

GENERAL INFORMATION

HANGERMATE®

Rod Hanging Anchors

PRODUCT DESCRIPTION

HangerMate 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. They are available in 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" and 3/8" diameters can be vertically suspended with HangerMate (a 1/2" diameter size is also available for wood). They are 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 hangers, a HangerMate Socket Driver is recommended to provide proper installation with a drill screw gun. For concrete hangers, a powered impact tool with a maximum impact wrench power of 120 ft-lb is recommended.

A pivot head version is also available for flexible connection angle and positioning of rod hangers. An acoustical ceiling eyelet version is also available for hanging wire or cable attachments.

GENERAL APPLICATIONS AND USES

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

FEATURES AND BENEFITS

- + Ease and speed of overhead installation
- + Lower in-place cost, when compared to beam clamps, lag bolts and dropins
- + Steel and wood HangerMate can be installed with a drill screw gun
- + Side mount versions available for steel and wood HangerMate
- + Socket drivers, pole tool and accessories to optimize ease of installation

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

GUIDE SPECIFICATIONS

CSI Divisions: 03 16 00 - Concrete Anchors, 05 05 23 - Metal Fastenings and 06 05 23 - Wood, Plastic, and Composite Fastenings. Rod Hangers shall be HangerMate anchors as supplied by DEWALT, Towson, MD. Anchors shall be installed in accordance with published instruction and the Authority Having Jurisdiction.

SECTION CONTENTS

General Information.....	1
Material Specifications	2
Installation Specifications	2
Performance Data.....	3
Ordering Information.....	5



STEEL HANGERMATE



WOOD HANGERMATE



CONCRETE HANGERMATE

ANCHOR MATERIALS

- Zinc Plated Carbon Steel

ANCHOR SIZE RANGE (TYP.)

- 1/4" to 3/8" for Steel
- 1/4" to 1/2" for Wood
- 1/4" to 3/8" for Concrete
(Threaded Coupler Heads)

THREAD VERSION

- Unified Coarse Thread (UNC)

SUITABLE BASE MATERIALS

- Steel Purlins and Beams
- Wood and Timber
- Concrete Members

MATERIAL SPECIFICATIONS

Component	Component Material
Screw Body	Case hardened carbon steel
Coupling (UNC thread) / Eyelet	Case hardened carbon steel
Zinc Plating	ASTM B633, SC1, Type III (Fe/Zn5)

INSTALLATION SPECIFICATIONS

Steel HangerMate

Rod Coupler Size	1/4"	3/8"
Coupling Thread Size (UNC)	1/4-20	3/8-16
Coupling Thread Depth (in.)	3/8	3/8
Coupling Height (in.)	3/4	3/4
Socket Driver Size (in.)	1/2	1/2

Note: the side mount couplings have full thread depth (through head).

Wood HangerMate

Rod Coupler Size	1/4"	3/8"	1/2"
Coupling Thread Size (UNC)	1/4-20	3/8-16	1/2-13
Coupling Thread Depth (in.)	3/8	3/8	3/8
Coupling Height (in.)	13/16	13/16	13/16
Socket Driver Size (in.)	5/8	5/8	5/8

Note: the side mount couplings have full thread depth (through head).

Concrete HangerMate

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

Installation Guidelines

1. 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 HangerMate, drill a hole to the appropriate embedment depth, adding at least 1/4" to the drilling depth to prevent the tip of the fastener from running into the back of the anchor hole during installation.

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

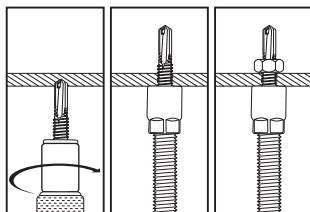
For UL and/or FM listings for hangers Steel HangerMate should be installed with a retaining nut for parts that are packaged with a nut (see performance data and listings as applicable).

Suggested drill speed for Steel HangerMate installations is 1200 to 1800 rpm.

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

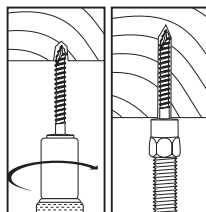
3. Thread the appropriate diameter steel threaded rod or threaded bolt into the coupling. The threaded rod or bolt should fully engage the thread length of the coupling on a vertical mount fastener. The threaded rod or threaded portion of the bolt can pass through coupling of a side mount fastener.

