

TufTile's 165,000 sq. ft. manufacturing and distribution facility is located in Lake Zurich, IL.



TufTile®

ADA DETECTABLE WARNING PRODUCTS

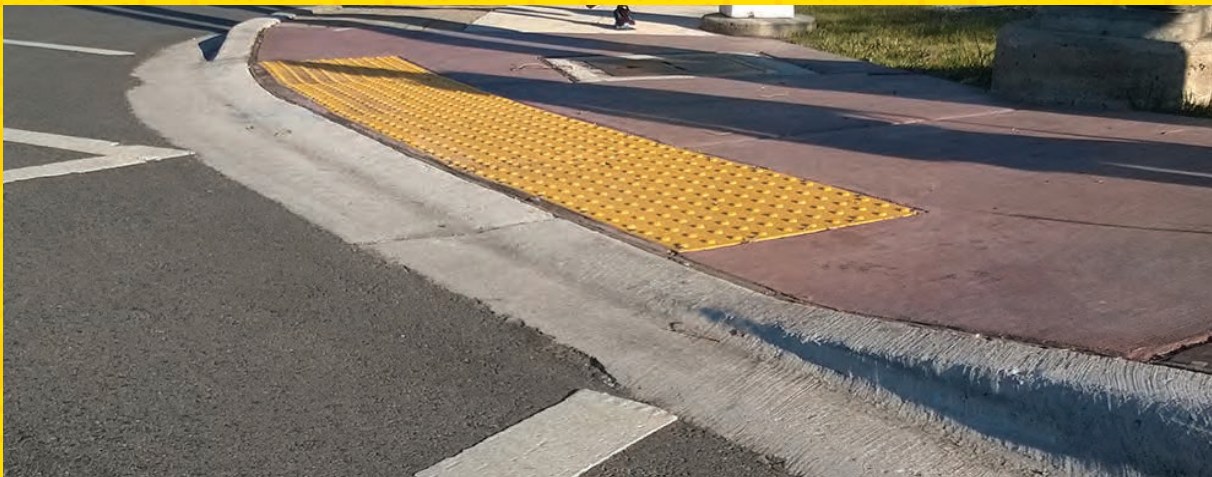
Surface-Applied

ADA COMPLIANT • DURABLE • REPLACEABLE

Radius

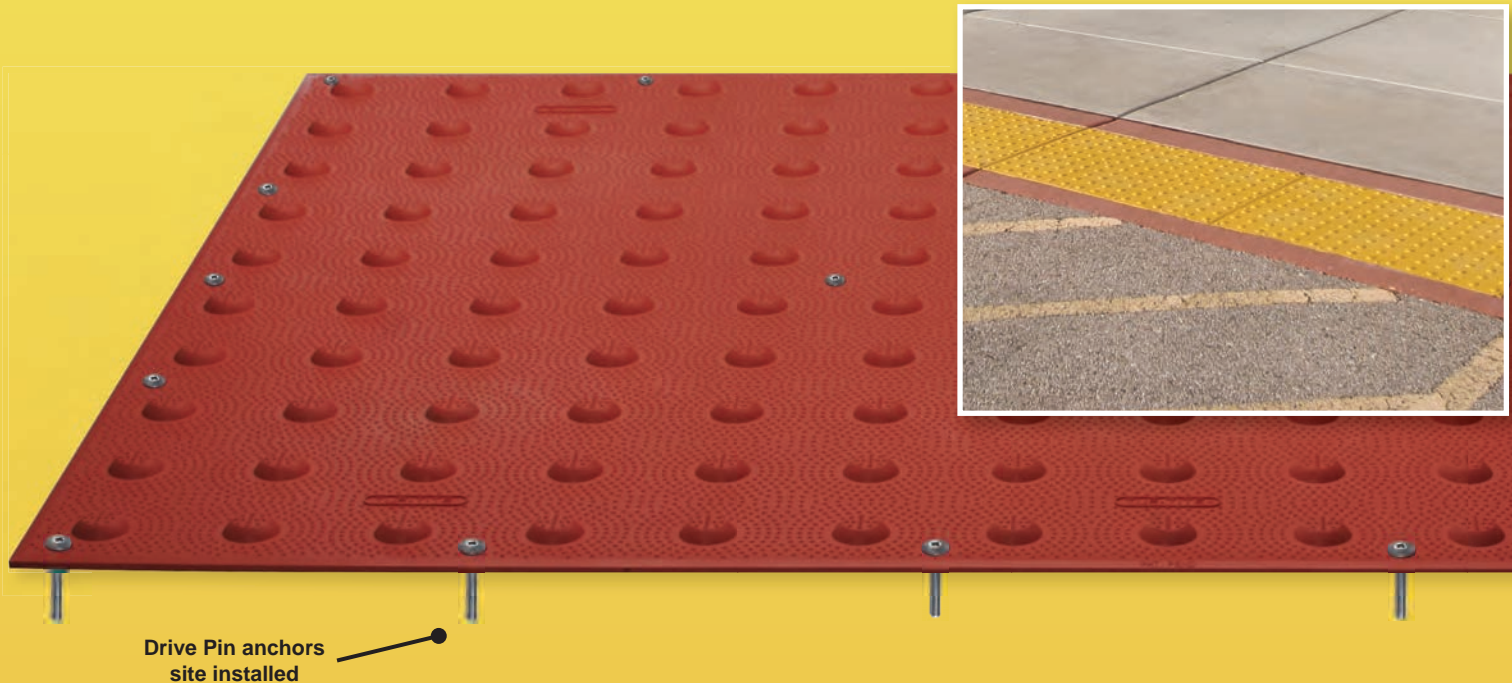


Polymer



www.TufTile.com

HIGH-IMPACT POLYMER TILES SURFACE-APPLIED (REPLACEABLE)



Surface-Applied (Replaceable) Tiles

TufTile® SA is a UV stabilized, high-impact polymer engineered for superior impact-resistance, slip-resistance, wear-resistance and long-term durability for retro-fit applications. Homogenous materials, uniformly distributed throughout the thickness of the tile provides for superior strength and color stability.

TufTile's combination of industrial strength sealant and tamper resistant drive pin anchors provide excellent adhesion strength.

TufTile's SA low profile coupled with beveled perimeter edges provides for an easy, safe transition from surrounding surfaces.

TufTile® SA has superior strength and durability features, our proprietary material retains enough flexibility to allow the tile to conform to irregularities found in existing concrete retro-fit applications.

