

# Speed Bumps Installation Instructions

# Pavement Surface Preparation & Application Procedure

**Installation Instructions January 2022** 

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#### **Pavement Surface Preparation**

#### **Description**

This document contains pavement surface preparation and application procedures for Hersan USA™ Speed Bumps. For situations not specifically covered in this document, it is the responsibility of the installer to contact the appropriate Hersan USA™ technical service representative for guidance. Instructions contained in this document must be followed for proper application and performance.

#### **Application Guidelines**

Speed Bumps are designed for application to properly prepared asphalt or Portland cement concrete surfaces using recommended nails, anchor wedges or two-part epoxy or bitumen adhesives. Adhesives other than those recommended must be evaluated by the user to determine suitability.

Follow the recommendations of the adhesive manufacturer for application temperatures and ambient weather requirements.

All Applications must be made on a dry surface that has been swept clean or blown with high-pressure air to remove dirt and dust.

**NOTE:** DO NOT apply speed bumps in the following situations:

- During rainfall or within 24 hours after rainfall
- Over existing pavement markings such as paint, thermoplastic, or preformed tapes
- On transverse or longitudinal seams or joints in the pavement
- On pavement surfaces with cracking, spalling, or failure of underlying base material
- Closer than 2 inches (50 mm) to a pavement construction (transverse or longitudinal) joint or within an intersection

If the initial location of a speed bump is determined to violate one of the conditions, relocate the affected piece longitudinally. Relocate the piece within a distance not exceeding 10 percent of the specified piece spacing.

#### **Surface Types**

#### Chip, Slurry or Fog Sealed Surfaces

Allow adequate compaction and curing time before application of speed bumps. Chip seal surfaces should be swept of excess aggregate and open to traffic for 30 days prior to installation of pieces. Follow the recommendations of the adhesive manufacturer for these surfaces. On coarse textured chip seal pavements, epoxy adhesive may need to be placed in two steps to allow for proper leveling prior to speed bumps application.

#### New Portland Cement Concrete Surfaces

Concrete surfaces open to traffic for less than 90 days must have the curing compound removed prior to application of bitumen or epoxy. Curing compound should be removed by sandblasting or other methods such as hydroblasting, shot blasting or grinding.

#### Old Portland Cement Concrete Surfaces

Markers can be applied directly to concrete surfaces that have been open to traffic for at least 90 days.

#### New Asphalt Surfaces

Review the manufacturer's recommendations for applying bitumen adhesives to asphalt surfaces to determine required waiting periods between paving operations and marker installation. The use of epoxy adhesives on asphalt surfaces open to traffic less than six months should be tested and approved by the user for adhesion performance before large-scale applications are made.

### **Application Procedure**

#### **Screw Anchor**

High-strength screw anchor or nail for concrete and asphalt should display the following characteristics:

Qualified for static and seismic loading conditions

No special drill bit required, designed to install using standard-sized ANSI tolerance drill bits

Hex-washer head requires no separate washer and provides a clean installed appearance

Zinc-plated carbon steel anchor can be used

#### **Application guidelines**

Once the space where the part will be installed has been selected, do the steps below:

- I. Place the piece oriented in the direction of the driver on the road,
- II. Place the drill over the holes in the speed bump,
- III. Use ½" x 10" concrete drill bit al 4.3" depth (approximate),
- IV. Place the wedge anchor in the holes leaving 0.80" of threaded section on the floor,
- V. Place the speed bump coinciding the hole with those of the wedges placed on the floor,
- VI. The wedge anchor nuts are placed using a ½" ratchet with an extra long <sup>3</sup>/<sub>4</sub>" die. A torque of 45 to 50 pounds of pressure is recommended.

Follow the manufacturer's recommendations for application.

# **Health and Safety Information**

Read all health hazard, precautionary and first-aid statements found in the Material Safety Data Sheet (MSDS) and/or product label of chemicals prior to handling or use. Also refer to the MSDS for information about the volatile organic compound (VOC) content of chemical products.

Consult local regulations and authorities for possible restrictions on product VOC content and/or VOC emission.