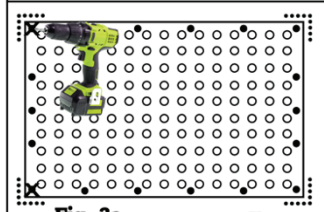


Fig. 3a

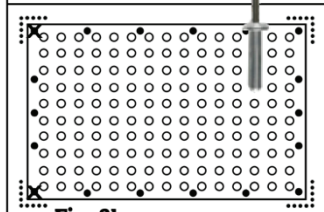


Fig. 3b

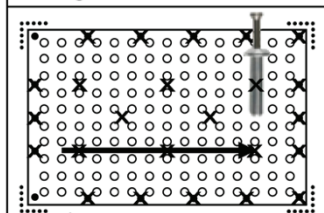


Fig. 4

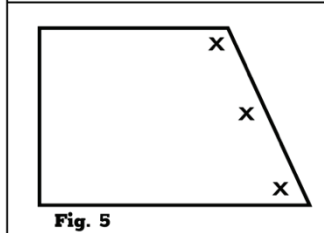


Fig. 5

1. La superficie debe estar limpia y libre de suciedad antes de empezar. Puede ser necesario usar un cepillo de alambre o una amoladora de hormigón para eliminar imperfecciones.
2. Ponga la baldosa sobre la superficie donde será instalada y marque las esquinas. (Fig. 1)
3. Levántela y póngale un pegamento al lado posterior de la baldosa como sea necesario. (Fig. 2) **NOTA:** Use el pegamento según las instrucciones del fabricante.
4. Ponga la baldosa en su ubicación marcada. Con una broca para mampostería de 1/4", haga hoyos de un mínimo de 2" (Fig. 3a) e inserte dos pasadores de impulsión. (Fig. 3b) **NOTA: No insertar los pasadores todavía ya que sirven para mantener la baldosa en su lugar mientras haga los demás hoyos.**
5. Continúe haciendo hoyos en los puntos de anclaje a lo largo de la baldosa. (Para superficie aplicado use los hoyos mas hacia el centro.) Una vez hechos los hoyos, limpie la baldosa con una escoba o aspiradora industrial antes de insertar el resto de los pasadores. [Haga clic aquí](#) para más información sobre el estándar OSHA §1926.1153 Respirable Crystalline Silica.
6. Inserte los pasadores de impulsión en todos los hoyos y martíllelos moviéndolos a través de la baldosa en una sola dirección. (Fig. 4) **NOTA: Martille el pasador sólo hasta que esté parejo con la cabeza del anclaje. IMPORTANTE: ES NECESARIO DEJAR UN ESPACIO DE 1/8" CUANDO SE INSTALEN MÚLTIPLES BALDOSAS LINEARES PARA PERMITIR EXPANSIÓN.**



NOTA: Si se corta una baldosa hay que hacer hoyos nuevos e insertar más pasadores a lo largo del borde. (Fig. 5)

La instalación ya está completa.

Instalación de Radio TufTile®

Ubique las baldosas y las piezas cñas sobre la superficie. Una vez satisfecho con el montaje, siga con los pasos 2-6 de arriba.

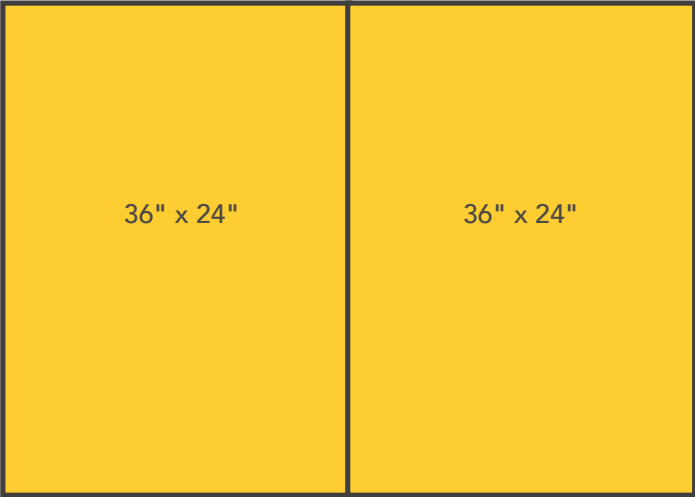
NOTA: Haga cualquier ajuste al montaje antes de fijar las baldosas.

[Haga clic aquí](#) para más información incluyendo un video tutorial de la instalación. Llámenos al 888-960-8897 con sus preguntas.

