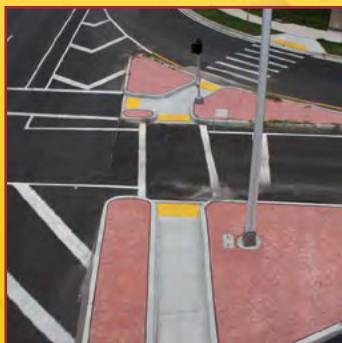
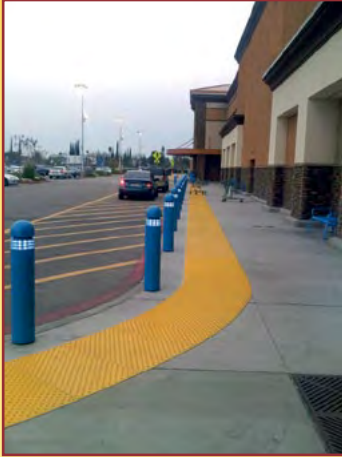




**detectable**  
warning systems™

Providers of the most complete line of detectable warnings since 1994



## ***The Most Complete Line of Detectable Warnings Since 1994***

Detectable Warning Systems has been a pioneer in providing innovative and economical detectable warning products. Our products provide ADA compliant tactile warning surfaces for visually impaired pedestrians at a reasonable cost to contractors, cities, counties, transit authorities and other agencies.

## ***Partnership with Cape Fear Systems / AlertTile®***

In early 2012 Detectable Warning Systems merged its operations with Cape Fear Systems, producers of the AlertTile line of detectable warnings since 2001. Through this partnership we now manufacture the best and most diversified line of products in the industry.

## ***Products to Meet any Job Specification***

Whatever the specifications of your job, Detectable Warning Systems has the product you need. With the flexible RediMat and rigid AlertTile we can meet the needs of any retrofit, surface applied job. And for cast in place requirements we have the AlertCast – the best overall cast in place detectable warning available, and the proven, heavy duty EZ Set Tile.

## ***Superior Customer Service***

With a highly trained staff we work with you and your customers during the entire project cycle. From design to bidding, procurement and installation - our team is with you all the way. We welcome the opportunity to partner with our customers to ensure 100% satisfaction on every job.

## ***ADA Compliance and a 5-Year Warranty***

All of our products are ADA compliant and meet or exceed ADAAG, FHWA, California Title 24, state and local requirements. And they are backed by a 5-year warranty covering defects in materials and workmanship.



All of our products are proudly made in the U.S.A.



Phone: 866.999.7452

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[info@detectable-warning.com](mailto:info@detectable-warning.com)  
[www.detectable-warning.com](http://www.detectable-warning.com)



# RediMat™

the original flexible surface applied mat

The original surface applied RediMat detectable warning is constructed of extremely durable, UV protected polyurethane. This flexible mat has a proprietary pre-applied adhesive system that enables installation in less than 10 minutes, drastically reducing labor time and expense, but not at the cost of durability.



## Features

- **No adhesives to apply** – simply remove protective backing, exclusive peel & stick technology
- **Installs on both asphalt and concrete** – multi-surface adhesive system
- **Conforms to uneven surfaces** – flexible polyurethane material
- **Unbreakable** – will not chip, crack, or splinter
- **Radius Ready** – Available in “Wedge” shape
- **Beveled Edge** – For easy pedestrian access
- **RediMatWZ™** – For temporary work zone applications, reusable, and safety orange color
- Includes stainless steel anchors to meet DOT requirements



## Installation



*Easiest installation of any surface applied detectable warning. Just peel and stick, roll the mat to ensure a secure bond and install stainless steel anchors. Less than 10 minutes - start to finish.*

## Physical Characteristics

- **Hardness** - 90 (Shore A)
- **Stain Resistance** - No Significant Change
- **Dome Spacing** - Inline, 2.35”
- **Slip Resistance** - .90
- **Taber Abrasion** - (1000gms/1000 cycles) 150mgs
- **Color** - Integral Throughout

## Colors



Safety Yellow



Brick Red

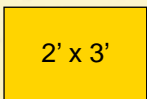


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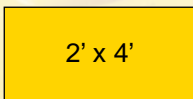
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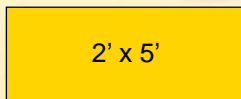
2' x 2'  
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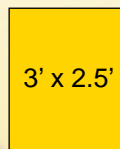
2' x 3'



