

HangerMate[®] anchors were designed to speed installation of fire sprinkler, HVAC, refrigeration, general piping, and electrical systems. They can also be used to install strut channels, cable trays, suspended ceiling grids, bridle rings and eye-rods.

HangerMate anchors can replace beam clamps, powder-actuated stud pins, eye sockets, or ceiling flanges, and eliminate labor-intensive operations such as pre-punching or drilling of steel components.

Power of One

The entire system has been re-engineered so only one driver is needed for all anchor sizes (except HangerMate LG anchors), regardless of the substrate material. Preparing concrete applications is accomplished with a standard 1/4" drill bit.

Head Styles

Two head styles are available:

 HangerMate vertical-mount anchors feature a tapped head to permit in-line mounting of threaded rod systems



end-drilled head

 HangerMate side-mount anchors feature a cross-drilled and tapped head to permit side-mounting of threaded rod systems



cross-drilled head

Both head styles feature a wide

array of thread and point styles for use in steel, concrete, masonry or wood applications, including the MP style that can be used in all three materials. Many styles are Factory Mutual (FM) approved or Underwriters Lab (UL) listed (see following pages).

Find out just how versatile and beneficial the HangerMate anchoring system can be.

Features & Benefits

- Solid, one-piece, cold formed and machined anchor
- Entire system requires only one driver (except for HangerMate LG anchors)
- Heads precision drilled and tapped to accept 3/8-16 or 1/4-20 threaded components
- HFZE270 adapter allows installation of 1/2-13 threaded rod components
- LG style allows installation of

threaded rod systems into light-gage metals

self-tapping threads

twin-lead threads

twin-lead threads

special threads

- MP style can be used in metal, wood or concrete, reducing the number of parts that need to be stocked
- Different thread and point styles available to meet the requirements of specific application materials
- Special hex nuts supplied as required
- Many styles UL listed and/or FM approved (see table inside)
- Ease assembly of HVAC, fire sprinkler, refrigeration, piping, and electrical systems for ceiling- or wall-mounted applications



self-drilling

gimlet point

gimlet point

self-drilling

point

with slot

point

for steel applications

for wood applications

for concrete applications

MP style for steel, wood

or concrete applications

Steel Applications*

Vertical Mount – En	d-Drilled H	ead						
	Rod Size	Steel Thickness	Elco Cat. No.	Description	UL Pipe Size	UL Steel Thickness	FM Pipe Size	FM Steel Thickness
	1/4-20	.060250	HFZG160	1/4-20X1 #3 point	N/A	N/A	N/A	N/A
	3/8-16	.060125	HFZG450	1/4-20X1 #2 point	4"	0.125"		
	3/8-16	.060250	HFZG470	1/4-20X1 #3 point	4"	0.125"	4"	12 ga.
	3/8-16	.060250	HFZG471	1/4-20X1 #3 point w/nuts	4"	0.060"	4"	16 ga.
	3/8-16	.060250	HFZG490	1/4-20X1-1/2 #3 point	4"	0.125"	4"	12 ga.
	3/8-16	.060250	HFZG491	1/4-20X1-1/2 #3 point w/nuts	4"	0.060"	4"	16 ga.
	3/8-16	.060250	HFZG530	1/4-20X2 #3 point			4"	0.125"
	3/8-16	.060250	HFZG540	1/4-20X3 #3 point				
	3/8-16	.187500	HFZG510	1/4-20X1-1/2 #5 point	4"	0.125"	4"	0.125"
	3/8-16	.060500	HFZG511	1/4-20X1-1/2 #5 point w/nuts	4"	0.060"	4"	16 ga.
	1/4-20	26 ga187"	HFZG610	1/4-20 collapsing insert	N/A	N/A	N/A	N/A
	3/8-16	26 ga. –.187"	HFZG580	1/4-20X1; use with HFZG610	2.5"	22 ga.	4"	12 ga.
	3/8-16	26 ga. –.187"	HFZG590	1/4-20X1; use with HFZG610	3.5"	18 ga.	4"	12 ga.
	3/8-16	26 ga. –.187"	HFZG600	1/4-20X1; use with HFZG610	4"	16 ga.	4"	12 ga.
Horizontal Mount –	1					1		
	Rod Size	Steel Thickness	Elco Cat. No.	Description	UL Pipe Size	UL Steel Thickness	FM Pipe Size	FM Steel Thickness
	1/4-20	.060250	HFZH155	1/4-20X1 #3 point	N/A	N/A	N/A	N/A
	3/8-16	.060125	HFZH455	1/4-20X1 #2 point				
	3/8-16	.060250	HFZH475	1/4-20X1 #3 point				
	3/8-16	.060250	HFZH476	1/4-20X1 #3 point w/nuts	4"	0.060"	4"	16 ga.
	3/8-16	.060250	HFZH495	1/4-20X1-1/2 #3 point				
(Canada Cal	3/8-16	.060250	HFZH496	1/4-20X1-1/2 #3 point w/nuts	4"	0.060"	4"	16 ga.
	3/8-16	.187500	HFZH515	1/4-20X1-1/2 #5 point				
	3/8-16	.060500	HFZH516	1/4-20X1-1/2 #5 point w/nuts	4"	0.060"	4"	16 ga.
	3/8-16	.060250	HFZH535	1/4-20X2 #3 point				