STATE OF CALIFORNIA
POLYMER RAMP LAYOUT

RAMP SIZE

3' x 4'



TILE SIZE

36" x 24"

QUANTITY

2

24" X 12" TILE (REPLACEABLE)

POLYMER DETECTABLE WARNING TILE

2.350 DOME SPACING

TufTile®

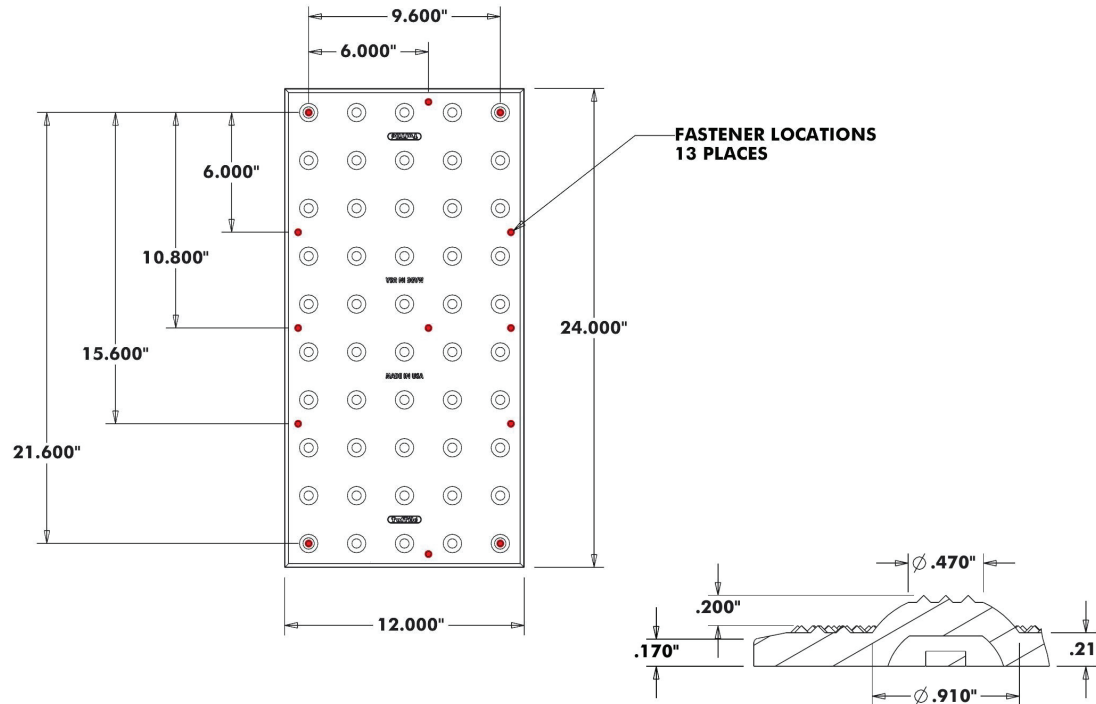
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TOLERANCE	+/- 0.050	SCALE	REV	DATE	

NOTES:

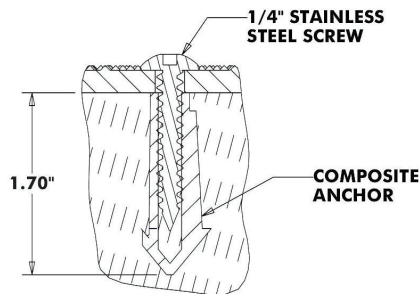
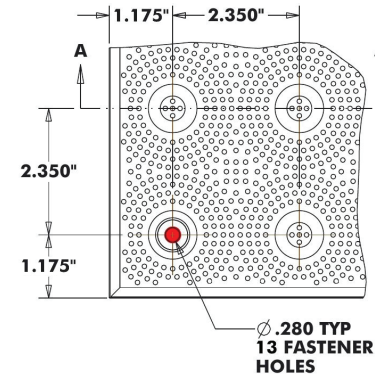
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"XX" SA DESIGNATES SURFACE APPLIED

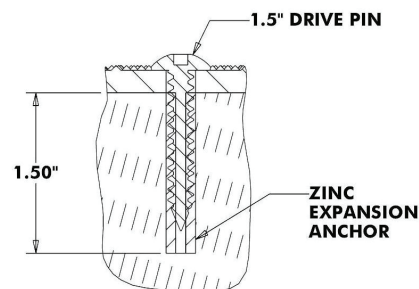
"XXX" DESIGNATES COLOR



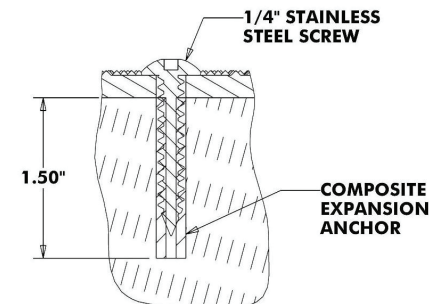
SECTION A-A



WET SET ANCHOR DETAIL
(FRESH CONCRETE)