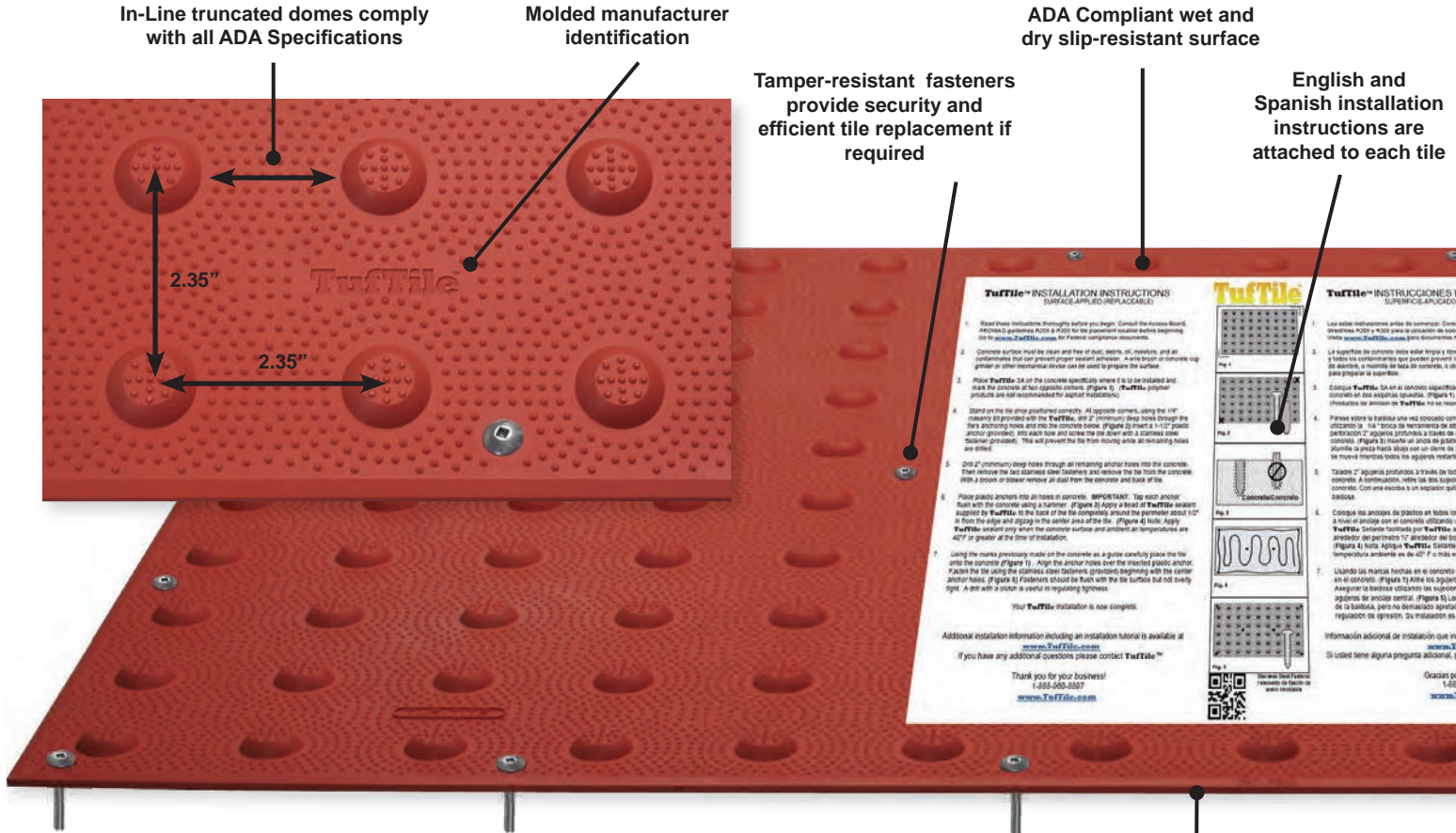
Cost-effective ADA compliant alternative to new concrete installation.

Complies with ADA "trip hazard" requirements.

TufTile® ADA Tiles have a 5-Year Limited Warranty – see website or contact customer service.

TUFTILE® TACTILE IS ADAAG / PROWAG / CA TITLE 24 COMPLIANT

PAT. NO. US D691,743 S



Surface-Applied Fastening System

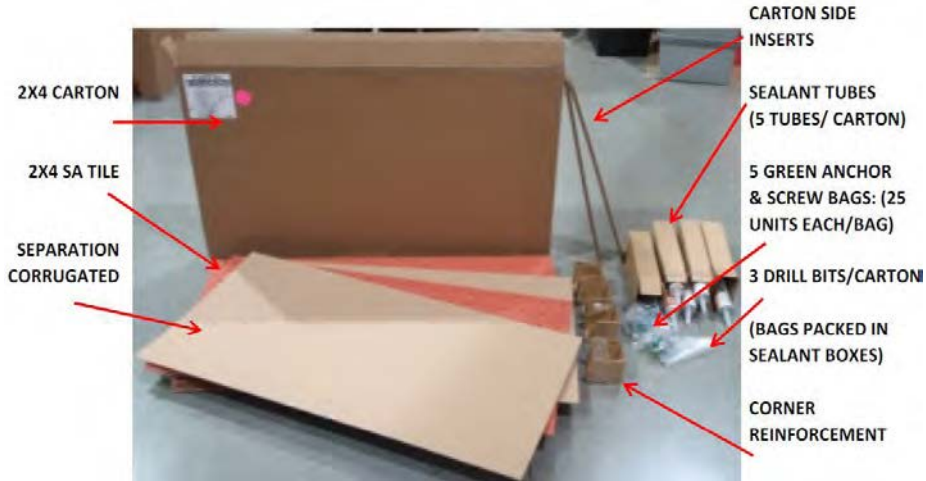


Beveled edges provide excellent transition egress, complies with ADA "trip hazard" requirements

TUFTILE SURFACE-APPLIED (REPLACEABLE) TILES

SIZES	Tiles/Cartron	Cartons/Pallet	COLORS					
			BRICK RED FED 22144 COLOR I.D. BRD	YELLOW FED 33538 COLOR I.D. YEL	DARK GRAY FED 36118 COLOR I.D. GRY	COLONIAL RED FED 20109 COLOR I.D. CRD	BLACK FED 37038 COLOR I.D. BLK	SAFETY RED FED 31350 COLOR I.D. SRD
2' X 1'	10	12						
2' X 2'	10	12						
2' X 3'	6	12						
2' X 4'	5	12						
2' X 5'	4	12						

TufTile Surface-Applied Packaging Design



Typical Surface-Applied Box Contents

TufTile®						
ADA TACTILE(POLYMER) PRODUCTS						
SURFACE-APPLIED						
COLOR	<input type="checkbox"/> Brick Red	<input type="checkbox"/> Colonial Red	<input type="checkbox"/> Yellow			
Tile Size	Tiles	Sealant	Screws	Anchors	Drill Bits	
2'x1'	10	2	13	15	2	
2'x2'	10	5	17	19	3	
2'x3'	6	6	20	22	2	
2'x4'	5	5	25	27	2	
2'x5'	4	4	30	32	3	

Carton Product Label



Accessory Packages
(Sealant, Screws, Anchors and Drill Bits)



Corner Reinforcement and Side Insert Placement

Panel Sizes, Quantities and Packaging Dimensions



Panel Size	2' x 1'	2' x 2'	2' x 3'	2' x 4'	2' x 5'
Units/Carton	10	10	6	5	4
Cartons/Pallet	12	12	12	12	12
Units/Pallet	120	120	72	60	48
Weight	380 lbs	721 lbs	666 lbs	752 lbs	716 lbs
Dimensions	25"x25"x12"	40"x40"x57"	40"x40"x48"	50"x41"x36"	52"x62"x30"

TufTile Radius Calculator

Reset Values

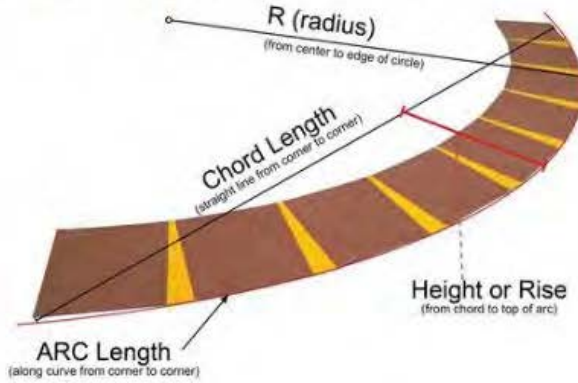
Feet/Inches
 Metric

Polymer Cast Iron

Radius Length feet
 Have Radius Have Height

Chord Length feet
 Have Chord Length Have Arc Length

Arc Length Segment Length (tile + wedge) Arc Overrun Variance



Recommended Tile Size Quantity
 Recommended Wedge Size Quantity

Calculate

Enter values in the 2 fields provided (Radius Length and Chord Length) then click the 'Calculate' button to create the estimate for your Radius installation. You can enter the Height or Rise in lieu of the Radius Length. Arc Length can be used as an alternative to the Chord as well. The recommended Tile Size, Wedge Size and their respective Quantities will display in the space provided.

The Metric option will expect the lengths to be entered in Meters.

