

Vertigo™ Rod Hangers

PRODUCT DESCRIPTION

Vertigo is an all steel threaded fastening system for suspending steel threaded rod vertically overhead in pipe hanging, fire protection, electrical conduit and cable-tray applications. Vertigo are available in three versions which can be installed in a variety of base materials including steel purlins, bar joists and beams, wood frame columns and beams, as well as concrete ceilings, beams and columns.

Steel threaded rods in 1/4", 3/8" and 1/2" diameters can be vertically suspended with Vertigo. In wood and steel base materials, Vertigo is also offered in a side mount style for lateral installation of 1/4" and 3/8" diameter steel threaded rods onto joists, columns and overhead members. For all steel and wood Vertigo fasteners, a universal Vertigo Socket Driver is recommended to provide proper installation with a screw gun or hammer drill. Concrete Vertigo fasteners should be installed with the appropriate size standard drive sockets and adjustable torque, battery powered screw gun or hammer drill.

GENERAL APPLICATIONS AND USES

- Hanging Pipe and Sprinkler Systems
- Lighting Systems and Overhead Utilities
- Suspended Ceilings
- Suspending Conduit and Cable Trays
- HVAC Ductwork and Strut Channels
- Mounting Security Equipment

FEATURES AND BENEFITS

- + One system for all rod hanging applications in steel, wood and concrete
- + Ease and speed of overhead installation
- + Lower in-place cost, when compared to beam clamps, lag bolts and dropins
- + Steel and wood Vertigo can be installed with a screw gun or hammer drill
- + Concrete Vertigo can be installed with an adjustable torque, battery powered screw gun or hammer drill
- + Side mount versions available for steel and wood Vertigo
- + The universal socket can be used for the steel and wood Vertigo

APPROVALS AND LISTINGS

FM Approvals (FM) - (see listing for applicable sizes and types).

Pipe Hangers components for automatic sprinkler systems - File No. JI 3015153

Underwriters Laboratory (UL) - (see listing for applicable sizes and types).

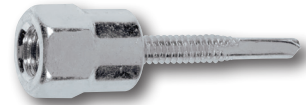
Pipe Hangers - File No. EX 1289

Luminaire - File No. E362339

GUIDE SPECIFICATIONS

CSI Divisions: 03 16 00 - Concrete Anchors, 05 05 19 - Post-Installed Concrete Anchors, 05 05 23 - Metal Fastenings and 06 05 23 - Wood, Plastic, and Composite Fastenings. Rod Hangers shall be Vertigo anchors as supplied by Powers Fasteners, Inc., Brewster, NY.

SECTION CONTENTS	Page No.
General Information.....	1
Installation Specifications.....	2
Material Specifications	2
Performance Data	3
Ordering Information	7



Steel Vertigo



Wood Vertigo



**Concrete Vertigo
(Wedge-Bolt OT)**

ANCHOR MATERIALS

Zinc Plated Carbon Steel

ANCHOR SIZE RANGE (TYP.)

1/4" to 1/2" for Steel
1/4" to 1/2" for Wood
1/4" to 1/2" for Concrete

SUITABLE BASE MATERIALS

Steel Purlins and Beams
Wood and Timber
Normal-Weight concrete
Structural Lightweight concrete
Hollow Core Concrete Plank

INSTALLATION SPECIFICATIONS

Steel Vertigo

Point Style	#3	#5
Self Drilling Range	0.036" (20 gauge) – 0.188" (3/16")	0.188" (3/16") – 0.500" (1/2")
Screw Size (UNC)	1/4-20 thread	1/4-20 thread
Root Diameter (in.)	13/64	13/64
Thread Length (in.)	1-3/16" (1-1/2" screw)	31/32" (1-1/2" screw)
Flange Thickness (in.)	1/16	1/16
Drill Speed (RPM)	500-1,500	500-1,500

Install with universal steel and wood socket.

Wood Vertigo

Screw Size	1/4" Thread Forming	5/16" Thread Forming
Pre-drill Diameter (in.) (if required)	1/8	1/8
Point Style	Type 17	Type 17
Root Diameter (in.)	3/16	7/32
Thread Length (in.)	Screw length less 5/16	Screw length less 5/16
Flange Thickness (in.)	1/16	1/16

Install with universal steel and wood socket.