EXPANSION ANCHOR DETAIL
(HARDENED CONCRETE)



EXPANSION ANCHOR DETAIL
(ASPHALT)



TufTile.com

1-888-960-8897

905 Telser Road, Lake Zurich, IL 60047

24" X 24" TILE (REPLACEABLE)

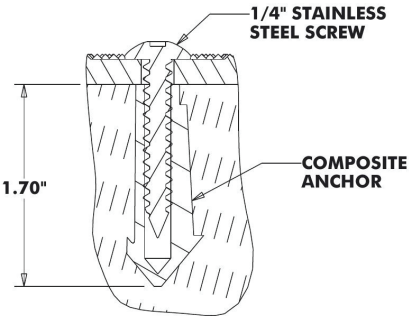
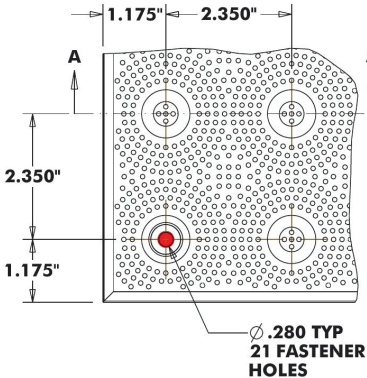
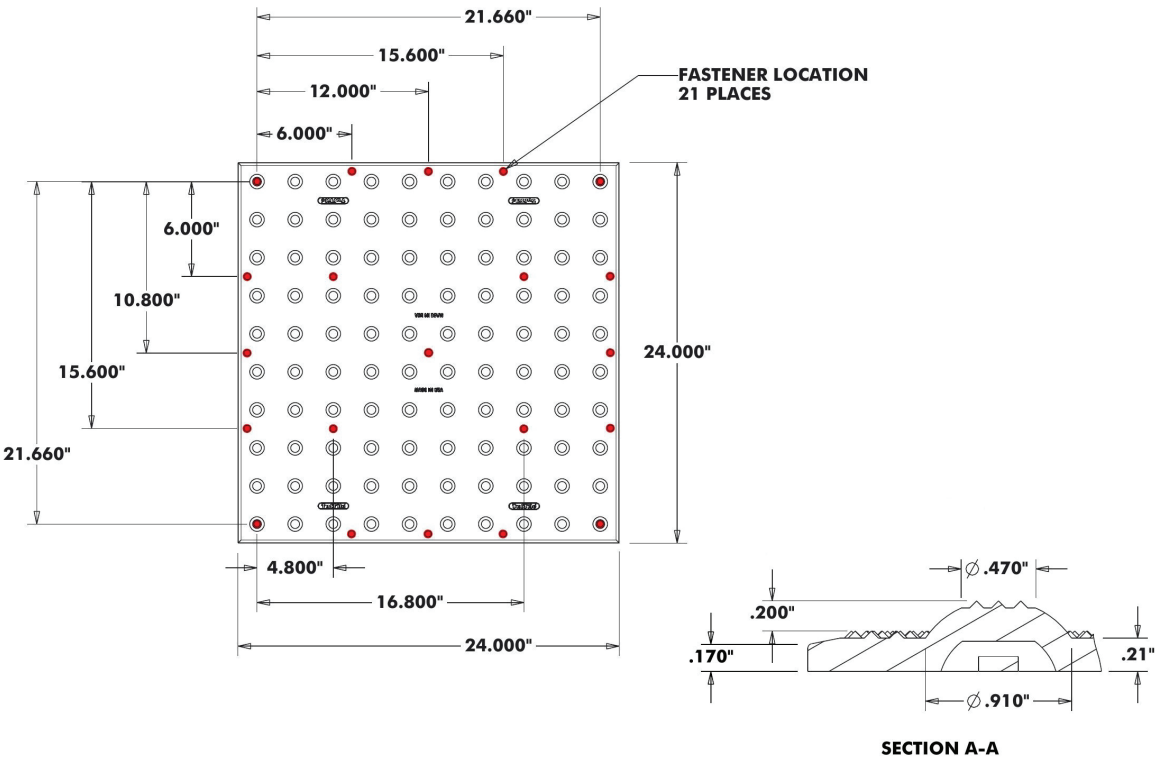
POLYMER DETECTABLE WARNING TILE

