

ORDERING INFORMATION

Mushroom Head Type 316 Stainless Spike (Tamperproof)

Cat. No.	Anchor Size	Drill Diameter	Min. Embed.	Std. Box	Std. Carton	Wt./100
6602	3/16" x 1"	3/16"	7/8"	100	1,000	1 1/4
6603	3/16" x 1 1/4"	3/16"	7/8"	100	1,000	1 1/2
6604	3/16" x 1 1/2"	3/16"	1 1/4"	100	1,000	1 3/4
6606	3/16" x 2"	3/16"	1 1/4"	100	1,000	2
6623	1/4" x 1 1/4"	1/4"	1"	100	1,000	2 1/4
6624	1/4" x 1 1/2"	1/4"	1 1/4"	100	1,000	2 1/2
6626	1/4" x 2"	1/4"	1 1/4"	100	1,000	3
6628	1/4" x 2 1/2"	1/4"	1 1/4"	100	1,000	4
6630	1/4" x 3"	1/4"	1 1/4"	100	1,000	4 1/2
6646	3/8" x 2"	3/8"	1 3/4"	25	250	7 1/2
6648	3/8" x 2 1/2"	3/8"	1 3/4"	25	250	9
6650	3/8" x 3"	3/8"	1 3/4"	25	250	10

The published length is measured from below the head to the end of the anchor.



MECHANICAL ANCHORS

Pipe Spike

Cat. No.	Anchor Size	Drill Diameter	Min. Embed.	Std. Box	Std. Carton	Wt./100
3755	1/4"	3/16"	1 1/4"	100	1,000	4
3758	3/8"	1/4"	1 3/4"	50	500	6

Designed for rod hanging.



Tie-Wire Spike

Catalog Number	Anchor Size	Drill Diameter	Minimum Embed.	Tie Wire Hole Size	Standard Box	Standard Carton	Wt./100
3756	3/16"	3/16"	1 1/8"	3/16"	100	500	2
3759	1/4"	1/4"	1 1/8"	9/32"	100	500	2 1/2

Designed for suspended ceilings.



Forming Spike

Cat. No.	Anchor Size	Drill Diameter	Min. Embed.	Std. Box	Std. Carton	Wt./100
3795	3/16" x 1 1/2"	3/16"	1 1/4"	100	1,000	2 1/2
3796	3/16" x 2"	3/16"	1 1/4"	100	1,000	3
3797	3/16" x 2 3/4"	3/16"	1 1/4"	100	1,000	4
3794	1/4" x 2 3/4"	1/4"	1 1/4"	100	1,000	5

Designed for concrete forming. The published length is measured from below the head to the end of the anchor.



Spike® Pre-Expanded Anchor

PRODUCT DESCRIPTION

The Spike anchor, also known as the *Rawl Spike*, is a patented, one-piece, tamper-proof vibration resistant anchor for use in concrete, block or stone. Several head styles and anchor materials are available. The Spike anchor is formed with an "s" shaped configuration at the working end of the anchor to create an expansion mechanism. Since the anchor is pre-expanded, there is no secondary tightening operation required which greatly reduces the overall cost of an anchor installation.

GENERAL APPLICATIONS AND USES

- Tamper-proof Application
- Exterior Applications
- Cable Trays and Strut
- Suspended Ceilings
- Metal Track Attachments
- Fire Sprinkler
- Concrete Formwork
- Suspended Ceilings

FEATURES AND BENEFITS

- + Pre-expanded anchor design allows for easy installation
- + Mushroom and flat head Spike anchors are tamper-proof
- + Forming Spike, which is removable, can be used for temporary installations
- + Pipe and Tie-wire Spike is an easy to install alternative to overhead anchoring

APPROVALS AND LISTINGS

Factory Mutual Research Corporation (FM Approvals) – J.I. ON5A1.AH, 3/8" diameter Pipe Spike
 Pipe hanger components for Automatic Sprinkler Systems
 Tested in accordance with ASTM E488 and AC01 criteria

GUIDE SPECIFICATIONS

CSI Divisions: 03151-Concrete Anchoring, 04081-Masonry Anchorage and 05090-Metal Fastenings. Pre-expanded anchors shall be Spike as supplied by Powers Fasteners, Inc., Brewster, NY.