Polymer vs Cast Iron will make use of the 24"x36" tiles or 24"x30" respectively as required.

The values 'arc length', 'segment length', 'arc overrun' and 'variance' are informational.

Arc Length is calculated when the chord length is given. Segment Length is known by adding the top edge lengths of 1 selected Tile and Wedge. Arc overrun is the remainder when the Arc Length is different than the sum of the Tiles and Wedges. Variance occurs when the Radius calculated is different than the Radius made from the suggested components. The variance amount is the distance between those two values.

The Size change warning line will display when the program calculates an 'Arc overrun' that is negative. In the case when a smaller tile will leave less extra radius it recommends that instead of just adding another equal width tile. So if the job calls for 7 24"x24" tiles and 7 wedges and it leaves less than 14 inches of remaining radius, it tells the user to order 1 24"x12" tile instead of another 24"x24". The same goes for 30" and 36" wide tiles where it can substitute a 24"x12" or 24"x24" as required. This is only a suggested solution.

Our Radius calculator is provided as a reference to help you estimate the amount of material you need for your project. This calculator provides an ESTIMATE.

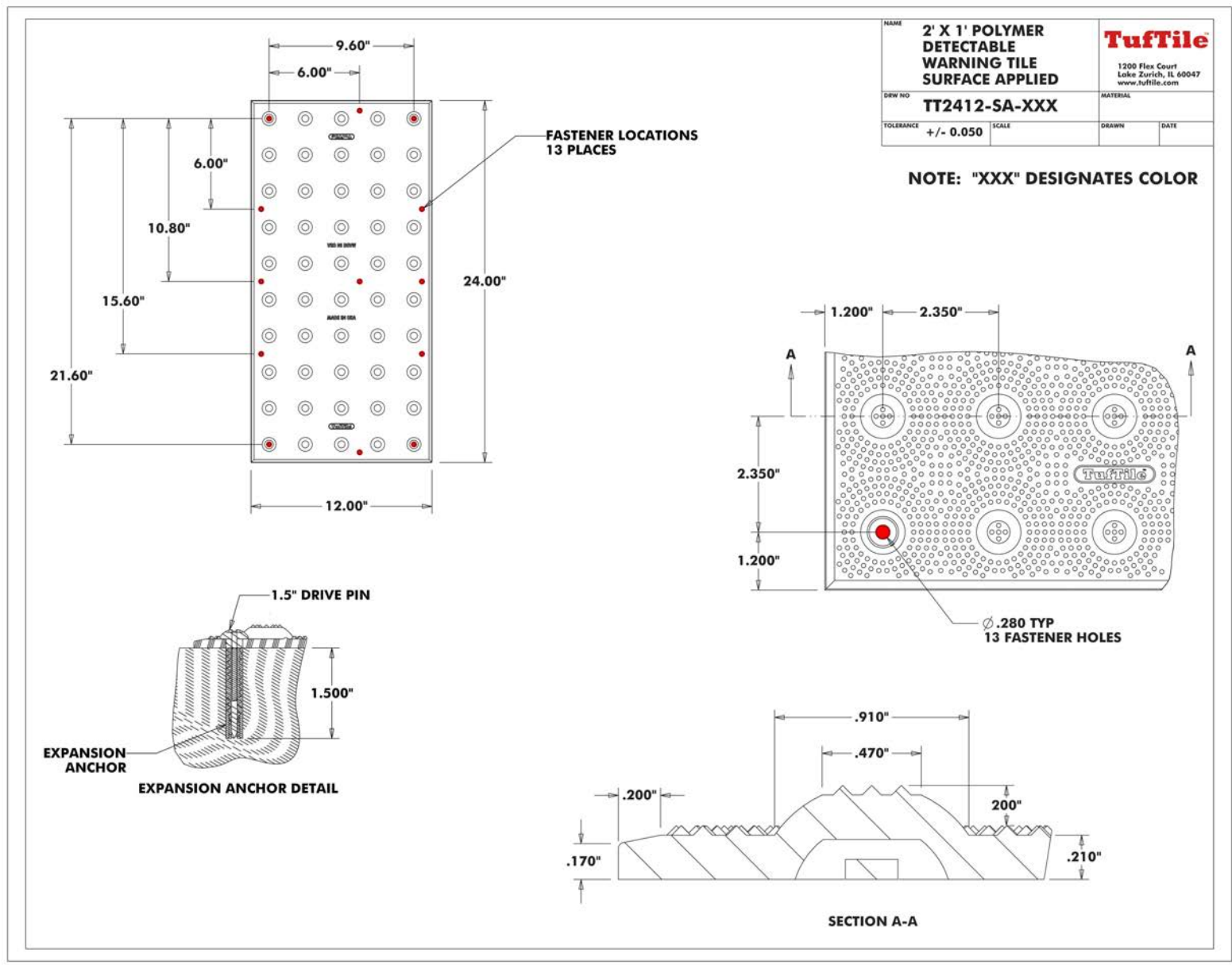
*Coverage is affected by a number of factors. ** In order for us to ensure that you have adequate material for your job, please round up to the nearest foot.*



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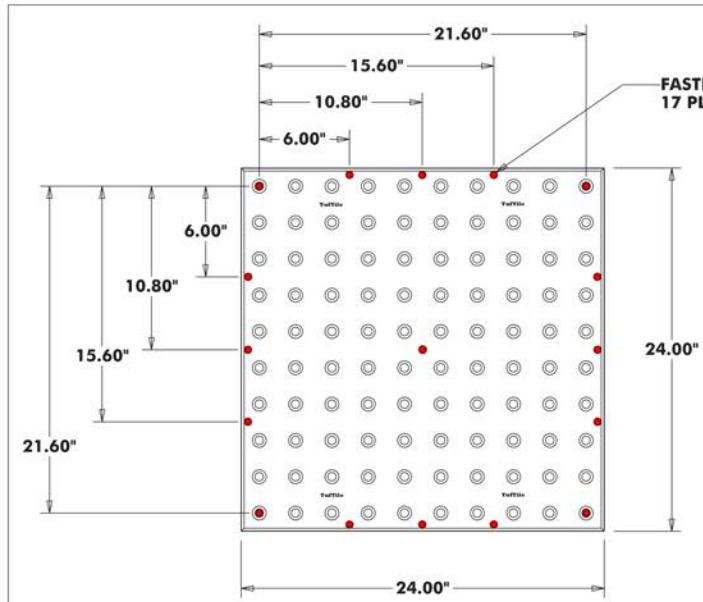
2' X 1' SURFACE APPLIED (REPLACEABLE) TACTILE TILE 2.350 DOME SPACING

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com



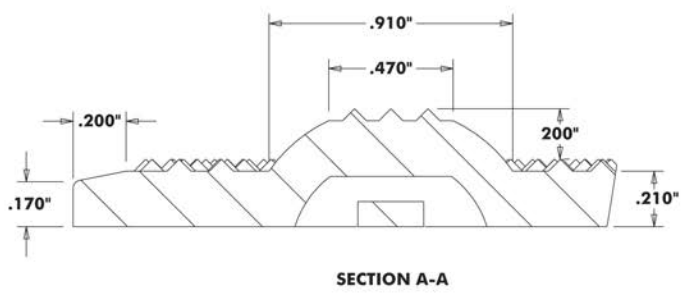
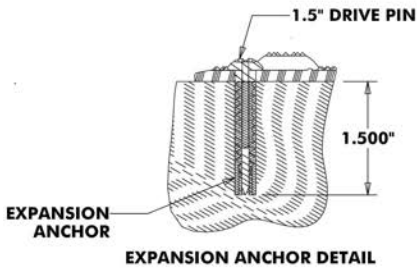
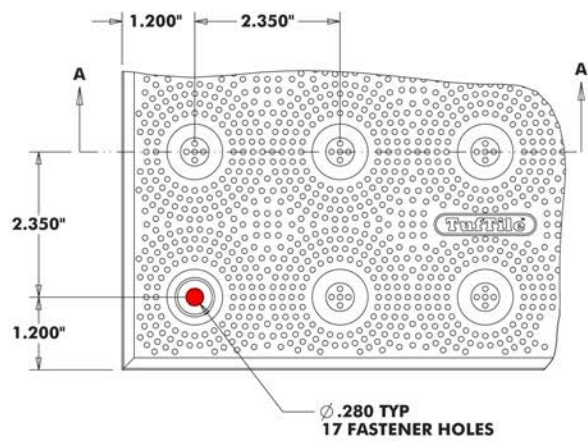
2' X 2' SURFACE APPLIED (REPLACEABLE) TACTILE TILE 2.350 DOME SPACING