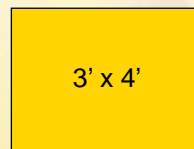
2' x 4'



2' x 5'



3' x 2.5'



3' x 4'



Wedge

10 ft  
radius

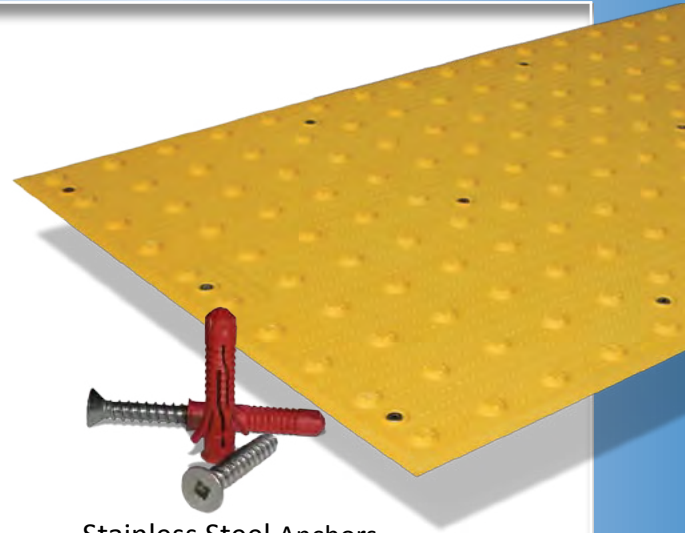
\*Special order only

# alerttile®

## semi-rigid surface applied detectable warning

AlertTile® is a glass reinforced thermoset composite engineered for superior impact resistance, slip resistance, wear resistance and long-term durability for retrofit applications.

AlertTile®'s exclusive design incorporates a thin, slightly flexible profile with a perimeter beveled edge to provide a safe pedestrian transition.



Stainless Steel Anchors

## Features

- **Semi-rigid composition** – 30,000 psi strength yet flexible enough to conform to ramp irregularities
- **Premium UV Treatment**– ensures long term color retention
- **Proven Anchoring System** – premium adhesive and HILTI HUD-1 anchors with stainless steel screws
- **Perimeter Beveled Edges** – for safe pedestrian transition
- **AlertTile Universal** – uses patented Penetrator anchors for cast in place applications, allows distributors ability to stock single tile for surface and cast in place installations

## Installation



*Fast, easy installation with included adhesive and anchor system. Apply adhesive to scored areas on back, place in desired location and install anchors*

## Physical Characteristics

- **Compressive Strength** - 30,000 psi
- **Flexural Strength** - 18,000 psi
- **Dome Spacing** - 2.35" Center to Center
- **Slip Resistance** - Dry = 1.03 / Wet = .83
- **Freeze / Thaw Durability** - Pass-No change
- **Color** - Integral Throughout

## Colors



Safety Yellow



Colonial Red



Brick Red

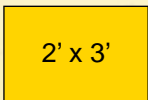


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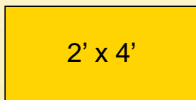


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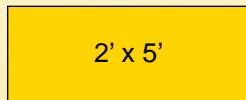
## Sizes



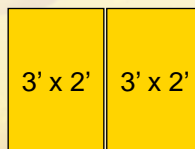
2' x 3'



2' x 4'



2' x 5'



3' x 2'

3' x 2'

3' x 4'

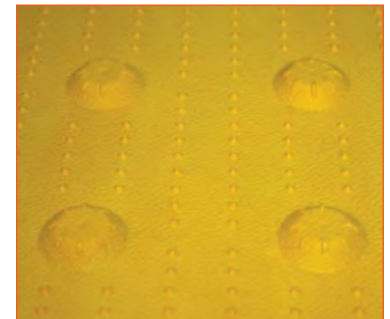
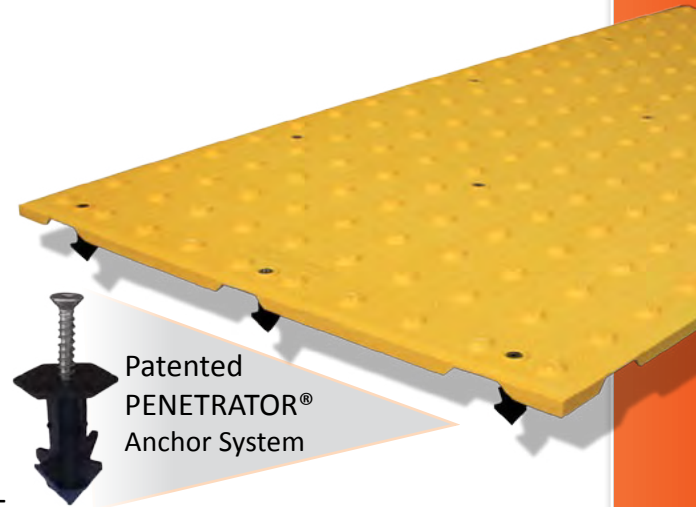
## alertcast®