2.350 DOME SPACING

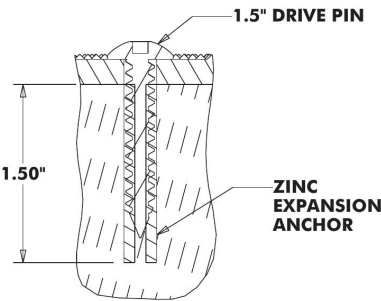


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TOLERANCE	+/- 0.050	SCALE	REV	DATE	

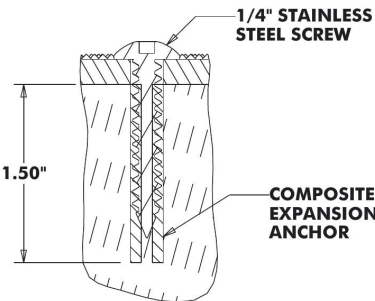
NOTES:
 "XX" WS DESIGNATES WET SET
 "XX" SA DESIGNATES SURFACE APPLIED
 "XXX" DESIGNATES COLOR



WET SET ANCHOR DETAIL
(FRESH CONCRETE)



EXPANSION ANCHOR DETAIL
(HARDENED CONCRETE)



EXPANSION ANCHOR DETAIL
(ASPHALT)



24" X 36" TILE (REPLACEABLE)

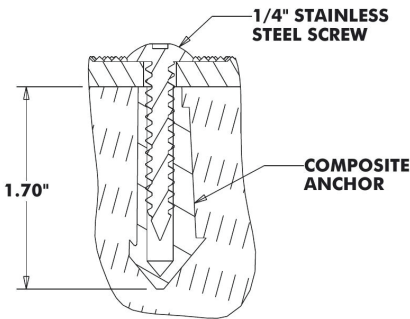
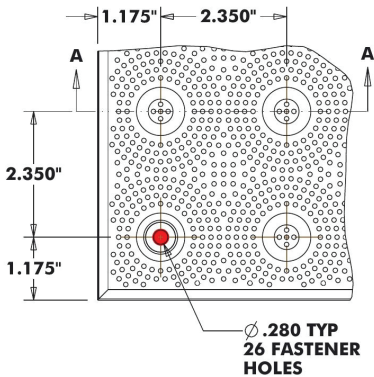
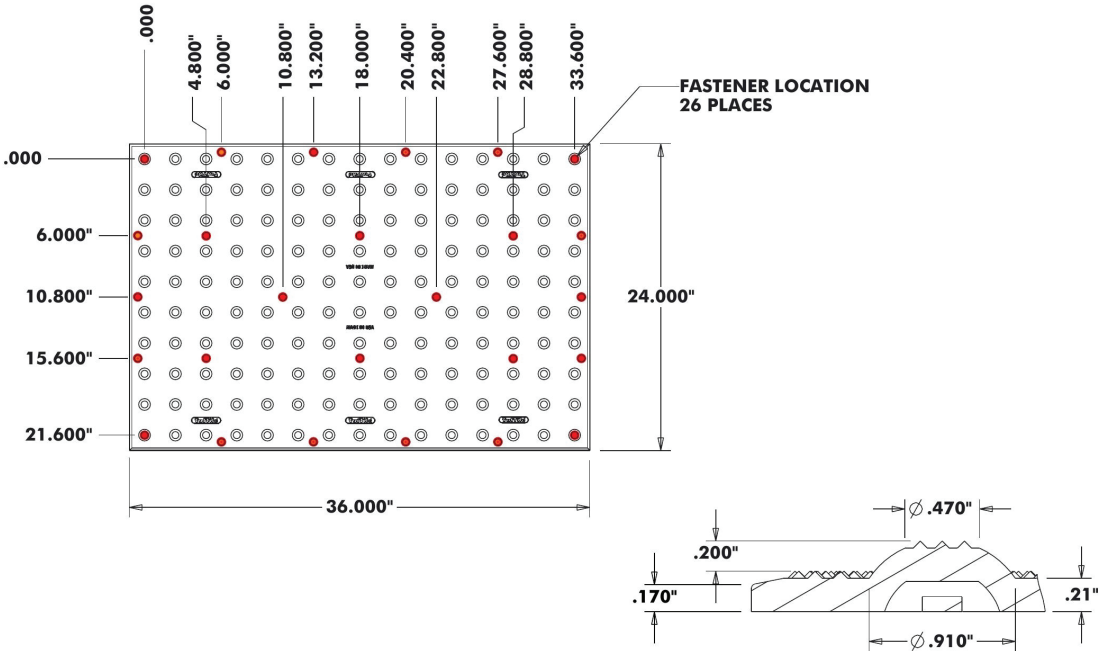
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2.350 DOME SPACING

