

**Overview** Asphalt Anchors Corp. has developed the **BoltHold** family of anchors suitable for mounting structures to asphalt surfaces. The SP58 anchors are 10" (25 cm) long and 1.25" (32 mm) in diameter, with a 5/8"-11 coarse female thread. The anchor is cemented in the ground using our special grouts EPX2 or EPX3. This is our strongest anchor, and it is suitable for heavier loads such as speed bumps and bollards. The anchors are available in zinc plated steel and in 304 stainless steel.

The anchor is also available in M16x2 mm Metric thread (SP58-M16) as a special order item (not stocked in the USA).

**Description** The standard SP58 is constructed from a thick-walled Zinc plated steel tube acting as the backbone of the anchor. The bottom is flared and sealed to act as a wedge when pushing the anchor into the ground. A welded steel spiral along the length of the anchor provides for a strong bond with the grout. The top of the anchor incorporates a 2" washer with an internal 5/8" female thread. The anchor is supplied with a 5/8" x 1.5" bolt and a 1" washer. A variation with a 2" bolt is available in the stainless steel model. All dimensions are equal for the zinc plated steel versions and the stainless steel version.

**About Asphalt:** Asphalt is a relatively weak surface, and care must be taken when installing structures to that surface. Asphalt will flow under pressure over time, and will not resist expansion-type anchors that are so successful in concrete.

A significant increase in the anchor's shear force resistance is derived from the gravel surface **below** the asphalt. The compacted gravel resists sideways forces (shear). Bonding the anchor to the gravel, in addition to the bond to the asphalt, adds shear and



pull resistance.

**Force Rating** The resistance of the installed anchors to extraction depends greatly on the nature of the asphalt and the gravel below it. The SP58 will resist 5,000 lb. pull in asphalt 3" and thicker when installed per instructions and using the recommended grout. At ground level, the anchors can resist 2,500 lb. of shear force (see note 1).

In addition to pull and shear forces, the anchor must also resist rotational torque which is applied when the bolt is tightened into the anchor. The SP58 is rated for **>720** in-lb. of torque. Do not exceed this torque when installing the anchor. The use of impact wrenches is not recommended.

To find if the anchors are suitable for your application, the safe way is to make a test installation. You will be able to leave the anchors in place after the test without the need to remove them as they are flush with the surface.

**Grout Selection** The term "grout" is used here in a broad meaning; the actual material can be specialty cements or epoxies .

In general, the grout must be self-leveling (meaning that it flows easily, to fill in all the crevices and voids). It must cure to a hard material and must be immune to extended exposure to water and temperature fluctuations.

The most cost effective anchoring results are achieved using an expanding concrete mix labeled "Anchor Cement". You will need about 10 oz (285 mL) of mixture per anchor. The grout is available from AAC as the EPX2, available in 10 lb. tubs (good for 8 anchors) or in 14oz bags (need 1.2 bags per anchor).

An alternate grout is our EPX3. This is a



10 Ridge Rd, West Orange, NJ 07052 USA

Tel: 1.973.669.8214

Fax: 1.973.669.5161

email: [marketing@asphaltanchors.com](mailto:marketing@asphaltanchors.com)

WEB: [www.asphaltanchors.com](http://www.asphaltanchors.com)

Cartridge-type epoxy that can be applied even at very low (14F) temperatures.

**Installation** The installation requires drilling a 1.5" (38 mm) hole, 10" (25 cm) deep, into the asphalt and the gravel below it. Note that you will need a hammer drill with an SDS **Max** chuck.



The hole is filled with grout and the anchor is dropped in. If the anchor meets resistance as it is pushed in, use a dead-blow hammer (sand hammer) to gently drive the anchor, or place a piece of wood between the hammer and the anchor's head.

The anchor is ready for use in 15 minutes (depending on temperature).

Always consult the latest [installation instructions](#) before installing these anchors. The online manual is updated regularly to reflect the availability of grouts, new installation techniques and user feedback.

### Packing

The **BoltHold SP58** anchors are packaged 6 anchors to a carton. Each anchor includes a 1.5" long, grade 5 bolt and 1" diameter washer. A version with 2" bolt is available for the SS anchors.

**Coating:** The standard anchors and hardware are zinc plated. A stainless steel version is available for critical applications near potable water sources or where rust is a concern.

### Tariffs

The SP58 are shipped under schedule 55. HTS code (export) 7316.00

Anchor Metrics	
Anchor Length	10" (250mm)
Anchor body diameter	1.25" (32mm)
Anchor head diameter	2" (50mm)
Anchor weight	1 lb. (0.5 Kg)
Internal Thread	5/8"-11 UNC
Allowed internal bolt length	6" (150 mm)
Finish	Zinc plated
Typical pull resistance	5,000 lb. (2270 Kg)
Shear resistance	2500 lb. (1135 Kg)
Max torque	720 lb.-in
Grout volume required	285 cc (9.6 oz)
SP58 per 10lb EPX2	9
<b>P/N 6pack Imperial zinc</b>	<b>01-6358.58K</b>
<b>P/N 6pack 304 Stainless 1.5" bolt</b>	<b>01-6358.5SK</b>
<b>P/N 6pack 304 Stainless 2" bolt</b>	<b>01-6358.5SK-2</b>
<b>P/N 6pack M16 Metric</b>	<b>01-6358.16K</b>
<b>P/N 6pack M16 Metric 304 Stainless</b>	<b>01-6358.6SK</b>

Kit Packing Information	
Anchors per Set	6
Set Carton dimensions, mm	306 x 140 x 90
Set Carton dimensions, inch	12 x 5.5 x 3.5
Set Carton weight	3.2 Kg / 7 lbs.
Set Carton Volume	0.xx CBM
Master carton	<b>36</b> anchors
Dimensions mm	330 x 435 x 200
Dimensions inch	13 x 17 x 8
weight	20 Kg / 44 lbs.

**Note 1:** When installing anchors close together, de-rate the pull strength of the additional anchors by 6% for every 1 inch less than 12. Thus an arrangement of

4 anchors at 4" apart will resist a total pull force of 12,800 lbs. (5000 + (3 x (52% x 5000))). See online calculator [asphaltanchors.com/calculators](http://asphaltanchors.com/calculators)



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