the industry's best replaceable cast-in-place detectable warning

AlertCast® is a glass-reinforced thermoset composite engineered for superior impact resistance, slip resistance, wear resistance and long-term durability. The exclusive design incorporates a top panel of superior slip-resistant truncated domes and bottom docking anchors that are embedded into wet concrete.

### Features

- **Replaceable, uses patented PENETRATOR anchoring system** – simple wet concrete installation with minimal aggregate displacement and maximum holding capabilities. Easy tile replacement should the need arise.
- **Premium UV Treatment** – ensures long term color retention
- **Superior strength and impact resistance** – reinforced to over 30,000 psi, yet lightweight
- **All weather performance** – hot and cold climate superiority
- **Delivered ready to install** – anchors in place, protective sheeting with attached installation instructions in English and Spanish



Superior Wet/Dry Slip Resistance

### Installation



*Simple place and press process with the patented PENETRATOR® anchor system.*

### Physical Characteristics

- **Compressive Strength** - 30,000 psi
- **Flexural Strength** - 18,000 psi
- **Dome Spacing** - 2.35" Center to Center
- **Slip Resistance** - Dry = 1.03 / Wet = .83
- **Freeze/Thaw Durability** - Pass - No Change
- **Color** - Integral Throughout

### Colors



Yellow



Colonial Red



Brick Red

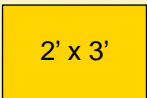


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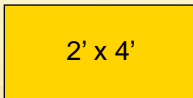


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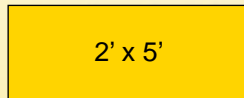
### Sizes



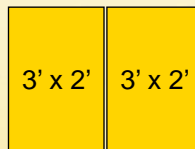
2' x 3'



2' x 4'



2' x 5'



3' x 2'

3' x 2'

3' x 4'

# Detectable Warning Systems, Inc.

## SURFACE APPLIED DETECTABLE WARNING MATS

### RediMat Submittal

#### **PART 1 - GENERAL**

##### 1.01 SECTION CONTENTS

- A. Description
- B. Related Work Specified Elsewhere.
- C. Submittals
- D. Quality Assurance.
- E. Delivery, Storage & Handling
- F. Site Conditions
- G. Extra Stock
- H. Guarantee
- I. Manufacturers
- J. Materials.
- K. Installation.
- L. Cleaning & Protecting

##### 1.02 DESCRIPTION

- A. This Section specifies furnishing and installing RediMat surface applied polyurethane detectable warning mat where indicated, using an exterior grade tactile warning surface described herein.

##### 1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. Drawings and general provisions of Contract, including General and Special Conditions and Division 1 Specifications Section, apply to this Section.

##### 1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's literature describing products, installation procedures and routine maintenance.
- B. Samples for Verification Purposes: Submit three (3) samples of RediMat surface applied polyurethane tactile mat of the kind proposed for use.
- D. Material Test Reports: Submit test reports from qualified independent testing laboratory indicating that materials proposed for use are in compliance with requirements and meet the properties indicated.
- A. Maintenance Instructions: Submit copies of manufacturer's specified maintenance practices for each type of tactile tile and accessory as required.

