

BOLT HOLD™ SP12-38 Asphalt Anchors

Datasheet V4

Overview

Asphalt Anchors Corp. has developed the *BoltHold™* family of anchors suitable for mounting objects to asphalt surfaces. The SP12-38 anchors body is 12" long and 3/8" in diameter, with a 3/8"-16 female thread. The anchor is bonded to the asphalt using special grouts such as our EPX2 or EPX3.

The SP12-38 is recommended for applications where pull forces are less than 2,000 lb. per anchor and shear forces are high (less than 1,500 lb. per anchor).

Description

The SP12-38 is constructed from a thick-walled tube. The bottom is flared and sealed to act as a wedge when pushing the anchor into the ground. A welded spiral along the length of the anchor provides a strong bond with the grout.

The top of the anchor incorporates a large washer with an internal 3/8" female thread. The washer prevents the anchor from dropping below the surface.

The standard SP12 is made of zinc plated steel. An all stainless-steel version is available. Each anchor is preinstalled with a 1" long grade 5 hex bolt and a 1" washer.



Force Rating

The resistance of the installed anchors to extraction depends on the nature of the asphalt and the gravel below it. The SP12-38 is pull-rated for 2,000 lb.(8.9kN) when installed with the EPX2 or EPX3 grouts (see note 1). At ground level, the anchor can resist 1,500 lb. of shear force. The anchor is rated for 200 in-lb. rotary torque; this torque is exerted when tightening the attaching bolt.

To find out if an anchor is 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 roadway surface.

Note 1: When installing anchors close together, derate the pull strength of additional anchors by 6% for every 1 inch less than 12. For example, 4SP12 anchors at 4" apart will resist a total pull of 5,120 lb. (2,000 + (3x(52% x2000))).

About Asphalt

Asphalt is 20 times weaker than concrete. Asphalt flows under pressure over time and thus cannot support expansion-type wedge anchors that are so effective in concrete. BoltHold anchors use a stress-free bond between the anchors and the asphalt, assuring long term stability.

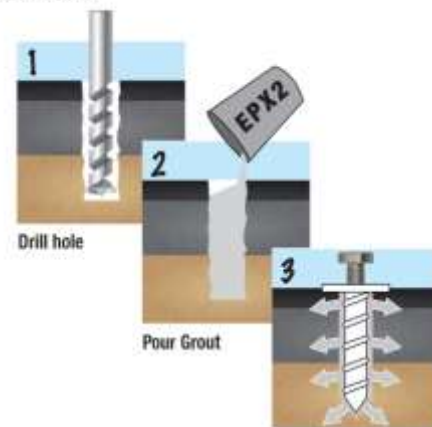
The length of the anchor serves to increase the shear resistance by embedding the anchor in the compacted gravel below the asphalt layer.

Installation

The installation requires drilling a 3/8", 12" deep hole into the asphalt and the gravel below it. The hole is then filled with grout and the anchor is dropped in. The anchor is ready for use in 15-45 minutes depending on the grout and ambient temperature. Below 45°F use our EPX3 resin grout.

Always consult the latest inline installation instructions before installing these anchors. A comprehensive installation manual is available on our web site under "Library". The online manual is updated regularly to reflect the availability of grouts, new installation techniques and user feedback.

Installation



1. Drill a hole per anchor specs
2. Fill hole with EPX2 grout
3. Push anchor in flush with surface.
4. Wait 15 minutes and attach object to anchor.



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Grout Selection

The term “grout” is used here in a broad meaning; the actual materials can be expanding cement or certain 2-part hard epoxies. We offer our tested EPX2 cement and EPX3 resin (epoxy) grouts.

In general, the anchoring 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. **Do not use Kwixset or Rockite.**

You will need about 2 Fluid oz (1/4 cup) or 60 cc of grout per anchor. Our EPX2 resealable bag supplies 4 anchors. The EPX2 10 lb. tubs supply 55 anchors. Our EPX3 single-cartridge epoxy tube covers 5 SP12 anchors.

Packing

The BoltHold SP12-38 anchors are packaged 6 anchors to a “Set” carton. 9 Sets are packaged in a Master carton which holds 54 anchors.

KIT PACKING INFORMATION	
Anchors per Set	6
Set Carton dimensions, mm	335 x 107 x 84
Set Carton dimensions, inch	13.2” x 4.2 x 3.3
Set Carton weight	3.5 lb./ 1.6 Kg
Set Carton Volume	0.003 CBM
Number of anchors per Master	54
Master Carton dimensions, mm	353 x 340 x 285
Master Carton dimensions, inch	13.9x 13.4 x 11.2
Master Carton Gross Weight	32 lb. / 14.5 Kg
Master carton Volume	0.038 CBM

Tariffs

The SP12-38 are shipped under schedule 55. HTS code (export) 7318.19.0000

Links

[Installation Manual](#)

[Prices](#)

Anchor Metrics	
Anchor Length	12” (309 mm)
Anchor body diameter	5/8” (18 mm)
Anchor head diameter	1.35” (43 mm)
Washer thickness	0.08” (2 mm)
Anchor weight	0.4 lb. (0.2 Kg)
Internal Thread	3/8”-16 UNC
Bolt allowed depth	4” (100 mm)
Finish SP12-38	Zinc plating
Finish SP12-38S	SS 304
Finish SP12-38-D	Dacromet 320
Pull resistance	2,000 lb.
Shear Resistance	1,500 lb.
Torque rating	200 lb.-in
Grout volume required	120cc (4 FL oz)
SP12 per EPX2 bag/Tub	2 / 28
SP12-38 6-pack SKU	01-6310.38K
SP12-38S 6-pack SKU	01-6310.3SK
SP12-38-D 6-pack SKU	01-6310.38K-D