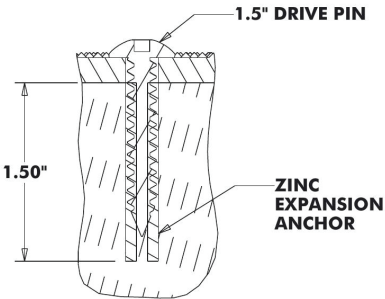


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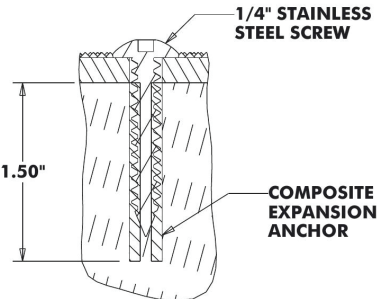
NOTES:
 "XX" WS DESIGNATES WET SET
 "XX" SA DESIGNATES SURFACE APPLIED
 "XXX" DESIGNATES COLOR



WET SET ANCHOR DETAIL
(FRESH CONCRETE)



EXPANSION ANCHOR DETAIL
(HARDENED CONCRETE)



EXPANSION ANCHOR DETAIL
(ASPHALT)



24" X 48" TILE (REPLACEABLE)

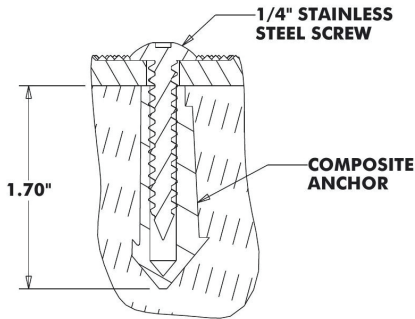
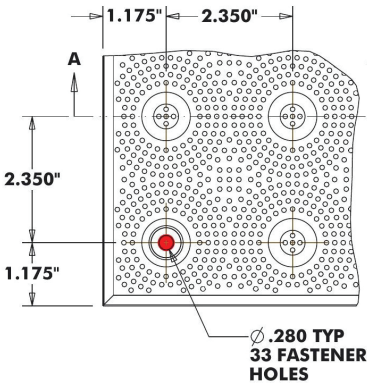
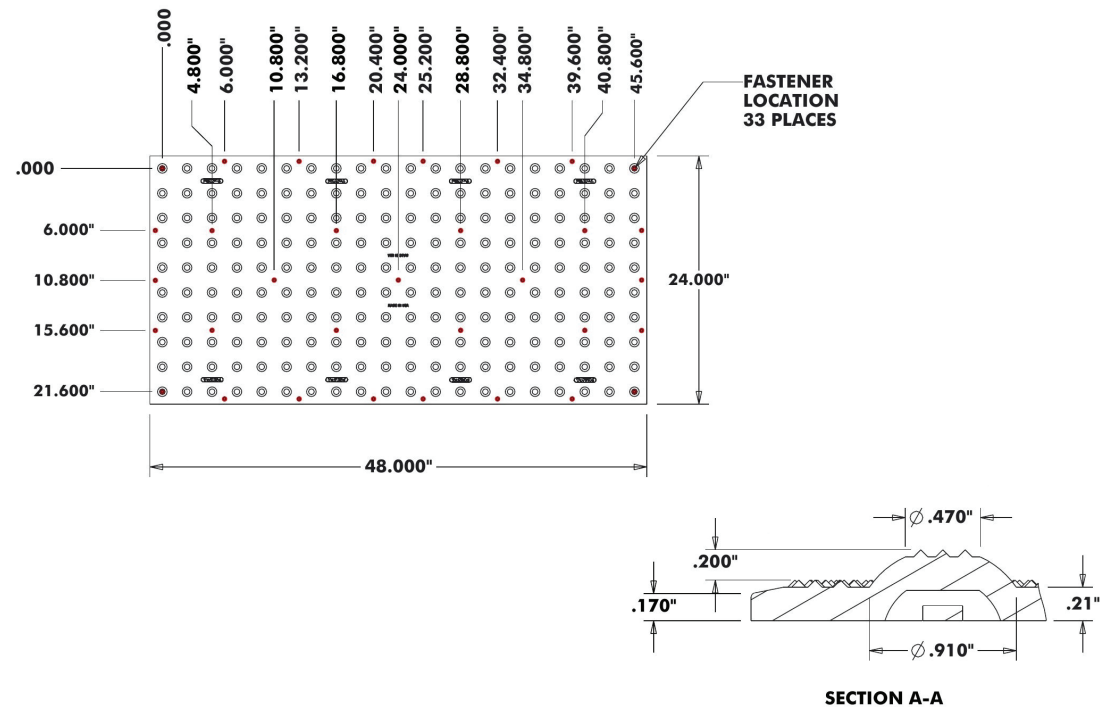
POLYMER DETECTABLE WARNING TILE

