Vertigo™ *Rod Hanging System*

PRODUCT DESCRIPTION

Vertigo is a one-piece, all steel threaded fastening system for suspending steel threaded rod vertically overhead in pipe hanging, fire protection, electrical conduit and cable-tray applications. Vertigo 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 an 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

International Code Council, Evaluation Service (ICC-ES) ESR-1678
(for concrete Vertigo only)
Factory Mutual Research Corporation (FM Approvals) File No. J.I 3015153
Underwriters Laboratory (UL) File No. EX 1289 (N)

GUIDE SPECIFICATIONS

CSI Divisions: *03151-Concrete Anchoring, 05090-Metal Fastenings and 06060-Wood Connections and Fasteners.* Rod Hangers shall be Vertigo anchors as supplied by Powers Fasteners, Inc., Brewster, NY.

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Steel Vertigo

Wood Vertigo

Concrete Vertigo (Wedge-Bolt OT)

ANCHOR MATERIALS

Zinc Plated Carbon Steel

ROD/ANCHOR SIZE RANGE (TYP.)

1/4" to 1/2" threaded rod for Steel
1/4" to 1/2" threaded rod for Wood
1/4" to 1/2" threaded rod 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 gage) – 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	3/8" Thread Forming
Pre-drill Diameter (in.) (if required)	1/8	1/8
Point Style	Type 17	Type 17
Root Diameter (in.)	3/16	5/16
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)

Coupling Size and Type	1/4" Vertical	3/8" Vertical	1/2" Vertical	1/4" Side	3/8" 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

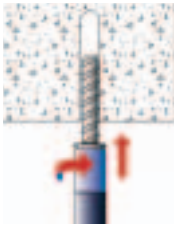
Install with appropriate sized concrete socket.

Installation Guidelines

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

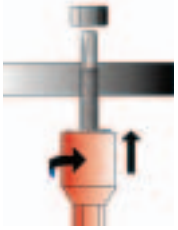
If pre-drilling is required (certain types of wood truss/wood joist and all concrete base materials), select the recommended drill bit type and diameter. For Concrete Vertigo only, drill to the appropriate embedment depth, adding at least one diameter (1/4" to 1/2") to the drilling depth to prevent the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

Concrete



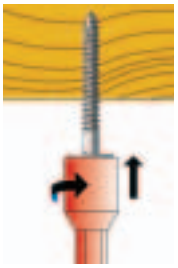
Select the appropriate socket driver for the anchor size and type to be installed and mount into chuck of installation tool. Insert the Vertigo fastener into the socket driver, and install perpendicular to the base material surface. Drive the fastener with a smooth steady motion until the coupling is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

MATERIAL SPECIFICATIONS

Steel and Wood Vertigo

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

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)

PERFORMANCE DATA

Steel Vertigo – Ultimate Tension Load Capacities when Installed in Minimum ASTM A 36 Steel (Beams) and ASTM A 572 Steel (Purlins)[1,2]

Anchor Size/ Rod Diameter in. (mm)	Mount Direction	Screw Shank Size and Length	Minimum Steel Gage (Thickness)						
			20 0.036"	18 0.048"	16 0.060"	14 0.075"	12 0.105"	3/16" 0.187"	1/4" 0.250"
			lbs. (kN)	lbs. (kN)	lbs. (kN)	lbs. (kN)	lbs. (kN)	lbs. (kN)	lbs. (kN)
1/4 (6.4)	Vertical	1/4-20 x 1" (w/nut)	1,550 (7.0)	1,550 (7.0)	1,775 (8.0)	1,775 (8.0)	2,050 (9.2)	3,850 (17.3)	5,040 (22.7)
	Vertical	1/4-20 x 1"	405 (1.8)	620 (2.8)	985 (4.4)	1,160 (5.2)	1,560 (7.0)	3,205 (14.4)	5,040 (22.7)
	Side	1/4-20 x 1" (w/nut)	1,550 (7.0)	1,550 (7.0)	1,775 (8.0)	1,775 (8.0)	2,050 (9.2)	3,850 (17.3)	2,050 (9.2)
3/8 (9.5)	Vertical	1/4-20 x 1" (w/nut)	1,550 (7.0)	1,550 (7.0)	1,775 (8.0)	1,775 (8.0)	2,050 (9.2)	3,850 (17.3)	5,040 (22.7)
	Side	1/4-20 x 1-1/2" (w/nut)	1,550 (7.0)	1,550 (7.0)	1,775 (8.0)	1,775 (8.0)	2,050 (9.2)	3,850 (17.3)	2,050 (9.2)
	Vertical	1/4-20 x 1-1/2"	405 (1.8)	620 (2.8)	985 (4.4)	1,160 (5.2)	1,560 (7.0)	3,205 (14.4)	5,040 (22.7)
	Side	1/4-20 x 1-1/2"	405 (1.8)	620 (2.8)	985 (4.4)	1,160 (5.2)	1,560 (7.0)	1,965 (8.8)	1,965 (8.8)
	Vertical	1/4-20 x 2" (w/nut)	1,550 (7.0)	1,550 (7.0)	1,775 (8.0)	1,775 (8.0)	2,050 (9.2)	3,850 (17.3)	5,040 (22.7)
1/2 (12.7)	Vertical	12-24 x 1-1/2"	495 (2.2)	710 (3.2)	920 (4.1)	1,560 (7.0)	2,050 (9.2)	3,280 (14.8)	5,040 (22.7)

