

## ITEM 608.02 91M - EMBEDDED PREFORMED DETECTABLE WARNING UNITS

### DESCRIPTION

This work shall consist of furnishing and installing embedded, preformed detectable warning units on, or adjacent to, sidewalk curb ramps and other locations, as indicated on the plans or elsewhere in the Contract Documents.

### MATERIALS

#### **General Requirements:**

The Manufacturer shall supply certification that the detectable warning surface material meets the requirements of these specifications. Detectable warning surface materials shall:

- Meet the requirements of the current Standard Sheet for detectable warning details.
- Be composed of a mixture of cementitious material, clay or shale, plastics, polymeric materials, resins, or pigments.
- Be an approximate visual match to the color specified in the Contract Documents, as determined by the Engineer, and be uniform in color and texture.
- Have a good appearance, free of cracks or other defects
- Have clean-cut and well-defined edges.
- Where applicable, adhere to Hot Mix Asphalt (HMA) or portland cement concrete (PCC) surfaces at a minimum air temperature of 16°C (60°F), and a minimum pavement temperature of 21°C (70°F).
- Be weather resistant and durable to normal pedestrian wear and maintenance activities.
- Show no appreciable fading, lifting, or shrinkage.
- Have friction characteristics similar to a broomed PCC surface.

#### **Physical Properties:**

<u>Property</u>	<u>Requirement</u>
Compressive Strength, Min., 28 days	55 Mpa Minimum
Freeze-thaw Loss (25 Cycles, one per day, 10% NaCl solution)	1.0 % Maximum

#### **Basis of Materials Acceptance:**

As listed in this specifications Provisionally Approved Product list OR provisionally approved equivalent by the Department:

**ITEM 608.02 91M - EMBEDDED PREFORMED DETECTABLE WARNING UNITS**

Product Name	Manufacturer/Location
ADA Pavers	Whitacre-Greer Alliance, Ohio 44601
Armor-Tile Cast-In-Place System	Engineered Plastics Inc Williamsville, NY 14221
Detecto-Tile	Detecto-Tile Inc. Central Valley, NY 10917
Hanover Detectable Warning Paver	Hanover Architectural Products Hanover, PA 17331
Oaks Detectable Warning Paver	Oaks Concrete Products Milton, Ontario
Press in Place Paver Tile	ADA Solutions, Inc. North Billerica, MA 01862
STEP-Safe Precast Polymer Concrete	Transpo Industries New Rochelle, NY 10801

For additional products, which may have been approved after the date of this specification, contact the Main Office Landscape Architecture Office at (518) 457-4460.

In order to be approved as equal by the Department:

- A. The Contractor shall submit three sets of the following to the Engineer, for distribution to the Materials Bureau and the Regional Landscape Architect and for the Engineer's approval, at least 30 days prior to the proposed installation:
- A minimum 300 mm x 300 mm sample of the Detectable Warning Surface Material.
  - All associated product material literature.
  - Preparation requirements.
  - Equipment required for installation.
  - Name(s) of suppliers.

OR

- B. The Manufacturer shall demonstrate in writing and provide references that the detectable warning unit has been satisfactorily used for roadway, sidewalk curb ramp, path, or exterior floor applications. Further, this use shall have been in locations exposed to high pedestrian traffic, and under weather conditions similar to those experienced in New York State, for a minimum period of five years.

The manufacturer of any product/system provisionally approved under method A or B shall submit to the Engineer a letter from the Materials Bureau indicating that the requirements of this

## **ITEM 608.02 91M - EMBEDDED PREFORMED DETECTABLE WARNING UNITS**

specification have been met. The product must perform to the satisfaction of the Department for a minimum period of one year in order to be listed in this specification.

Field evaluation will consist of 1 year in service to determine acceptability to be used for future Department projects.

Field evaluation will not be required for manufacturers of Precast Concrete Pavers (§704-13), who appear on the Departments Approved List or for current NYSDOT Approved precast facilities submitting preformed detectable warning units.

### **CONSTRUCTION DETAILS**

Preformed, embedded detectable warning units may be installed in plastic concrete, installed directly on existing subbase prior to placing concrete, inlaid on prepared concrete surfaces, or as otherwise recommended by the manufacturer or specified in the Contract Documents.

Follow all applicable material supplier's and manufacturer's requirements for environmental conditions, surface preparation, installation procedures, curing procedures, and materials compatibility.

### **METHOD OF MEASUREMENT**

Detectable Warning Surface will be measured as the number of square meters, measured to the nearest tenth (0.1) square meter, computed from the payment lines shown in the Contract Documents.

### **BASIS OF PAYMENT**

The unit price bid shall include all labor, material, and equipment necessary to complete the work, including job site samples. Sidewalk curb ramps and other locations where detectable warnings will be furnished and installed will be paid for under the sidewalk or other applicable items in the Contract.