2.350 DOME SPACING

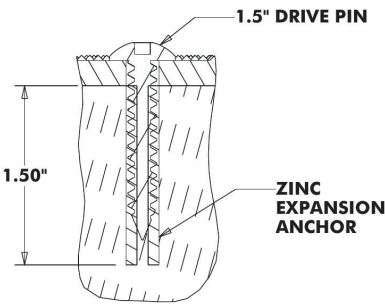


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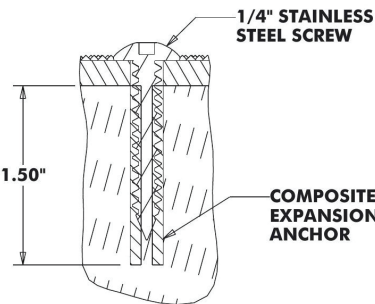
NOTES:
 "XX" WS DESIGNATES WET SET
 "XX" SA DESIGNATES SURFACE APPLIED
 "XXX" DESIGNATES COLOR



WET SET ANCHOR DETAIL
(FRESH CONCRETE)



EXPANSION ANCHOR DETAIL
(HARDENED CONCRETE)



EXPANSION ANCHOR DETAIL
(ASPHALT)



24" X 60" TILE (REPLACEABLE)

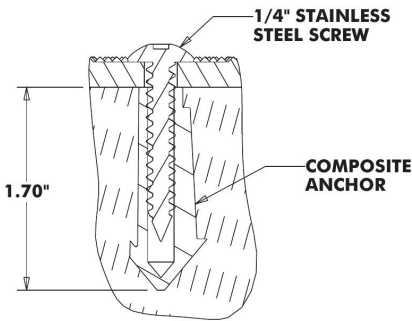
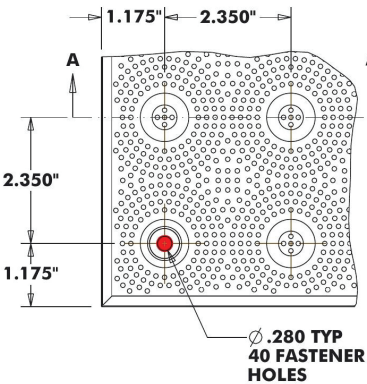
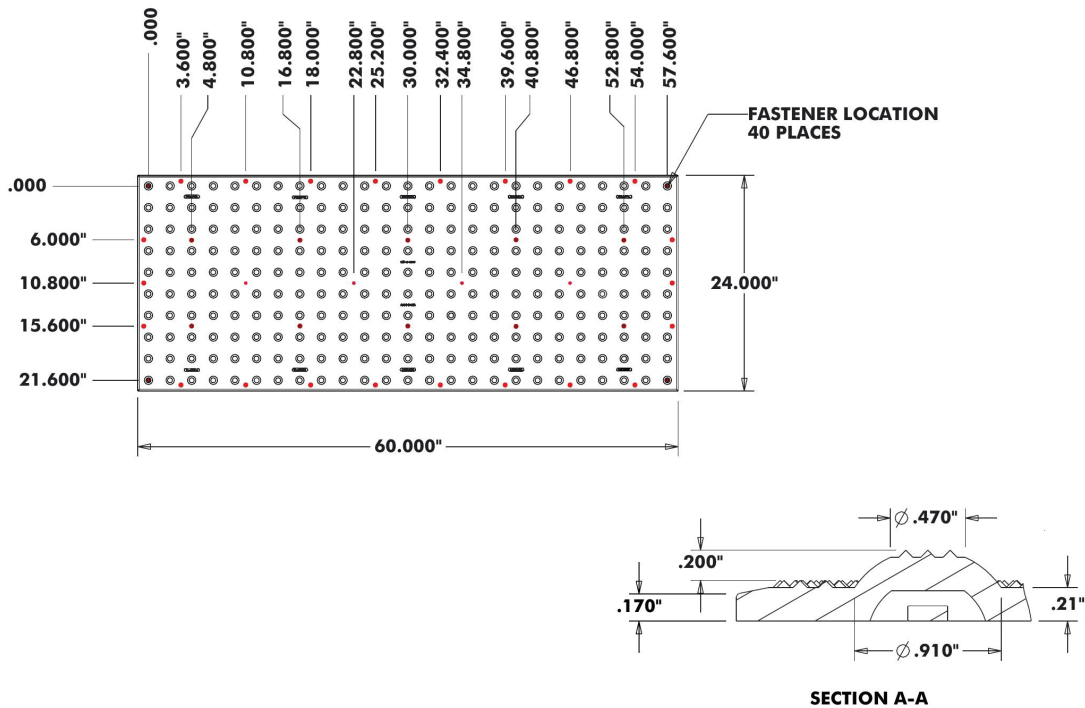
POLYMER DETECTABLE WARNING TILE