## 1.05 QUALITY ASSURANCE

- A. Provide surface applied tactile mat and accessories as produced by a single manufacturer.
- B. Installer's Qualifications: Engage an experienced Installer qualified for installation, who has successfully completed tile installations similar in material, design, and extent to that indicated for Project. .
- C. Americans with Disabilities Act (ADA): Provide tactile warning surfaces which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title 49 CFR TRANSPORTATION, Part 37.9 STANDARDS FOR ACCESSIBLE TRANSPORTATION FACILITIES, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES. In addition products must comply with CALIFORNIA TITLE 24 requirements regarding patterns, color and sound on cane contact.
- D. Polyurethane tactile mat incorporating truncated domes shall conform to the following:
  - 1. Water Absorption of mat when tested by ASTM-D570 not to exceed 0.35% -after vacuum.
  - 2. Compressive Strength - ATM D695-96 5,000 psi
  - 3. Slip Resistance- ASTM F1679-96 - .89
  - 4. Impact Resistance ASTM D5420-96 No cracking up to 80 inch pounds
  - 5. Accelerated Weathering ASTM G154/ASTM D4587 Delta E <6.5 after 500 hours
  - 6. Flexural Strength ASTM 790-96a 13,000 psi
  - 7. Stain & Chemical Resistance ASTM 1308-87 No Change
  - 8. Tensile Strength ASTM D412 Not less than 1,100 psi
  - 9. Hardness of mat when tested to ASTM-D2240: 90 (Shore A).
  - 10. Specific Gravity of mat when tested to ASTM-D792: 1.22
  - 11. Abrasion/Wear Resistance -weight loss of mat when tested to ASTM- D4060 - 4.7 mgs.

## 1.06 DELIVERY, STORAGE AND HANDLING

- A. Mat and adhesive materials shall be packaged durable cartons to prevent damage in shipment or handling. Mats should remain in the factory cartons until reaching the job site and installation has begun. Mats shall be kept dry and away from sources of heat. Store at 80 degrees F or less. Store on flat level surface.
- B. Mats shall be delivered to location at building site for storage prior to installation.

## 1.07 SITE CONDITIONS

- A. Environmental Conditions and Protection: Maintain minimum air and surface temperature of 50 degrees F and rising in spaces to receive tactile mats prior to installations, during installation, and for not less than 2 hours after installation.

B. Provide barricades or screens to protect passengers or public.

1.08 EXTRA STOCK

A. Deliver extra stock to the Owner. Furnish new materials from same manufactured lot as materials installed and enclose in protective packaging with appropriate identification. Furnish not less than two or (10)% of the supplied materials for each type, color and pattern installed.

1.09 Warranty

A. Surface applied detectable warning mat shall be warranted in writing for a period of five years from date of final completion.

**PART 2 – PRODUCTS**

2.01 MAT SPECIFICATIONS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:

The polyurethane detectable warning mat specified is based on the Detectable Warning RediMat manufactured by Detectable Warning Systems, Inc. (866-999-7452).

B. It is an unbreakable, UV protected, flexible polyurethane material with a proprietary pre-applied adhesive system that employs peel and stick technology. Existing engineered ADA field tested products in service for a minimum of 2 years which are subject to compliance with requirements, may be incorporated in the work and shall meet or exceed the specified test criteria and characteristics.

1. Materials – mat to be produced with a glass reinforced, UV treated polyurethane material for durability, strength and sun degradation.
2. Composition – mat to be a molded material that is 100% solid throughout, including surface and truncated domes. This requirement is for durability and safety concerns.
3. Color - Color shall be homogenous throughout the mat. Colors must provide light-on-dark or dark-on-light contrast with the surrounding substrate/surface
4. Pre-applied adhesive – attached peel and stick adhesive must completely cover the underside of the mat and be composed of materials that adhere to substrate (concrete or asphalt) without the requirement of any additional materials or actions such as primers or concrete sealers being applied to the substrate.