Vertigo Couplings (Steel & Wood)

Screw Size	1/4"	3/8"	1/2"	1/4"	3/8"
Coupling Size and Type	Vertical	Vertical	Vertical	Side	Side
Thread Size (UNC)	1/4-20	3/8-16	1/2-13	1/4-20	3/8-16
Thread Depth (in.)	3/8	3/8	3/8	5/8 (through)	5/8 (through)
Width (flat to flat) (in.)	5/8	5/8	5/8	5/8	5/8
Height (in.)	13/16	13/16	13/16	13/16	13/16

Concrete Vertigo (Wedge-Bolt OT)

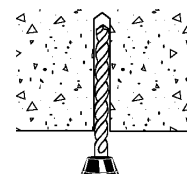
Rod Diameter/Anchor Size	1/4"	3/8"	1/2"
ANSI Drill Bit (in.)	1/4	1/4	3/8
Overall Screw Shank Length	1-1/4	1-1/2	2-3/4
Anchor Thread Length (in.)	1-1/8	1-3/8	2-1/2
Root Diameter (in.)	15/64	15/64	23/64
Coupling / Washer Height (in.)	27/64	9/16	53/64
Integral Washer O.D. (in.)	31/64	39/64	31/32
Coupling Thread Size (UNC)	1/4-20	3/8-16	1/2-13
Coupling Thread Depth (in.)	3/8	1/2	3/4
Socket Driver Size (in.)	3/8	1/2	11/16

Install with universal steel and wood socket.

Installation Guidelines

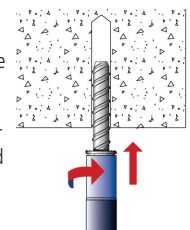
When installing Vertigo fasteners, eye protection should be worn as a safety precaution.

If pre-drilling is required (certain types of wood truss/wood joist and all concrete base materials), select the recommended drill bit type and diameter. For Concrete Vertigo only, drill to the appropriate embedment depth, adding at least one diameter (1/4" to 1/2") to the drilling depth to prevent the tip of the fastener from running into a dead end at the rear of the anchor hole.



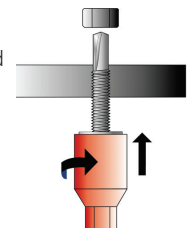
Concrete

Select the appropriate socket driver for the anchor size and type to be installed and mount into chuck of installation tool. Insert the Vertigo fastener into the socket driver, and install perpendicular to the base material surface. Drive the fastener with a smooth steady motion until the coupling is firmly seated against the surface of the base material.



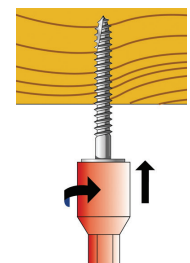
Steel

Thread the appropriate diameter steel threaded rod or threaded bolt into the coupling. The threaded rod or bolt should fully engage the thread length of the coupling on a vertical mount fastener. The threaded rod or threaded portion of the bolt can pass through coupling of a side mount fastener.



Wood

For UL and FM listings for Pipe Hangers, Steel Vertigo should be installed with a retaining nut.



MATERIAL SPECIFICATIONS

Steel and Wood Vertigo

Component	Component Material
Screw Body	AISI 1018-1022 (Case Hardened)
Coupling	AISI 1018-1022 (Case Hardened)
Zinc Plating	ASTM B633, SC1, Type III (Fe/Zn5)

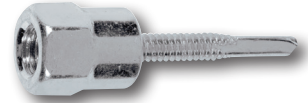
Concrete Vertigo (Wedge-Bolt OT)

Component	Component Material
Anchor Body	Case Hardened 10B21 Carbon Steel
Zinc Plating	ASTM B633, SC1, Type III (Fe/Zn 5)

ORDERING INFORMATION

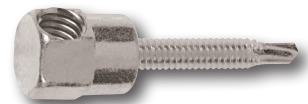
Steel Vertical Hanger (#3 for Purlins, #5 for Beams)