Steel



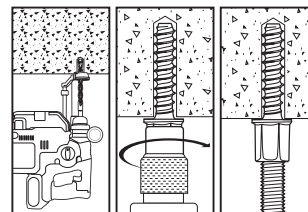
Install with appropriate sized steel socket driver. (side and variable mount direction versions not pictured)

Wood



Install with appropriate sized wood socket driver. (side and variable mount direction versions not pictured)

Concrete



Install with appropriate sized concrete socket driver. (variable mount direction version not pictured)

PERFORMANCE DATA

HangerMate for Steel - General Information

Cat. No.	Screw Description	Mount Direction	Rod Coupler Size	Driver #	Min. Thick. in.	Max. Thick. in.	UL		FM	
							Max. Pipe Size	UL Thick.	Max. Pipe Size	FM Thick.
HangerMate For Steel - Vertical										
PFM2231000	1/4-20 x 1" #3	Vert.	1/4"	PFM2201200 (Silver)	0.060	0.210	-	-	-	-
PFM2231100	1/4-20 x 1" #3	Vert.	3/8"	PFM2201200 (Silver)	0.060	0.210	4"	0.060"	-	-
PFM223110N	1/4-20 x 1" #3/nut	Vert.	3/8"	PFM2201200 (Silver)	0.060	0.210	4"	0.125"	4"	0.105"
PFM2231150	1/4"-20 x 1-1/2" #5	Vert.	3/8"	PFM2201200 (Silver)	0.125	0.500	4"	0.060"	4"	0.060"
PFM223115N	1/4-20 x 1-1/2" #5/nut	Vert.	3/8"	PFM2201200 (Silver)	0.125	0.500	4"	0.125"	4"	0.105"
PFM2231200	1/4-20 x 1-1/2" #3	Vert.	3/8"	PFM2201200 (Silver)	0.060	0.210	4"	0.060"	-	-
PFM223120N	1/4-20 x 1-1/2" #3/nut	Vert.	3/8"	PFM2201200 (Silver)	0.060	0.210	4"	0.060"	-	-
PFM2231250	1/4-20 x 2" #3	Vert.	3/8"	PFM2201200 (Silver)	0.060	0.210	4"	0.125"	-	-
HangerMate For Steel - Horizontal										
PFM2241100	1/4-20 x 1" #3	Side	3/8"	PFM2201200 (Silver)	0.060	0.210	-	-	-	-
PFM224110N	1/4-20 x 1" #3/nut	Side	3/8"	PFM2201200 (Silver)	0.060	0.210	4"	0.060"	4"	0.060"
PFM2241150	1/4-20 x 1-1/2" #3	Side	3/8"	PFM2201200 (Silver)	0.060	0.210	-	-	-	-
PFM224115N	1/4-20 x 1-1/2" #3/nut	Side	3/8"	PFM2201200 (Silver)	0.060	0.210	4"	0.060"	4"	0.060"
PFM2241200	1/4-20 x 1-1/2" #5	Side	3/8"	PFM2201200 (Silver)	0.125	0.500	-	-	-	-
PFM224120N	1/4-20 x 1-1/2" #5/nut	Side	3/8"	PFM2201200 (Silver)	0.125	0.500	4"	0.060"	4"	0.060"
HangerMate Pivot For Steel - Angled Applications										
PFM2281150	1/4-20 x 1" #3	Variable	3/8"	PFM2201250	0.060	0.188	-	-	-	-
PFM2281200	12-20 x 1-3/4" #5	Variable	3/8"	PFM2201250	0.125	0.500	-	-	-	-
PFM2281250	1/4-14 x 1" #3	Variable	3/8"	PFM2201250	0.060	0.188	-	-	-	-
HangerMate For Steel - Acoustical Ceiling Eyelet										
PFM2231500	1/4-14 x 7/8" #2	Variable	13/64"	PFM2201350	0.060	0.105	-	-	-	-
PFM2231550	1/4-14 x 2" #2	Variable	eyelet	PFM2201350	0.060	0.105	-	-	-	-