2.02 INSTALLATION MATERIALS

A. Stainless steel concrete screws 3/16" x 1 1/4" for pre-drilled holes ( number to vary depending on mat size)

B. Nylon finishing washers colored to match mat color.



## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. During all surface preparation and mat installation, procedures must ensure adequate safety guidelines are in place and that they are in accordance with the applicable industry and government standards.
- B. Throughout the installation phases of surface preparation and mat setting, ensure that care is taken to prevent damage to any work.
- C. Immediately prior to installing the surface applied tactile mats, all surfaces must be inspected to ensure that they are clean, dry, free of voids, curing compounds, projections, loose material, dust, oils, grease, sealers and determined to be structurally sound before the application warning mat. . All new substrate concrete paving must have been cured for at least 28 days prior. If present, all concrete curing compounds shall be removed with sandblasting. The proprietary sealant/adhesive requires that the substrate and the ambient temperature are 50 degree F minimum and rising, and completely dry with no precipitation during 24 hours prior to installation. Assure that sprinklers or other water sources will not be turned on during the installation and adhesive curing process.
- D. Place mats as shown on the drawings. Inspect the mats and clean all dust and other contaminants from the surfaces to be adhered. Set the mats in place one at a time, true and square, following the manufacturers written instructions.
- E. Carefully remove the paper backing. Place adjoining mats with a 1/8" gap against each other in their pre-laid positions. Press firmly from the center out to remove all trapped air. Using, hand, foot and/or roller apply pressure over the entire surface of the mat to insure complete contact with the concrete substrate.
- F. After the mats have been installed stainless steel concrete screws shall be installed. Drill holes true and straight to the depth required using the recommended bit with holes located by the preformed holes in the mats. Clean dust from the holes to provide clear passage for the anchor. Mechanically fasten tiles to the floor by hand using Phillips screwdriver. Set screws to a depth and tightness that will allow the washer to slightly turn. Ensure the fastener has been set to full depth, straight and true.
- G. After fasteners have been set cut the nozzle of the included sealant tube at a 45 degree angle. Apply a smooth, thin bead of sealer around the perimeter (sealer is not required between adjoining mats).
- H. After the mats have been fully installed, and sealer has cured, the surface can be cleaned, if needed, following the recommended maintenance and cleaning procedures.

### **3.02 CLEANING AND PROTECTING**

- A. Protect mats against damage during construction period to comply with manufacturer's specification.
- B. Protect mats against damage from rolling loads following installation by covering with plywood.
- C. Clean mats by method specified by the manufacturer. RediMat can be cleaned with a medium stiff brush and a diluted mild detergent/water cleaner. Due to the non-porous nature of the mat normal rainfall will keep the mat with a clean appearance.

**-END OF SECTION-**

### Before you begin ...

#### General Conditions

Store mats at room temperature. Installation surface must be dry and clean from oils, contaminants, dust, dirt and debris. Temperature must be 50°F and rising. To increase surface temperature, a hand torch may be used to heat the concrete surface. Best cold-weather application is achieved with surface temperature at 95°F. New concrete is to cure for 28 days before mat installation. The RediMat is designed for pedestrian safe zones and as such is not designed for, or intended to be installed in vehicular traffic areas.

#### Cleaning

Prepare surface with a stiff broom to remove dust, dirt and debris from concrete surface. Sweep the area completely clean and use a blower if possible.

#### Required Materials

Stiff Broom	Eye Protection
Blower (optional)	Hammer Drill
Phillips Screwdriver	5/32" Masonry Bit(s)
Utility Knife	3/8" All Purpose
RediMat™ Roller	Drill Bit



1

After ensuring "General Conditions" (refer to box on left) have been met, and surface has been properly cleaned, place mat(s) in desired final position. *If mats are placed side by side, leave a 1/8 in. gap between them.*



2

While standing on the mat to prevent movement, remove one section of the paper backing.



3

Roll and press the exposed portion onto the surface. While standing on the attached end, peel the remaining sections of the backing and press and roll onto the surface.



4

To insure a secure bond is achieved, roll the mat both lengthwise, widthwise and most importantly along the edges, with the handheld RediMat™ Roller. *For mats with an offset pattern, hold the roller at a 45° angle and use the outer roller pad to roll between the domes diagonally from front to rear and along the edges.*



5

Using the drill and a 5/32 in. masonry bit, drill through the pre-drilled holes into the concrete to a depth of 1 1/4 in. If the mats are trimmed so a pre-drilled hole is removed, a new hole must be drilled in the mat using a 3/8 in. standard drill bit, 2 in. from the side edge and 1 in. from the beveled edge.



6

Be sure the screw and the matching washers are oriented so the neck of the screw falls into the inside taper of the washer. Using a Phillips screwdriver, fasten the screws into the drilled holes. The proper screw tightness will allow a slight finger twist of the washer. *Do not overtighten.*



7

Cut the nozzle of the sealant tube at the 1/4 in. mark. Apply a smooth, thin bead of sealer around the perimeter (sealer is not required between adjoining mats). Mats are ready for immediate use once installation is completed and edge sealant has dried to the touch. *Tip: To make the edge sealer dry faster, mist with plain water.*