Cat. No.	Rod Dia.	Screw Shank Size and Length	Point Style	Self Drilling Range	Std. Box	Std. Ctn.
7155	1/4"	1/4"-20 x 1"	#3	0.036" (20 gauge) to 0.188" (3/16")	100	500
7157	3/8"	1/4"-20 x 2"	#3		100	500
7158	3/8"	1/4"-20 x 1" (w/nut)	#3		100	500
7159	3/8"	1/4"-20 x 1-1/2" (w/nut)	#3		100	500
7160	3/8"	1/4"-20 x 1-1/2" (w/nut)	#3		100	500
7152	1/4"	12"-20 x 1-1/2"	#5	0.188" (3/16") to 0.500" (1/2")	100	500
7154	3/8"	12"-20 x 1-1/2" (w/nut)	#5		100	500
7161	1/2"	12"-20 x 1-1/2" (w/nut)	#5		100	500



Steel Side Hanger (#3 for Purlins, #5 for Beams)

Cat. No.	Rod Dia.	Screw Shank Size and Length	Point Style	Self Drilling Range	Std. Box	Std. Ctn.
7183	1/4"	1/4"-20 x 1"	#3	0.036" (20 gauge) to 0.188" (3/16")	100	500
7184	3/8"	1/4"-20 x 1" (w/nut)	#3		100	500
7186	3/8"	1/4"-20 x 1-1/2" (w/nut)	#3		100	500
7188	3/8"	1/4"-20 x 2" (w/nut)	#3		100	500
7200	1/4"	12"-20 x 1-1/2"	#5	0.188" (3/16") to 0.500" (1/2")	50	300
7201	3/8"	12"-20 x 1-1/2" (w/nut)	#5		100	600



Wood Vertical Hanger

Cat. No.	Rod Dia.	Screw Shank Size and Length	Point Style	Pre-Drill Diameter (If Required)	Std. Box	Std. Ctn.
7163	1/4"	1/4" x 2"	Type 17	1/8"	100	500
7203	3/8"	1/4" x 1"	Type 17		100	500
7165	3/8"	1/4" x 2"	Type 17		100	500
7167	3/8"	1/4" x 3"	Type 17		100	500
7169	3/8"	1/4" x 4"	Type 17		100	500
7162	3/8"	5/16" x 2-1/2"	Type 17		100	500
7164	1/2"	5/16" x 2-1/2"	Type 17		100	500



Wood Side Hanger

Cat. No.	Rod Dia.	Screw Shank Size and Length	Point Style	Pre-Drill Diameter (If Required)	Std. Box	Std. Ctn.
7185	1/4"	1/4" x 1"	Type 17	1/8"	100	500
7205	3/8"	1/4" x 1"	Type 17		100	500
7170	3/8"	1/4" x 2"	Type 17		100	500
7156	3/8"	5/16" x 2-1/2"	Type 17		100	500



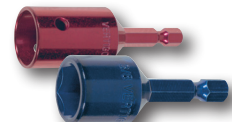
Concrete Vertical Hanger

Cat. No.	Rod Dia.	Screw Shank Size and Length	Thread Style	Pre-Drill Diameter (If Required)	Std. Box	Std. Ctn.
7171	1/4"	1/4" x 1-1/4"	Wedge-Bolt OT	1/4" ANSI	100	500
7173	3/8"	1/4" x 1-1/2"	Wedge-Bolt OT	1/4" ANSI	100	500
7175	1/2"	1/4" x 2-3/4"	Wedge-Bolt OT	3/8" ANSI	50	250



Drive Sockets and Pole Tool

Cat. No.	Description	RPM	Std. Box	Std. Ctn.
7166	6'-12' Pole Tool (includes three Jaw Chuck)	N/A	1	1
7187	Universal Steel & Wood Socket (Red)	500 to 1500 RPM	5	25
7195	1/4" Concrete Socket (Blue)	-	5	25
7197	3/8" Concrete Socket (Blue)	-	5	25
7198	1/2" Concrete Socket (Blue)	-	5	25



Concrete Vertigo Installation Accessories

Cat. No.	Description	Maximum Bit Length	Std. Box	Std. Ctn.
5864	Vertigo Installation Kit: 1/4" and 3/8" Concrete Drive Sockets (Blue) Universal Steel & Wood Socket (Red) (Sleeve Assembly (same as Cat# 5874)	6"	1	3/4
5874	Sleeve Assembly (5-3/4")	6"	1	-
Cat. No.	Description	Usable Length	Std. Tube	Wt./10
5866	1/4" x 6" Hex Shank SDS Drill Bit	4"	1	1/2