1. For Steel Vertigo loaded perpendicular to threaded rod (shear) the ultimate load capacity for the anchor is 1,965 lbs in nominal 20 gage steel (0.036").
2. Steel Vertigo are recommended to be installed with the Universal Steel & Wood Nut Driver.

Wood Vertigo – Ultimate Tension Load Capacities when Installed in Wood Base Materials (Structural Wood and Timber)[1,2]

Anchor Size/ Rod Diameter in. (mm)	Mount Direction	Screw Shank Size and Length	Embedment Depth in. (mm)	Wood Member (Type)		
				Fir	Pine	Spruce
				lbs. (kN)	lbs. (kN)	lbs. (kN)
1/4 (6.4)	Vertical	1/4 x 1"	1 (25.4)	685 (3.1)	650 (2.9)	650 (2.9)
	Side	1/4 x 1"	1 (25.4)	685 (3.1)	650 (2.9)	650 (2.9)
3/8 (9.5)	Vertical	1/4 x 2"	2 (50.8)	1,510 (6.8)	1,510 (6.8)	1,510 (6.8)
	Side	1/4 x 2"	2 (50.8)	1,800 (8.1)	1,800 (8.1)	1,800 (8.1)
	Vertical	1/4 x 3"	3 (76.2)	2,075 (9.3)	1,510 (6.8)	1,510 (6.8)
	Vertical	1/4 x 4"	4 (101.6)	2,075 (9.3)	1,510 (6.8)	1,510 (6.8)
	Vertical	3/8" x 2 1/2"	2 1/2 (63.5)	2,670 (12.0)	3,110 (14.0)	3,110 (14.0)
	Side	3/8" x 2 1/2"	2 1/2 (63.5)	1,450 (6.5)	1,530 (6.9)	1,380 (6.2)
1/2 (12.7)	Vertical	3/8" x 2 1/2"	2 1/2 (63.5)	2,670 (12.0)	3,110 (14.0)	3,110 (14.0)

1. Timber/joist manufacturers may require pre-drilled holes with wood depending on the location of the anchor installation. Consult with the trust/joist manufacturer for details.
2. Wood Vertigo are recommended to be installed with the Universal Steel & Wood Nut Driver.

PERFORMANCE DATA

Concrete Vertigo – Ultimate Load Capacities when Installed in Normal-Weight Concrete[1,2,3]

Anchor Size/ Rod Dia. in. (mm)	Mount Direction	Screw Shank Size and Length	ANSI Drill Bit Diameter d_{bit} in.	Embed. Depth h_v in. (mm)	Minimum Concrete Compressive Strength (f'_c)					
					2,000 psi (13.8 MPa)		**4,000 psi** (20.7 MPa)		**6,000 psi** (41.4 MPa)	
					Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)	Tension lbs. (kN)	Shear lbs. (kN)
1/4 (6.4)	Vertical	1/4" x 1 1/4"	1/4"	1 1/4 (31.8)	1,390 (6.3)	1,810 (8.1)	1,950 (8.8)	2,440 (11.0)	2,070 (9.3)	2,570 (11.6)
3/8 (9.5)	Vertical	1/4" x 1 1/2"	1/4"	1 1/2 (38.1)	1,760 (7.9)	2,580 (11.6)	2,595 (11.7)	2,640 (11.9)	2,770 (12.5)	2,700 (12.2)
1/2 (12.7)	Vertical	3/8" x 2 3/4"	3/8"	2 3/4 (69.9)	5,320 (23.9)	5,250 (23.6)	6,050 (27.2)	6,330 (28.5)	8,620 (38.8)	3,110 (14.0)

1. The values listed above are ultimate load capacities which should be reduced by a minimum safety factor of 4.0 or greater to determine the allowable working load.
2. Linear interpolation may be used to determine ultimate loads for intermediate compressive strengths.
3. Concrete Vertigo anchors are recommended to be installed with the appropriate Concrete Nut Driver.