HangerMate for Steel - Ultimate Load Capacities when Installed in Steel^{1,2}

Cat. No.	Screw Description	Mount Direction	Rod Coupler Size	Steel Gauge Thickness, in.						
				16 0.060 lbs.	14 0.075 lbs.	12 0.105 lbs.	1/8 0.125 lbs.	3/16 0.187 lbs.	1/4 0.250 lbs.	1/2 0.500 lbs.
HangerMate For Steel - Vertical										
PFM2231000	1/4-20 1" #3	Vertical	1/4"	785	1,140	1,740	2,375	2,820	-	-
PFM2231100	1/4-20 x 1" #3	Vertical	3/8"	785	1,140	1,740	2,375	4,695	-	-
PFM223110N	1/4-20 x 1" #3/nut	Vertical	3/8"	3,435	4,025	4,280	4,690	5,810	-	-
PFM2231150	1/4-20 x 1-1/2" #5	Vertical	3/8"	-	-	-	-	3,675	5,205	5,205
PFM223115N	1/4-20 x 1-1/2" #5/nut	Vertical	3/8"	3,435	4,025	4,280	4,690	5,810	5,810	5,810
PFM2231200	1/4-20 x 1-1/2" #3	Vertical	3/8"	785	1,140	1,740	2,375	4,695	-	-
PFM223120N	1/4-20 x 1-1/2" #3/nut	Vertical	3/8"	3,435	4,025	4,280	4,690	4,695	-	-
PFM2231250	1/4-20 x 2" #3	Vertical	3/8"	785	1,140	1,740	2,375	4,695	-	-
HangerMate For Steel - Horizontal										
PFM2241100	1/4-20 x 1" #3	Side	3/8"	1,740	1,945	2,420	2,570	2,810	-	-
PFM224110N	1/4-20 x 1" #3/nut	Side	3/8"	2,755	2,810	2,570	2,810	2,810	-	-
PFM2241150	1/4-20 x 1-1/2" #3	Side	3/8"	1,740	1,945	2,420	2,570	2,810	-	-
PFM224115N	1/4-20 x 1-1/2" #3/nut	Side	3/8"	2,755	2,810	2,570	2,810	2,810	-	-
PFM2241200	1/4-20 x 1-1/2" #5	Side	3/8"	-	-	-	-	2,205	2,810	2,810
PFM224120N	1/4-20 x 1-1/2" #5/nut	Side	3/8"	2,755	2,810	2,570	2,810	2,810	2,810	2,810
HangerMate Pivot For Steel - Angled Applications										
PFM2281150	1/4-20 x 1" #3	Variable	3/8"	635 - Vert. (875 @ 45°)	635 - Vert. (875 @ 45°)	1,130 - Vert. (875 @ 45°)	1,130 - Vert. (875 @ 45°)	1,640 - Vert. (875 @ 45°)	-	-
PFM2281200	12-20 x 1-3/4" #5	Variable	3/8"	635 - Vert. (875 @ 45°)	635 - Vert. (875 @ 45°)	1,130 - Vert. (875 @ 45°)	1,130 - Vert. (875 @ 45°)	1,640 - Vert. (875 @ 45°)	1,640 - Vert. (875 @ 45°)	1,640 - Vert. (875 @ 45°)
PFM2281250	1/4-14 x 1" #3	Variable	3/8"	590 - Vert. (875 @ 45°)	590 - Vert. (875 @ 45°)	970 - Vert. (875 @ 45°)	970 - Vert. (875 @ 45°)	1,640 - Vert. (875 @ 45°)	-	-
HangerMate For Steel - Acoustical Ceiling Eyelet³										
PFM2231500	3/16 x 2" #2	Variable	13/64"	800	800	1,245	-	-	-	-
PFM2231550	3/16 x 3-1/4" #2	Variable	eyelet	800	800	1,245	-	-	-	-

Vert. = Vertical

1. The values listed above are ultimate load capacities which must be reduced by a minimum safety factor of 3.0 or greater to determine the allowable working load.
2. The strength of the threaded rod used with the HangerMate anchors must be considered when determining the controlling load capacity of the assembly.
3. Ultimate load capacity for PFM2231500 or PFM2231550 acoustical ceiling eyelets installed into 20 gauge steel deck members is 300 lbs.