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com



NAME	2' X 2' POLYMER DETECTABLE WARNING TILE SURFACE APPLIED		TufTile 1200 Flex Court Lake Zurich, IL 60047 www.tuftile.com	
DRW NO	TT2424-SA-XXX		MATERIAL	
TOLERANCE	+/- 0.050	SCALE	DRAWN	DATE

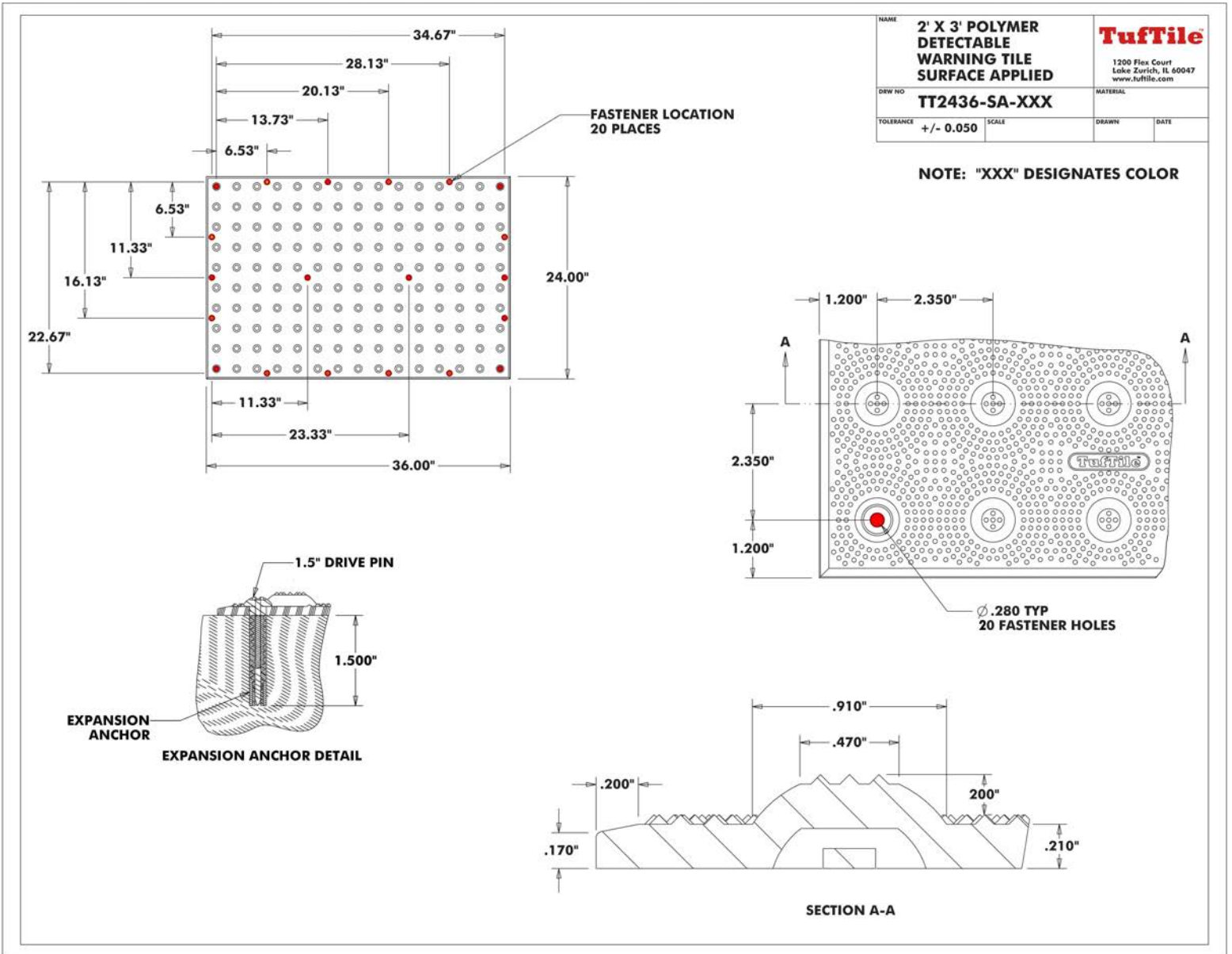
NOTE: "XXX" DESIGNATES COLOR



2' X 3' SURFACE APPLIED (REPLACEABLE)

TACTILE TILE
2.350 DOME SPACING

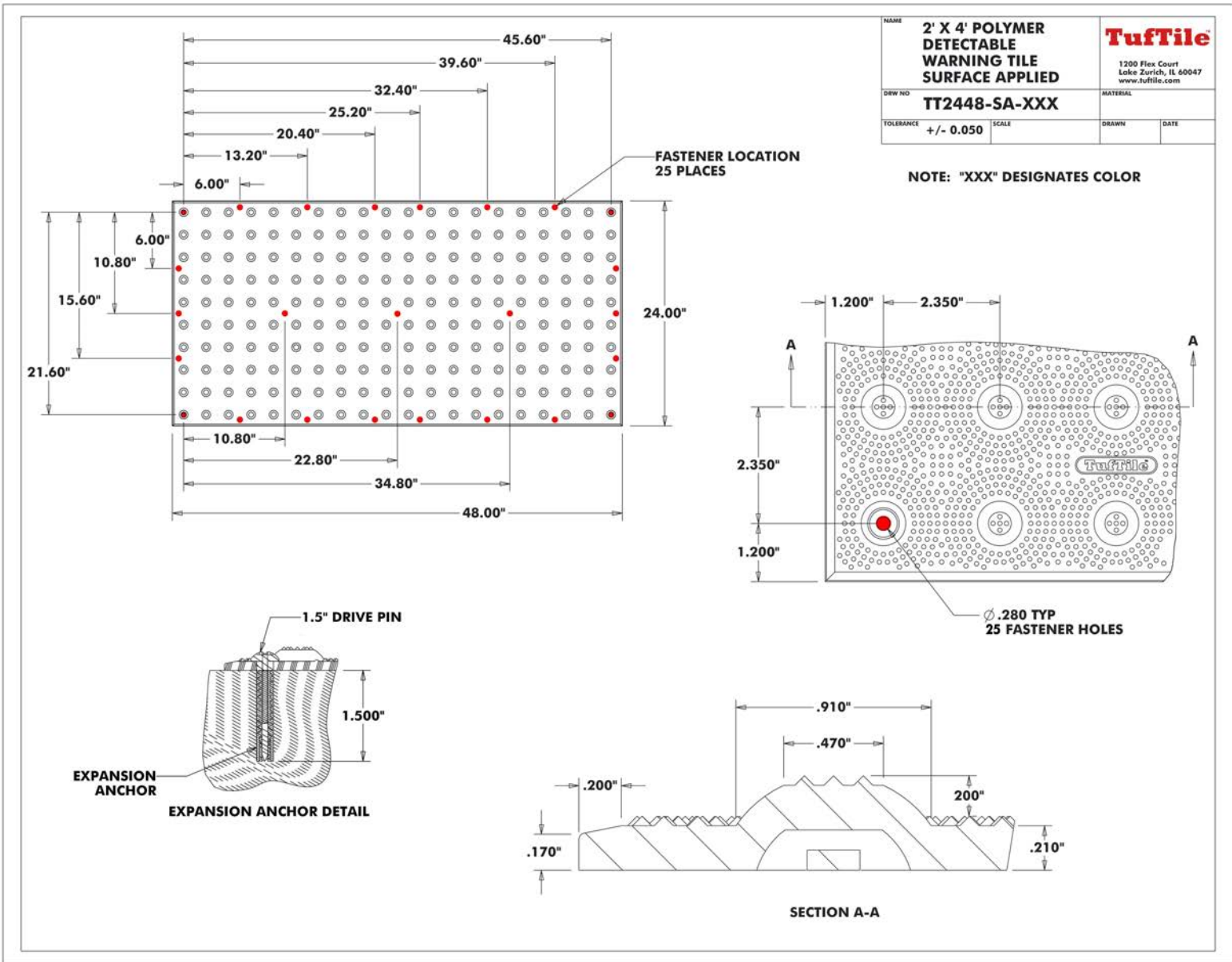
TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com