MATERIAL SPECIFICATIONS

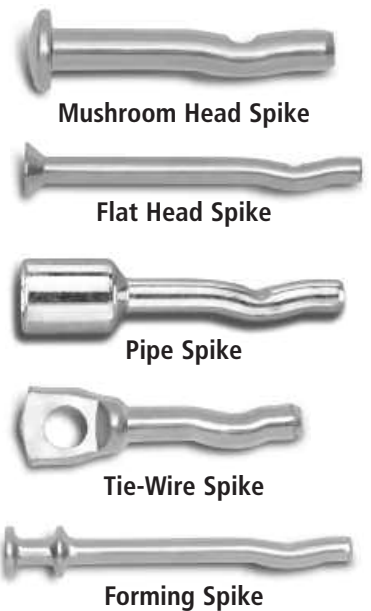
Carbon Steel (Mushroom Head, Flat Head, Pipe, Tie-Wire and Forming Spike)

Anchor Component	Component Material
Anchor Body	Grade 8.2 Carbon Steel
Zinc Plating	ASTM B633, SC1, Type III (Fe/Zn 5)

Stainless Steel (Mushroom Head)

Anchor Component	Component Material
Anchor Body	Type 316L Stainless Steel

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HEAD STYLES

- Mushroom Head
- Flat Head
- Pipe
- Tie-Wire
- Forming

ANCHOR MATERIALS

- Zinc Plated Carbon Steel
- Type 316 Stainless Steel

ANCHOR SIZE RANGE (TYP.)

3/16" diameter to 1/2" diameter

SUITABLE BASE MATERIALS

- Normal-Weight Concrete
- Structural Lightweight Concrete
- Grouted CMU

INSTALLATION SPECIFICATIONS

Mushroom Head Carbon Steel Spike

Dimension	Anchor Size, <i>d</i>			
	3/16"	1/4"	3/8"	1/2"
ANSI Drill Bit Size, <i>d_{bit}</i> (in.)	3/16	1/4	3/8	1/2
Fixture Clearance Hole, <i>d_h</i> (in.)	1/4	5/16	7/16	9/16
Head Height (in.)	7/64	7/64	7/32	1/4
Head Size, O.D. (in.)	7/16	1/2	3/4	1

Flat Head Spike (80° – 82° Head)

Dimension	Anchor Size, <i>d</i>	
	3/16"	1/4"
ANSI Drill Bit Size, <i>d_{bit}</i> (in.)	3/16	1/4
Fixture Clearance Hole, <i>d_h</i> (in.)	1/4	5/16
Head Height (in.)	7/64	9/64
Head Size, O.D. (in.)	3/8	1/2

Mushroom Head Stainless Steel Spike

Dimension	Anchor Size, <i>d</i>			
	3/16"	1/4"	3/8"	1/2"
ANSI Drill Bit Size, <i>d_{bit}</i> (in.)	3/16	1/4	3/8	1/2
Fixture Clearance Hole, <i>d_h</i> (in.)	1/4	5/16	7/16	9/16
Head Height (in.)	7/64	7/64	7/32	1/4
Head Size, O.D. (in.)	7/16	1/2	3/4	1

Pipe Spike

Dimension	Anchor Size	
	1/4"	3/8"
ANSI Drill Bit Size, <i>d, d_{bit}</i> (in.)	3/16	1/4
UNC Thread Size	1/4-20	3/8-16
Head Height (in.)	1/2	5/8
Head Size, O.D. (in.)	13/32	35/64

Tie-Wire Spike

Dimension	Anchor Size, <i>d</i>	
	3/16"	1/4"
ANSI Drill Bit Size, <i>d_{bit}</i> (in.)	3/16	1/4
Tie-Wire Hole (in.)	3/16	9/32
Head Height (in.)	37/64	41/64
Head Width (in.)	9/64 x 7/16	3/16 x 9/16

Forming Spike

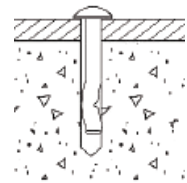
Dimension	Anchor Size, <i>d</i>	
	3/16"	1/4"
ANSI Drill Bit Size, <i>d_{bit}</i> (in.)	3/16	1/4
Fixture Clearance Hole, <i>d_h</i> (in.)	1/4	5/16
Head Height (in.)	9/16	9/16
Head Size, O.D. (in.)	13/32	1/2

Installation Procedure

Drill a hole into the base material to a depth of at least 1/2" deeper than the embedment required. The tolerances of the drill bit used should meet the requirements of ANSI Standard B212.15. Blow the hole clean of dust and other material.



Where a fixture is used, drive the anchor through the fixture into the anchor hole until the head is firmly seated against the fixture. Be sure the anchor is driven to the required embedment depth.



The Tie-Wire and Pipe Spike versions should be driven in until the head is seated against the surface of the base material.