2.350 DOME SPACING

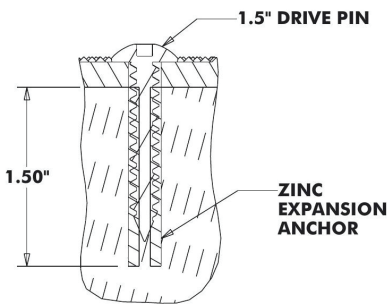


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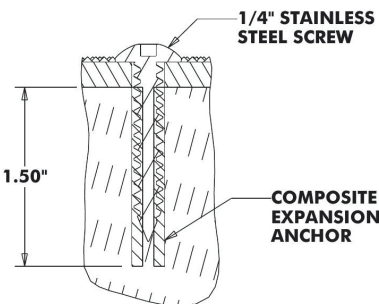
NOTES:
 "XX" WS DESIGNATES WET SET
 "XX" SA DESIGNATES SURFACE APPLIED
 "XXX" DESIGNATES COLOR



WET SET ANCHOR DETAIL
(FRESH CONCRETE)



EXPANSION ANCHOR DETAIL
(HARDENED CONCRETE)



EXPANSION ANCHOR DETAIL
(ASPHALT)



POLYMER 5-YEAR LIMITED WARRANTY

TufTile, Inc. values your business, and the TufTile, Inc. tactile tile (the "product") you purchased comes with a limited warranty that the product will be free from defects for a period of five years from date of installation subject to ordinary wear and tear. Failure to comply with recommended applications and installation of the product voids this warranty. Customer misuse including negligence, physical abuse and defects resulting from improper installation or resulting from outside forces (including, but not limited to, snow plows causing damage) are not covered by this warranty. Local building codes may require minimum tactile tile performance specifications. TufTile, Inc. does not warrant product installations that violate building codes. While within the limited warranty period, if the product is not in good working order for its intended purposes, a replacement product shall be made available to the purchaser of the product. Purchaser's remedy is limited to replacement of the product and no consequential or incidental damages and costs (including, but not limited to, lost profits, labor or transportation costs in connection with the removal, replacement and installation of the product) are recoverable or within the coverage of this limited warranty. Any representations made in connection with the sale of this product that differs from the terms of this limited warranty are not covered and should be brought to the attention of TufTile, Inc. immediately. No claim for replacement of a defective product will be honored without TufTile, Inc.'s reservation of its right to inspect the product for the claimed defect and its determination that the replacement of the product is covered by this warranty. The term of this limited warranty shall commence on the date of installation. Proof of purchase shall be required to be eligible for this warranty and to establish the commencement date of this limited warranty. No warranty replacement of the product is provided unless the purchaser's written replacement claim is submitted to TufTile, Inc. before the expiration of five years from the date of installation of the product.

CALTRANS 5-YEAR LIMITED WARRANTY

TufTile, Inc. further warrants to the purchaser, Caltrans, or any assignee against defects in materials and workmanship of dome shape, color fastness, sound-on-cane acoustic quality, resilience, and attachment for a period of five (5) years from date of installation. The remedy for product noncompliance with this warranty shall be repair or replacement of the product, whichever is reasonably determined within assignee's sole discretion. This warranty is assignable without limitation or derogation of any representations, other warranties, or any other obligations. This warranty is governed under the laws of the State of California.