2' X 4' SURFACE APPLIED (REPLACEABLE) TACTILE TILE

2.350 DOME SPACING

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com

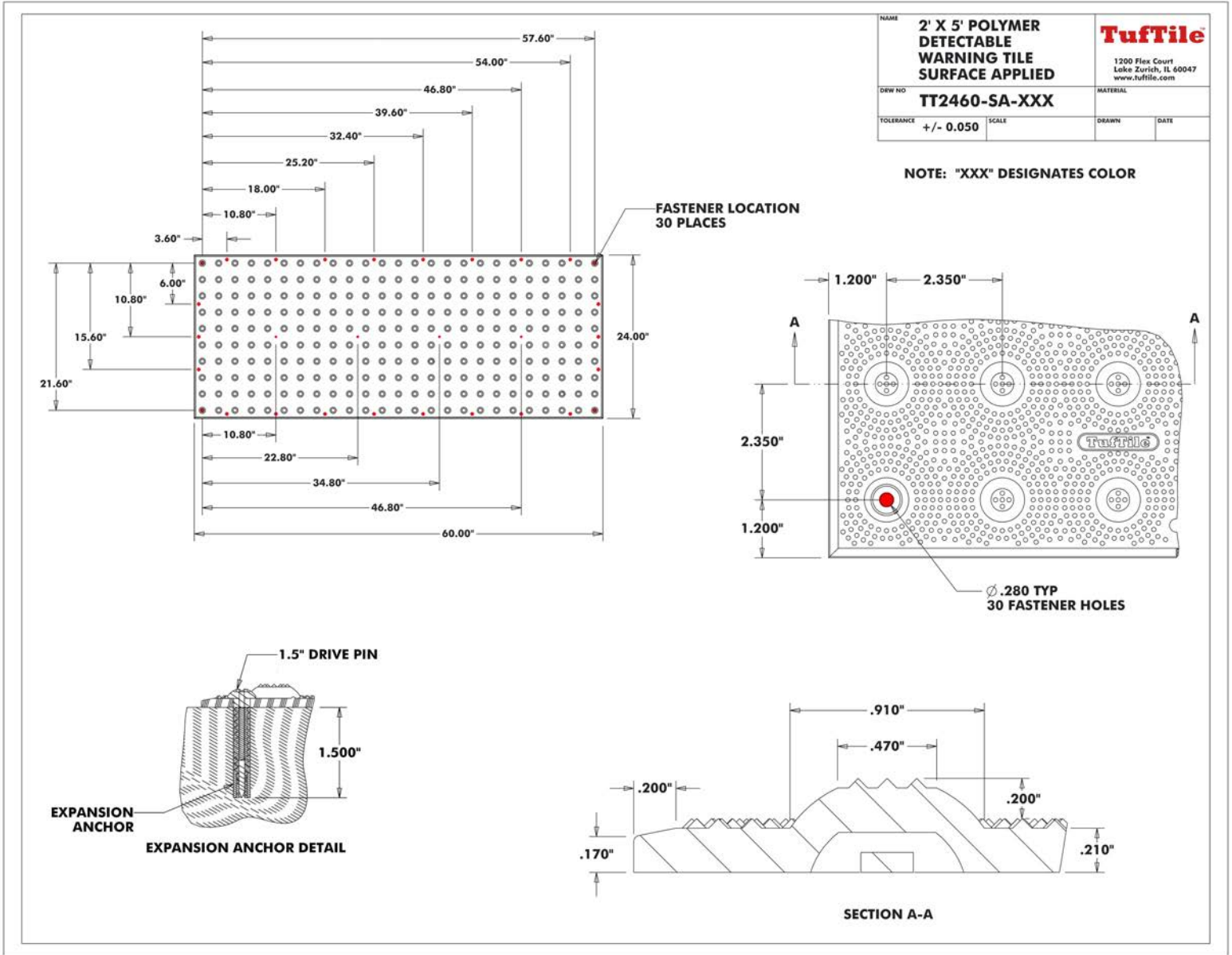


NAME	2' X 4' POLYMER DETECTABLE WARNING TILE SURFACE APPLIED		TufTile®	
			1200 Flex Court Lake Zurich, IL 60047 www.tuftile.com	
DRW NO	TT2448-SA-XXX		MATERIAL	
TOLERANCE	+/- 0.050	SCALE	DRAWN	DATE

2' X 5' SURFACE APPLIED (REPLACEABLE)

TACTILE TILE
2.350 DOME SPACING

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com



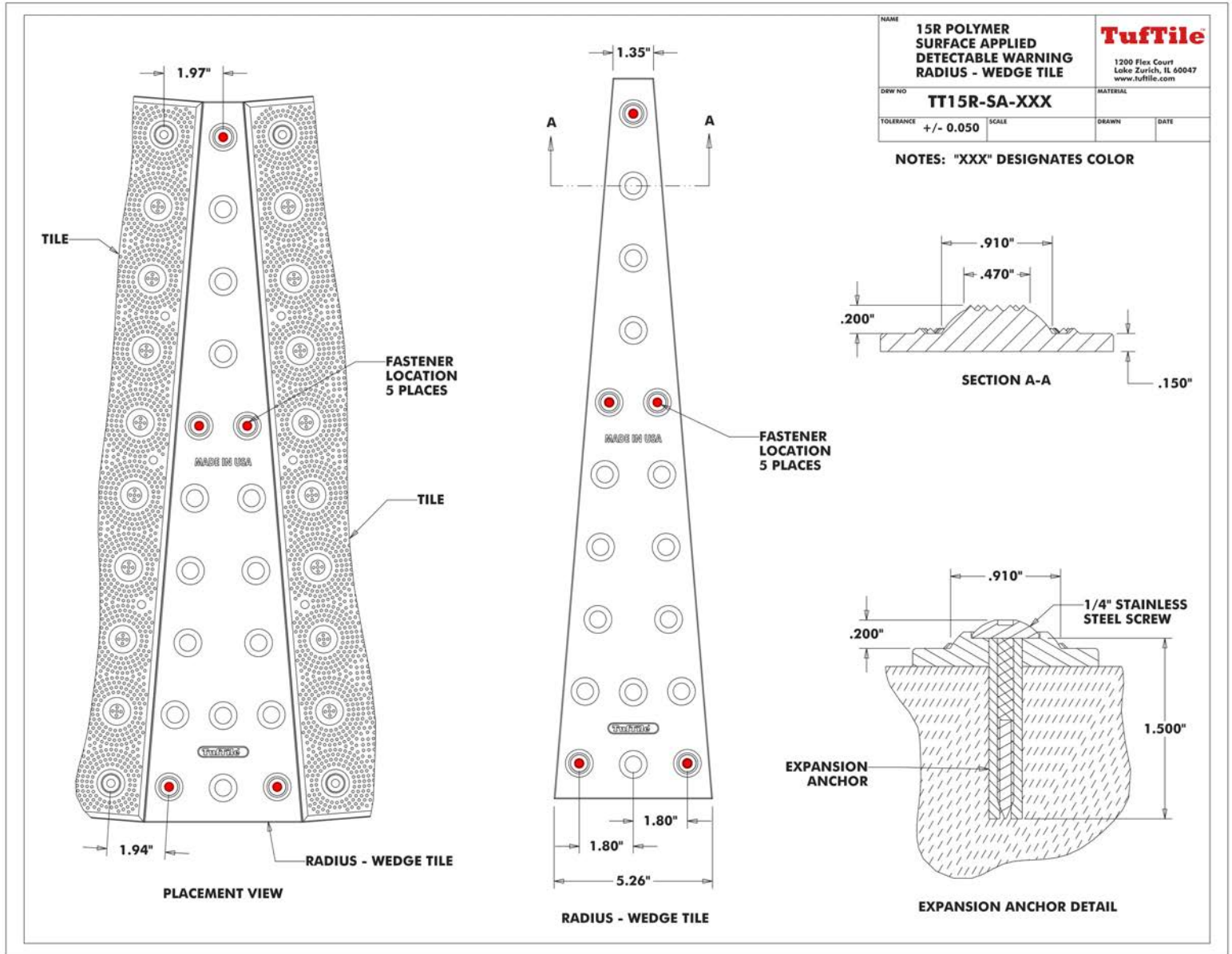
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15R SURFACE APPLIED