Concrete Vertigo – Ultimate Load Capacities when Installed Through Metal Deck into Structural Lightweight Concrete[1,2,3,4,5,6]

Anchor Size Rod Diameter d in. (mm)	Embedment Depth h_v in. (mm)	Lightweight Concrete Over Minimum 20 Ga. Metal Deck $f'_c \geq$ **3,000 psi** (20.7 MPa)	
		Minimum 4 1/2" Wide Deck	
		Tension lbs. (kN)	Load at 45° lbs. (kN)
1/4 (6.4)	1 1/4 (31.8)	800 (3.6)	1,140 (5.1)
3/8 (9.5)	1 1/2 (38.1)	1,780 (8.0)	1,500 (6.8)
1/2 (12.7)	2 3/4 (69.9)	3,880 (17.5)	2,920 (13.1)

1. The values listed above are ultimate and allowable load capacities for Vertigo rod hangers installed in sand-lightweight concrete.
2. The metal deck shall be minimum No. 20 gage thick steel [(0.035-inch base metal thickness (0.89 mm)] conforming to ASTM A 653/ A 653M.
3. Allowable loads capacities are calculated using an applied safety factor of 4.0.
4. The tabulated load values are for anchors installed with a minimum flute edge distance of 1 1/2-inch.
5. Allowable loads for anchors to resist short-term loads such as earthquake or wind may be increased by 33-1/3 percent for the duration of the load where permitted by code.
6. Concrete Vertigo anchors are recommended to be installed with the appropriate Concrete Nut Driver.

Concrete Vertigo – Ultimate Tension Load Capacities when Installed in Hollow Core Concrete Plank[1,2,3]

Anchor Size/ Rod Dia. in. (mm)	Mount Direction	Screw Shank Size and Length	ANSI Drill Bit Diameter d_{bit} in.	Embed. Depth h_v in. (mm)	Center of Web	Center of Core
					lbs. (kN)	lbs. (kN)
1/4 (6.4)	Vertical	1/4" x 1 1/4"	1/4"	1 1/4 (31.8)	1,390 (6.3)	1,810 (8.1)
3/8 (9.5)	Vertical	1/4" x 1 1/2"	1/4"	1 1/2 (38.1)	1,760 (7.9)	2,580 (11.6)
1/2 (12.7)	Vertical	3/8" x 2 3/4"	3/8"	2 3/4 (69.9)	5,320 (23.9)	5,250 (23.6)

1. Tabulated load values are for anchors installed in 8-inch-thick hollow core plank with minimum compressive strength of 5,000 psi at the time of installation. The 4' x 6' normal-weight concrete members features include 1-1/2" cover above and below cores and a minimum web thickness of 1-1/2".
2. Depending on fastener application and governing building code, ultimate load capacities should be reduced by a minimum safety factor to determine the allowable working load. NFPA 13 Fire Protection requirements are 5 times the weight of the liquid (water) filled pipe plus 250 lbs. Consult the engineer of record.
3. Concrete Vertigo anchors are recommended to be installed with the appropriate Concrete Nut Driver.

PERFORMANCE DATA

Steel Vertigo – Ultimate Load Capacities for Factory Mutual (FM Global) and Underwriter's Laboratories (UL) Listings[1]

Catalog Number	Anchor Size/ Rod Dia. in. (mm)	Mount Direction	Screw Shank Size and Length	Point Style	Maximum Pipe Size in. (mm)	UL Minimum Steel Thickness in. (mm)	UL Test Load lbs. (kN)	FM Minimum Steel Thickness in. (mm)	FM Test Load lbs. (kN)
7158	3/8 (9.5)	Vertical	1/4-20 x 1"	#3	4 (101.6)	0.060 (1.5)	1,500 (6.8)	0.096 (2.4)	1,475 (6.6)
7184		Side	1/4-20 x 1"	#3	4 (101.6)	0.060 (1.5)	1,500 (6.8)	0.096 (2.4)	1,475 (6.6)
7160		Vertical	1/4-20 x 1 1/2"	#3	4 (101.6)	0.060 (1.5)	1,500 (6.8)	0.096 (2.4)	1,475 (6.6)
7186		Side	1/4-20 x 1 1/2"	#3	4 (101.6)	0.060 (1.5)	1,500 (6.8)	0.096 (2.4)	1,475 (6.6)
7154		Vertical	12-24 x 1 1/2"	#5	4 (101.6)	0.060 (1.5)	1,500 (6.8)	0.096 (2.4)	1,475 (6.6)
7188		Side	1/4-20 x 2"	#3	4 (101.6)	0.060 (1.5)	1,500 (6.8)	0.096 (2.4)	1,475 (6.6)
7201		Side	12-24 x 1 1/2"	#5	4 (101.6)	0.060 (1.5)	1,500 (6.8)	0.096 (2.4)	1,475 (6.6)
7164	1/2 (12.7)	Vertical	12-24 x 1 1/2"	#5	8 (203.2)	0.250 (6.4)	4,050 (18.2)	0.250 (6.4)	3,800 (17.1)

1. Steel Vertigo anchors are recommended to be installed with the Universal Steel & Wood Nut Driver. For UL and FM listings, Steel Vertigo must be installed with a retaining nut.