HangerMate for Wood - Ultimate Load Capacities when Installed in Wood^{1,2}

Cat. No.	Screw Description	Mount Direction	Rod Coupler Size	Driver #	Load lbs*	UL	FM
						Max. Pipe Size	Max. Pipe Size
HangerMate For Wood - Vertical							
PFM2251000	1/4" x 2"	Vert.	1/4"	PFM2201150 (Red)	1,510	-	-
PFM2251050	1/4" x 1"	Vert.	3/8"	PFM2201150 (Red)	650	-	-
PFM2251100	1/4" x 2"	Vert.	3/8"	PFM2201150 (Red)	1,510	3"	-
PFM2251150	5/16" x 2-1/2"	Vert.	3/8"	PFM2201150 (Red)	2,670	4"	4"
PFM2251200	1/4" x 3"	Vert.	3/8"	PFM2201150 (Red)	2,075	3"	-
PFM2251250	1/4" x 4"	Vert.	3/8"	PFM2201150 (Red)	2,075	3"	-
PFM2251300	5/16" x 2-1/2"	Vert.	1/2"	PFM2201150 (Red)	2,670	-	-
HangerMate For Wood - Horizontal							
PFM2261000	1/4" x 1"	Side	1/4"	PFM2201150 (Red)	650	-	-
PFM2261050	1/4" x 1"	Side	3/8"	PFM2201150 (Red)	650	-	-
PFM2261100	1/4" x 2"	Side	3/8"	PFM2201150 (Red)	1,080	3"	-
PFM2261150	5/16" x 2-1/2"	Side	3/8"	PFM2201150 (Red)	1,450	4"	-
HangerMate Pivot For Wood - Angled Applications							
PFM2281100	1/4" x 2"	Variable	3/8"	PFM2201250	1,470 (Vertical)	-	-
					1,155 (45°)	-	-
HangerMate For Wood - Acoustical Ceiling Eyelet							
PFM2251500	3/16" x 3-1/4" (2-1/4" shank, 1-1/2" thread)	Variable	13/64" eyelet	PFM2201350	880	-	-

*Ultimate Loads from tests conducted in Douglas Fir, Southern Yellow Pine and White Spruce; the lowest pullout/withdrawal capacity of the three wood species is provided.
 1. Truss/joist manufacturers may require pre-drilled holes with wood depending on the location of the anchor installation. Consult with the truss/joist manufacturer for details.
 2. The values listed above are ultimate load capacities that must be reduced by a minimum safety factor of 3.0 or greater to determine the allowable working load.

Concrete HangerMate – Ultimate Load Capacities when Installed in Normal-Weight Concrete^{1,2,3}

Cat. No.	Rod Coupler Size in.	Screw Description	Mount Direction	ANSI Drill Bit Diameter in.	Embed. Depth in.	Minimum Concrete Compressive Strength (f'c)					
						2,000 psi		4,000 psi		6,000 psi	
						Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.	Tension lbs.	Shear lbs.
PFM2217171	1/4	1/4" x 1-1/4"	Vertical	1/4	1-1/4	1,390	1,810	1,950	2,440	2,070	2,570
PFM2217173	3/8	1/4" x 1-1/2"	Vertical	1/4	1-1/2	1,760	2,580	2,595	2,640	2,770	2,700
PFM2281300	3/8	3/16" x 2"	Variable	3/16	1-3/4	800 (Vertical) 875 (load at 45°)					

1. The values listed above are ultimate load capacities for anchors installed in uncracked normal weight concrete.
 2. The values listed above are ultimate load capacities which must be reduced by a minimum safety factor of 4.0 or greater to determine the allowable working load.
 3. Linear interpolation may be used to determine load capacities for intermediate compressive strengths.

Concrete HangerMate – Ultimate Load Capacities when Installed Through Metal Deck into Lightweight Concrete^{1,2,3,4}

Cat. No.	Rod Coupler Size in.	Screw Description	Mount Direction	ANSI Drill Bit Diameter in.	Embedment Depth in.	Lightweight Concrete Over Metal Deck f'c ≥ 3,000 psi			
						4-1/2" Wide Deck			
						Tension lbs.		Load at 45° lbs.	
PFM2217171	1/4	1/4" x 1-1/4"	Vertical	1/4	1-1/4	800		1,140	
PFM2217173	3/8	1/4" x 1-1/2"	Vertical	1/4	1-1/2	1,780		1,500	

1. The values listed above are ultimate load capacities for anchors installed in uncracked sand-lightweight concrete.
 2. The metal deck shall not exceed 18 gauge (0.048-inch base metal thickness) and conform to ASTM A653.
 3. The values listed above are ultimate load capacities which must be reduced by a minimum safety factor of 4.0 or greater to determine the allowable working load.
 4. The tabulated load values are for anchors installed with a minimum lower flute edge distance of 1-1/8-inch; or in the upper flute with consideration for integral washer clearance.