(REPLACEABLE)

POLYMER DETECTABLE WARNING
RADIUS—WEDGE TILE

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com

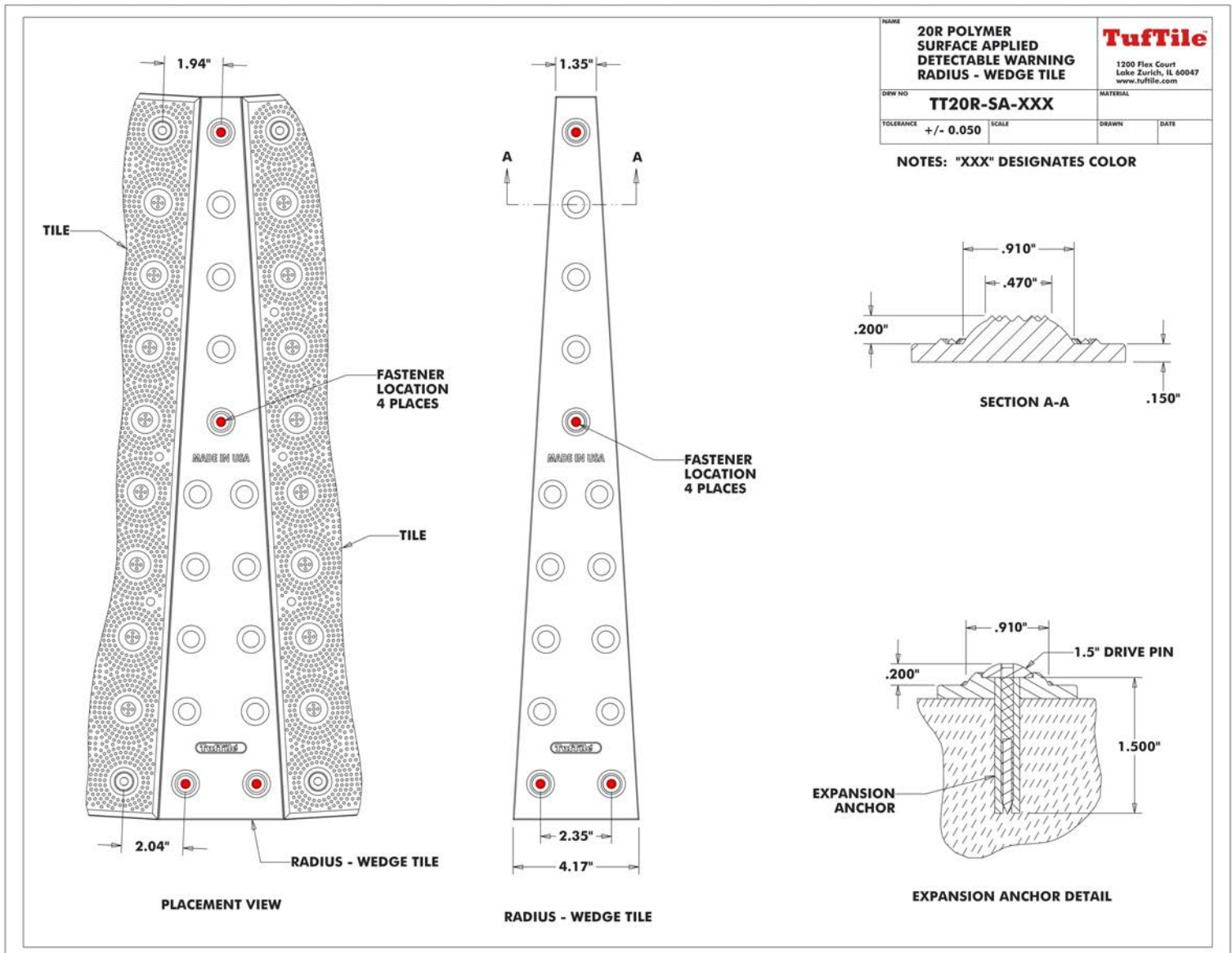


20R SURFACE APPLIED

(REPLACEABLE)