Wood Vertigo – Ultimate Load Capacities for Factory Mutual (FM Global) and Underwriter's Laboratories (UL) Listings[1]

Catalog Number	Anchor Size/ Rod Dia. in. (mm)	Mount Direction	Screw Shank Size and Length	Embedment Depth in. (mm)	UL Maximum Pipe Size in. (mm)	UL Test Load lbs. (kN)	FM Maximum Pipe Size in. (mm)	FM Test Load lbs. (kN)
7165	3/8 (9.5)	Vertical	1/4 x 2"	2 (50.8)	3 (76.2)	1,050 (4.7)	†	†
7170		Side	1/4 x 2"	2 (50.8)	3 (76.2)	1,050 (4.7)	†	†
7167		Vertical	1/4 x 3"	3 (76.2)	3 (76.2)	1,050 (4.7)	†	†
7169		Vertical	1/4 x 4"	4 (101.6)	3 (76.2)	1,050 (4.7)	†	†
7162		Vertical	3/8" x 2 1/2"	2 1/2 (63.5)	4 (101.6)	1,500 (6.8)	4 (101.6)	1,475 (6.6)
7156		Side	3/8" x 2 1/2"	2 1/2 (63.5)	4 (101.6)	1,500 (6.8)	†	†

1. Wood Vertigo anchors are recommended to be installed with the Universal Steel & Wood Nut Driver. No pre-drilling was done in the wood base materials.
† Factory Mutual standard requires a screw diameter of 3/8" and minimum length of 2 1/2" for pipe hanging approval in wood base materials.

Concrete Vertigo – Ultimate Load Capacities for Factory Mutual (FM Global) Listings[1,2]

Catalog Number	Anchor Size/ Rod Dia. in. (mm)	Mount Direction	Screw Shank Size and Length	ANSI Drill Bit Diameter d_{bit} in.	Embedment Depth in. (mm)	FM Maximum Pipe Size in. (mm)	FM Test Load lbs. (kN)
7173	3/8 (9.5)	Vertical	1/4" x 1 1/2"	1/4"	1 1/2 (38.1)	4 (101.6)	1,475 (6.6)
7175	1/2 (12.7)	Vertical	3/8" x 2 3/4"	3/8"	2 3/4 (69.9)	8 (203.2)	3,800 (17.1)

1. Tabulated load values are for anchors installed in 8 inch thick hollow core plank with minimum compressive strength of 4,000 psi at the time of installation. The 4' x 6' normal-weight concrete members features include 1 1/2" cover above and below cores and a minimum web thickness of 1 1/2".
2. Concrete Vertigo are recommended to be installed with the appropriate Concrete Nut Driver.

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 gage) 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"	#3		100	500
7160	3/8"	1/4-20 x 1 1/2" (w/nut)	#3		100	500
7152	1/4"	12-24 x 1 1/2"	#5	0.188" (3/16") to 0.500" (1/2")	100	500
7154	3/8"	12-24 x 1 1/2" (w/nut)	#5		100	500
7161	1/2"	12-24 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 gage) 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"	#3		100	500
7188	3/8"	1/4-20 x 1 1/2" (w/nut)	#3		100	500
7200	1/4"	12-24 x 1 1/2"	#5	0.188" (3/16") to 0.500" (1/2")	100	500
7201	3/8"	12-24 x 1 1/2" (w/nut)	#5		100	100

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"	3/8" x 2 1/2"	Type 17		100	500
7164	1/2"	3/8" 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"	3/8" 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	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"	3/8" x 2 3/4"	Wedge-Bolt OT	3/8" ANSI	50	250

For side mount concrete applications use Catalog Number 7185 and 7170 with a 1/4" ANSI drill bit.

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	Wt./ Each
5865	Tapper 3000 Tool Kit — Hex Driver (used with Cat#5860) Sleeve Assembly (same as Cat# 5874) 1/4" and 3/8" Concrete Drive Sockets (Blue)	6"	1	3/4
5874	Sleeve Assembly	6"	1	–
Cat. No.	**Description**	**Usable Length**	**Std.Tube**	**Wt./10**
5860	1/4" x 4 1/2" Straight Shank Drill Bit	3"	5	1/2
5866	1/4" x 6" Hex Shank SDS Drill Bit	4"	1	1/2