Concrete HangerMate – Ultimate Load Capacities when Installed in Hollow Core Concrete Plank^{1,2}

Cat. No.	Rod Coupler Size in.	Screw Description	Mount Direction	ANSI Drill Bit Diameter in.	Embedment Depth in.	Tension, Center of Web lbs.	Tension, Center of Core lbs.
PFM2217171	1/4	1/4" x 1-1/4"	Vertical	1/4	1-1/4	2,775	1,920
PFM2217173	3/8	1/4" x 1-1/2"	Vertical	1/4	1-1/2	3,700	2,570

1. Tabulated load values are for anchors installed in 8-inch-thick uncracked hollow core concrete with minimum compressive strength of 5,000 psi at the time of installation. The normal-weight concrete must have 1-1/2" cover above and below cores and a minimum web thickness of 1-1/2".
 2. The values listed above are ultimate load capacities which must be reduced by a minimum safety factor of 4.0 or greater to determine the allowable working load.

Concrete HangerMate – Factory Mutual (FM Global) Listings for Pipe Hangers

Cat. No.	Rod Coupler Size in.	Screw Description	Mount Direction	ANSI Drill Bit Diameter in.	Embedment Depth in.	FM Max. Pipe Size
PFM2217173	3/8	1/4" x 1-1/2"	Vertical	1/4	1-1/2	4"

ORDERING INFORMATION

HangerMate for Steel - Vertical

Cat. No.	Description	Driver # (Silver)	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2231000	1/4-20 x 1" #3	PFM2201200	Vertical	1/4"	25	125
PFM2231100	1/4-20 x 1" #3	PFM2201200	Vertical	3/8"	25	125
PFM223110N	1/4-20 x 1" #3/nut	PFM2201200	Vertical	3/8"	25	125
PFM2231150	1/4"-20 x 1-1/2" #5	PFM2201200	Vertical	3/8"	25	125
PFM223115N	1/4-20 x 1-1/2" #5/nut	PFM2201200	Vertical	3/8"	25	125
PFM2231200	1/4-20 x 1-1/2" #3	PFM2201200	Vertical	3/8"	25	125
PFM223120N	1/4-20x1-1/2" #3/nut	PFM2201200	Vertical	3/8"	25	125
PFM2231250	1/4-20 x 2" #3	PFM2201200	Vertical	3/8"	25	125



HangerMate for Steel - Horizontal

Cat. No.	Description	Driver # (Silver)	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2241100	1/4-20 x 1" #3	PFM2201200	Side	3/8"	25	125
PFM224110N	1/4-20 x 1" #3/nut	PFM2201200	Side	3/8"	25	125
PFM2241150	1/4-20 x 1-1/2" #3	PFM2201200	Side	3/8"	25	125
PFM224115N	1/4-20 x 1-1/2" #3/nut	PFM2201200	Side	3/8"	25	125
PFM2241200	1/4-20 x 1-1/2" #5	PFM2201200	Side	3/8"	25	125
PFM224120N	1/4-20 x 1-1/2" #5/nut	PFM2201200	Side	3/8"	25	125



HangerMate Pivot for Steel - Angled Applications

Cat. No.	Description	Pivot Driver #	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2281150	1/4-20 x 1" #3	PFM2201250	Variable	3/8"	25	125
PFM2281200	12-20 x 1-3/4" #5	PFM2201250	Variable	3/8"	25	125
PFM2281250	1/4-14 x 1" #3	PFM2201250	Variable	3/8"	25	125



HangerMate Acoustical Ceiling Eyelet for Steel

Cat. No.	Description	Eyelet Driver #	Mount	Eyelet Hole	Box Qty.	Carton Qty.
PFM2231500	3/16" x 2" 1/4-14 x 7/8" #2 screw	PFM2201350	Variable	13/64"	25	125
PFM2231550	3/16" x 3-1/4" 1/4-14 x 2" #2 screw	PFM2201350	Variable	13/64"	25	125



HangerMate for Wood - Vertical

Cat. No.	Description	Driver # (Red)	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2251000	1/4" x 2"	PFM2201150	Vertical	1/4"	25	125
PFM2251050	1/4" x 1"	PFM2201150	Vertical	3/8"	25	125
PFM2251100	1/4" x 2"	PFM2201150	Vertical	3/8"	25	125
PFM2251150	5/16" x 2-1/2"	PFM2201150	Vertical	3/8"	25	125
PFM2251200	1/4" x 3"	PFM2201150	Vertical	3/8"	25	125
PFM2251250	1/4" x 4"	PFM2201150	Vertical	3/8"	25	125
PFM2251300	5/16" x 2-1/2"	PFM2201150	Vertical	1/2"	25	125