POLYMER DETECTABLE WARNING
RADIUS—WEDGE TILE

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com

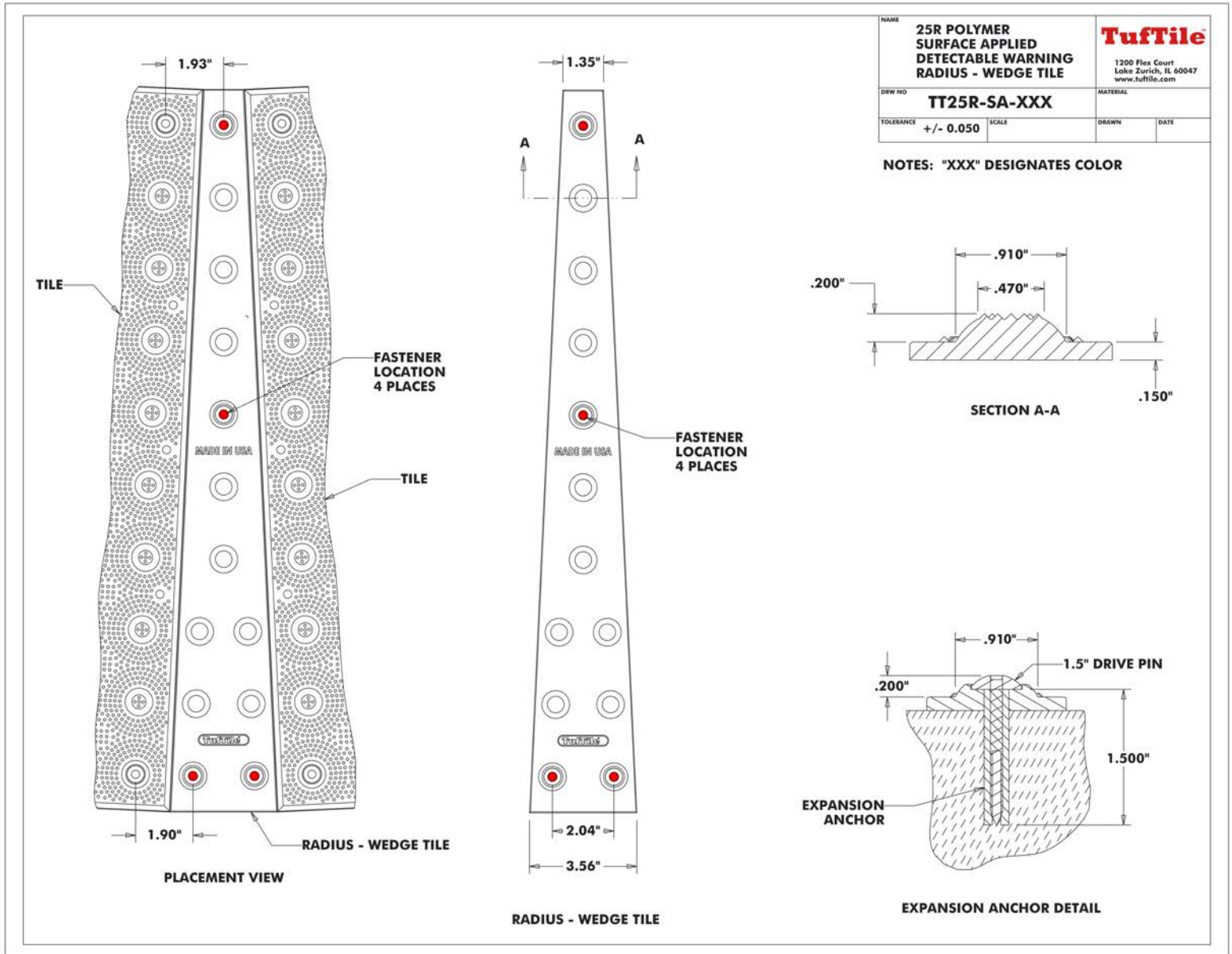


25R SURFACE APPLIED

(REPLACEABLE)

POLYMER DETECTABLE WARNING
RADIUS—WEDGE TILE

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com

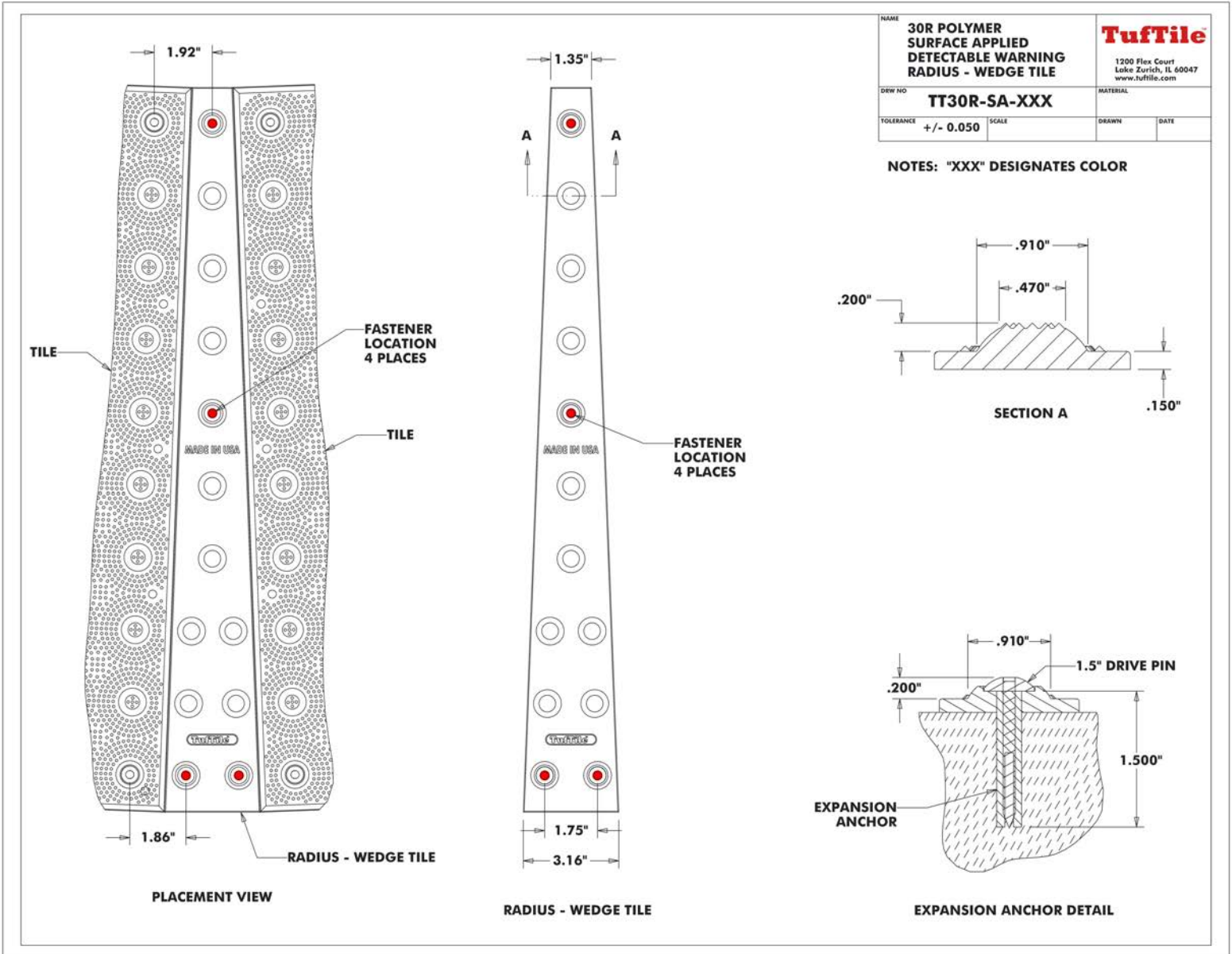


30R SURFACE APPLIED

(REPLACEABLE)

POLYMER DETECTABLE WARNING
RADIUS—WEDGE TILE

TEL 888-960-8897 FAX 847-550-8004 www.tuftile.com





TufTile® INSTALLATION INSTRUCTIONS

SURFACE-APPLIED (REPLACEABLE)

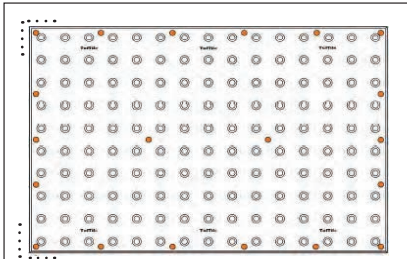


Fig. 1

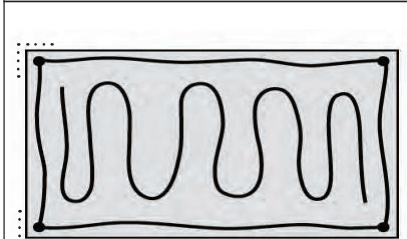


Fig. 2

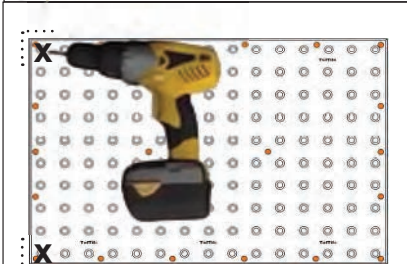


Fig. 3

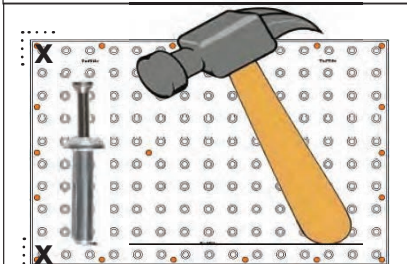
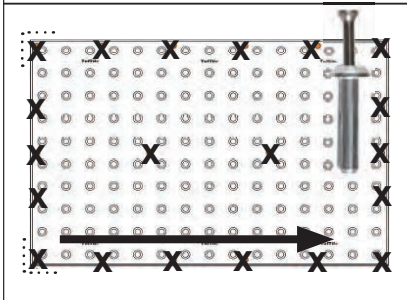


Fig. 4



1. Read these instructions thoroughly before you begin. Consult the Access-Board, PROWAG guidelines R208 & R305 for tile placement location before beginning. Go to www.TufTile.com for Federal compliance documents.
2. Concrete surface must be clean and free of dust, debris, oil, moisture, and all contaminants that can prevent proper sealant adhesion. A wire brush or concrete cup grinder or other mechanical device can be used to prepare the surface.
3. Place **TufTile** SA on the concrete specifically where it is to be installed and mark the concrete at two corners. **(Figure 1)** Remove the TufTile from the marked location.
4. Apply a bead of sealant supplied by **TufTile** to the concrete completely around the perimeter about 1/2" in from the edge and zigzag in the center area of the tile. **(Figure 2)**
Spread any excess sealant over the back of the tile.
Note: Use sealant according to the manufacturer's instructions.
5. Replace the panel onto the prepared concrete and drill 2" (miminum) deep holes through the spots in the panel at the marked corners. **(Figure 3)**
6. Insert Drive Pins into the holes and hammer them down. **(Figure 4)**
7. Moving across the panel, (→) drill holes in all the provided locations in the panel and insert Drive Pins in each. Hammer the pins as you go. **(Figure 5)**

Your **TufTile** installation is now complete.