TO THE MAXIMUM EXTENT APPLICABLE AND ALLOWABLE UNDER LAW, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE OF THE TUFTILE INC. LIMITED WARRANTY, AND TUFTILE INC. DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE PRODUCT, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. TO THE MAXIMUM EXTENT ALLOWABLE BY FEDERAL AND STATE LAW, THIS WARRANTY SUPPLEMENTS OR SUPERSEDES FEDERAL AND STATE CONSUMER GOODS WARRANTY PROTECTION.

FEDERAL LAW AND DETECTABLE WARNING SURFACES

The Americans with Disabilities Act (ADA) (42 U.S.C. 12101 et seq.) is a federal civil rights law that prohibits discrimination against individuals with disabilities. The regulations issued by the Department of Justice include accessibility standards for the design, construction, and alteration of facilities. One of those requirements requires installation of detectable warning surfaces as described in these sections of the ADA Accessibility Guidelines (ADAAG) for Public Rights-Of-Way (July 26, 2011). To view the entire proposed guidelines document, go to www.access-board.gov.

R305.1.1 Dome Size

The truncated domes shall have a base diameter of 23 mm (0.9 in) minimum and 36 mm (1.4 in) maximum, a top diameter of 50 percent of the base diameter minimum and 65 percent of the base diameter maximum, and a height of 5 mm (0.2 in).

R305.1.2 Dome Spacing

The truncated domes shall have a center-to-center spacing of 41 mm (1.6 in) minimum and 61 mm (2.4 in) maximum, and a base-to-base spacing of 17 mm (0.65 in) minimum, measured between the most adjacent domes.

R305.1.3 Contrast

Detectable warning surfaces shall contrast visually with adjacent gutter, street or highway, or pedestrian access route surface, either light-on-dark or dark-on-light.

R305.1.4 Size

Detectable warning surfaces shall extend 610 mm (2.0 ft) minimum in the direction of pedestrian travel. At curb ramps and blended transitions, detectable warning surfaces shall extend the full width of the ramp run (excluding any flared sides), blended transition, or turning space. At pedestrian at-grade rail crossings not located within a street or highway, detectable warnings shall extend the full width of the crossing. At boarding platforms for buses and rail vehicles, detectable warning surfaces shall extend the full length of the public use areas of the platform. At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, detectable warning surfaces shall extend the full length of the transit stop.

R305.2 Placement

The placement of detectable warning surfaces shall comply with R305.2.

R305.2.1 Perpendicular Curb Ramps

On perpendicular curb ramps, detectable warning surfaces shall be placed as follows:

1. Where the ends of the bottom grade break are in front of the back of curb, detectable warning surfaces shall be placed at the back of curb.
2. Where the ends of the bottom grade break are behind the back of curb and the distance from either end of the bottom grade brake to the back of curb is 1.5 m (5.0 ft) or less, detectable warning surfaces shall be placed on the ramp run within one dome spacing of the bottom grade break.
3. Where the ends of the bottom grade break are behind the back of curb and the distance from either end of the bottom grade brake to the back of curb is more than 1.5 m (5.0 ft), detectable warning surfaces shall be placed on the lower landing at the back of curb.

R305.2.2 Parallel Curb Ramps

On parallel curb ramps, detectable warning surfaces shall be placed on the turning space at the flush transition between the street and sidewalk.

R305.2.3 Blended Transitions

On blended transitions, detectable warning surfaces shall be placed at the back of curb. Where raised pedestrian street crossings, depressed corners, or other level pedestrian street crossings are provided, detectable warning surfaces shall be placed at the flush transition between the street and the sidewalk.

R305.2.4 Pedestrian Refuge Islands

At cut-through pedestrian refuge islands, detectable warning surfaces shall be placed at the edges of the pedestrian island and shall be separated by a 610 mm (2.0 ft) minimum length of surface without detectable warnings.

R305.2.5 Pedestrian At-Grade Rail Crossings

At pedestrian at-grade rail crossings not located within a street or highway, detectable warning surfaces shall be placed on each side of the rail crossing. The edge of the detectable warning surface nearest the rail crossing shall be 1.8 m (6.0 ft) minimum and 4.6 m (15.0 ft) maximum from the centerline of the nearest rail. Where pedestrian gates are provided, detectable warning surfaces shall be placed on the side of the gates opposite the rail.

R305.2.6 Boarding Platforms

At boarding platforms for buses and rail vehicles, detectable warning surfaces shall be placed at the boarding edge of the platform.

R305.2.7 Boarding and Alighting Areas

At boarding and alighting areas at sidewalk or street level transit stops for rail vehicles, detectable warning surfaces shall be placed at the side of the boarding and alighting area facing the rail vehicles.