HangerMate for Wood - Horizontal

Cat. No.	Description	Driver # (Red)	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2261000	1/4" x 1"	PFM2201150	Side	1/4"	25	125
PFM2261050	1/4" x 1"	PFM2201150	Side	3/8"	25	125
PFM2261100	1/4" x 2"	PFM2201150	Side	3/8"	25	125
PFM2261150	5/16" x 2-1/2"	PFM2201150	Side	3/8"	25	125



HangerMate Pivot for Wood - Angled Applications

Cat. No.	Description	Pivot Driver #	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2281100	3/16" x 2"	PFM2201250	Variable	3/8"	25	125



HangerMate Acoustical Ceiling Eyelet for Wood

Cat. No.	Description	Eyelet Driver #	Mount	Eyelet Hole	Box Qty.	Carton Qty.
PFM2251500	3/16" x 3-1/4"	PFM2201350	Variable	13/64"	25	125



The shank is approximately 2-1/4" long with 1-1/2" of thread.

HangerMate for Concrete - Vertical¹

Cat. No.	Description	Driver # (Black)	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2217171	1/4" x 1-1/4"	PFM1491050	Vertical	1/4"	100	600
PFM2217173	1/4" x 1-1/2"	PFM1491100	Vertical	3/8"	100	600

1. Concrete HangerMate require a pre-drilled hole using a 1/4" ANSI carbide drill bit (e.g. DW5517).



HangerMate Pivot for Concrete - Angled Applications¹

Cat. No.	Description	Pivot Driver #	Mount	Rod Size	Box Qty.	Carton Qty.
PFM2281300	3/16" x 2"	PFM2201250	Variable	3/8"	25	125

1. The HangerMate Pivot for concrete require a pre-drilled hole using a 3/16" ANSI carbide drill bit (e.g. DW5402).



Concrete Installation Accessories and Tool Guide

Cat. No.	Description	Drilling		Max Torque (ft.-lb.)	Installation	
		Rotary Hammer	SDS+ Bit		Impact Driver or Wrench	Impact-Rated Socket / Driver #
PFM2217171	1/4" Vertical Hanger 1/4" x 1-1/4"	DCH273P2DH	DW5416 DW5517 (1/4")	150	DCF887 (1/4" Impact Driver) DCF890 (3/8" Impact Wrench)	PFM1491050 or DWMT17311 DW2284 (3/8")
PFM2217173	3/8" Vertical Hanger 1/4" x 1-1/2"	DCH273P2DH	DW5416 DW5517 (1/4")	150	DCF887 (1/4" Impact Driver) DCF890 (3/8" Impact Wrench)	PFM1491100 or DWMT17311 DW2286 (1/2")

Steel and Wood HangerMate Pole Tool

Cat. No.	Description	Std. Pack Qty.	Carton Qty.
PFM2201100	HangerMate Pole Tool (Kit)	1	5

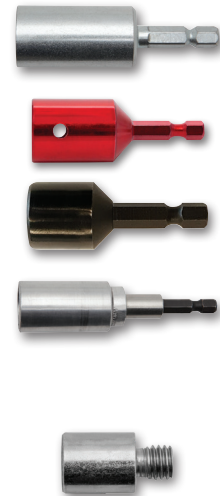
The HangerMate pole tool kit is designed for use with standard 1/2" steel conduit tubing (conduit not included) and can be customized to various lengths and ceiling heights. Compatible with standard steel and wood HangerMate.



HangerMate Sockets / Nut Drivers

Cat. No.	Description	Std. Pack Qty.	Carton Qty.
PFM2201200	1/4" & 3/8" Steel HangerMate Driver - Vertical and Horizontal Mounts (Silver)	5	25
PFM2201150	1/4" & 3/8" Wood HangerMate Driver - Vertical and Horizontal Mounts (Red)	5	25
PFM1491050	1/4" Concrete HangerMate Driver - Vertical Mount (Black)	5	25
PFM1491100	3/8" Concrete HangerMate Driver - Vertical Mount (Black)	5	25
PFM2201250	HangerMate Pivot Driver - Angled Mounts	5	25
PFM2201350	HangerMate Eyelet Driver - Angled Mounts	5	25

All HangerMate drivers have a 1/4-inch hex for connection to tools.



Universal Installation Accessories

Cat. No.	Description	Std. Pack Qty.	Carton Qty.
PFM2201050	3/8" to 1/2" Adapter	25	125

The 3/8" to 1/2" adaptor has a 3/8-16 external thread and a 1/2-13 internal thread.