Additional installation information including an installation tutorial is available at

www.TufTile.com

If you have any additional questions please contact **TufTile**®

Thank you for your business!

1-888-960-8897

www.TufTile.com

Drive Pin Fastener



TufTile® INSTRUCCIONES DE INSTALACION SUPERFICIE-APLICADO (REEMPLAZABLE)

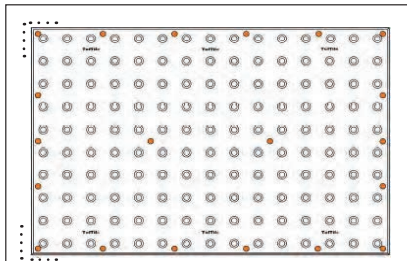


Fig. 1

1. Antes de empezar con la instalacion, consulte La Guia de Acceso: Prowag en las direcciones R208 y R305 para la ubicacion y colocacion de las baldosas visite en www.tufTile.com con el motivo de conocer del rendimiento de los documentos federales.

2. La superficie del concreto tiene que estar limpia, libre de polvo, escombros, humedad y otros contaminantes que pudieran prevenir la capacidad del pegamento. Un cepillo de alambre, Molinos para concreto u otros dispositivos mecanicos tambien pueden ser utilizados para preparar y suavisar la superficie del concreto.

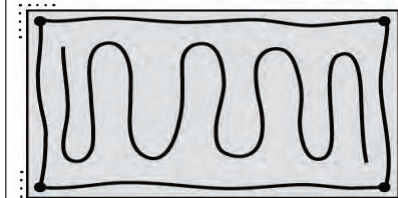


Fig. 2

Concreto

3. Coloque el **TufTile SA** sobre el concreto exactamente donde va a ser instalado, luego en el mismo oncreto, traze dos marcas en dos esquinas opuestas. **(Figura 1)** Remueva el **TufTile SA** para aplicar el pegamento.

4. Aplicar sobre el Concreto el pegamento suministrado por **TufTile**, en todo el perimetro a una distancia de 1/2" del borde completando en zigzag en el centro del area. **(Figura 2)** Si tiene exceso de pegamento, extiendolo sobre la parte posterior del **TufTile SA** Nota: Utilice el pegamento de acuerdo con las instrucciones del fabricante.

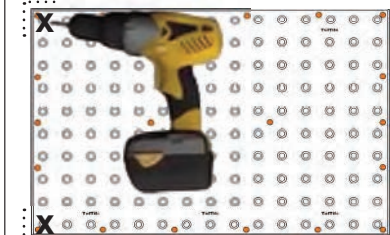


Fig. 3

5. Ponga el **TufTile SA** nuevamente sobre el concreto preparado, taladre los agujeros de 2" minimo de profundidad a travez de los puntos señalados en las esquinas del **TufTile SA**. **(Figura 3)**

6. Insertar los pasadores en los agujeros usando un martillo para penetrarlos en el concreto. **(Figura 4)**

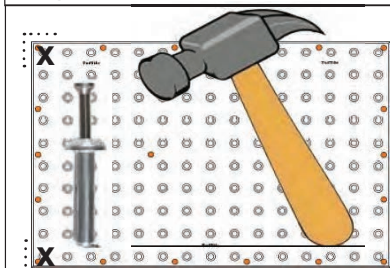


Fig. 4

7. De una forma continua, (→) siga taladrando en las ubicaciones senaladas en el **TufTile**, coloque los pasadores en cada agujero y en forma ordenada vaya martillando los pernos uno por uno para penetrarlos en el concreto. **(Figura 5)**

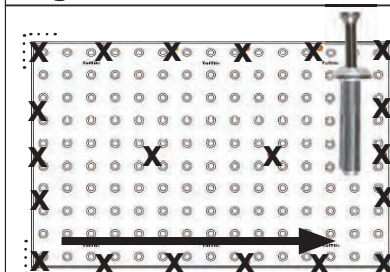


Fig. 5

Drive Pin Fastener

La instalacion de su **TufTile** esta completa

Información adicional de instalación que incluye un tutorial de instalación está disponible en

www.TufTile.com

Si usted tiene alguna pregunta adicional, por favor, póngase en contacto con **TufTile®**.

Gracias por su preferencia!

1-888-960-8897

www.TufTile.com



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION I: MATERIAL IDENTIFICATION

PRODUCT NAME: Thermoplastic Polymer
CHEMICAL FAMILY: Polyolefin
MANUFACTURER & CONTACT ADDRESS: TufTile™ 1200 Flex Court, Lake Zurich, IL 60047

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

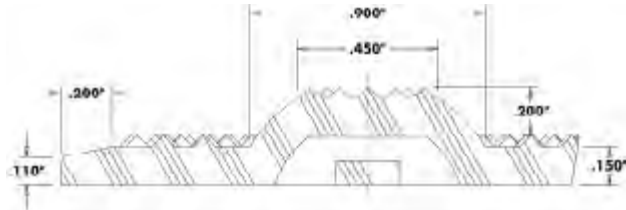
The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications 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.™

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PHYSICAL CHARACTERISTICS - POLYMER

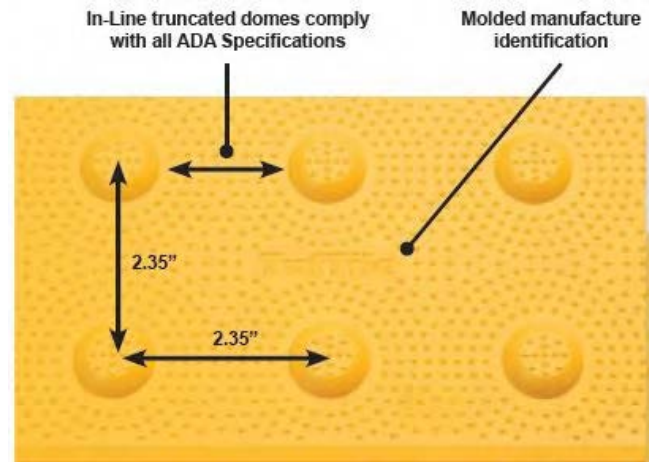
DOME GEOMETRY

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 a height of 0.2".



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)

Material – Proprietary Thermoplastic Polyolefin

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	No Effect
	-70Hrs/70° C	No Effect
	-Motor Oil	No Effect
	-Antifreeze	No Effect
	-Coffee	No Effect
ASTM B 117	Salt Spray (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: 48 lb steel dart with spherical head and 1.8" diameter radius dropped from 2 feet equaling 100ft/lbs of force)	Nubs flattened on tile, tile did not crack

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WARRANTY

TufTile, Inc. 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 and 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.

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.

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The Law and Detectable Warning Surfaces

FEDERAL

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.