NOTE: It is the responsibility of the installer to determine the application-specific details under which a code approval or listing was granted. Contact Elco Construction Products for more information.

†Collapsing insert HFZG610 can be used alone to install 1/4-20 threaded components or with HFZG580, HFZG590 or HFZG600 hangers to install 3/8-16 threaded components.

*Installation in Steel or Wood Applications:

Use HFZE215 drive socket (see next page). Hex drive will automatically disengage when anchor is seated.

HangerMate® Threaded Rod Anchoring System

Wood Applications*

Vertical Mount – End-Drilled Head							
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size		
	1/4-20	HFZG315	5/16X2-1/4	NA	NA		
	3/8-16	HFZG650	5/16X2-1/4	4"	4"		
	3/8-16	HFZG670	5/16X3	4"	4"		
Horizontal Mount – Cross	s-Drilled Head			·			
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size		
	1/4-20	HFZH320	5/16X2-1/4	NA	NA		
	3/8-16	HFZH665	5/16X2-1/4	3-1/2"			
Concrete Applicatio	ns**						

Vertical Mount – End-Drilled Head						
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size	
	1/4-20	HFZG365	5/16X2-1/4	NA	NA	
	3/8-16	HFZG730	5/16X2-1/4		4"	
Horizontal Mount – Cross-Dr	illed Head					
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size	
	1/4-20	HFZH370	5/16X2-1/4	NA	NA	
	3/8-16	HFZH735	5/16X2-1/4		4"	

Steel, Wood or Concrete

Vertical Mount – End-Drilled	Head					
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size	
	1/4-20	HFZG910	1/4-10X2	NA	NA	
	3/8-16	HFZG930	1/4-10X2			
Horizontal Mount – Cross-Dr	illed Head					
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size	
	3/8-16	HFZH935	1/4-10X2	NA	NA	
All Materials – Adapter for Hanging 1/2" Rod ^{\dagger}						
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size	
m ()	1/2-13	HFZE270		NA	NA	

* Simply install any 3/8" HangerMate anchor as required, then thread HFZE270 adapter into it. Use of adapter does not increase performance value of 3/8" HangerMate anchor. Check corresponding 3/8" anchor spec sheet for load-carrying capacity and add appropriate safety factor.

Installation Tools

	Elco Cat. No.	Description
	HFZE215	Drive Socket
C D	HFZE220	Drive Sleeve
	HFZE240	Drill Bit Adapter
	HFZE320	25/64 Drill Bit with Stop Collar
	HFZE340	ANSI 1/4" Tanged Drill Bit for Hammer Drills
	HFZE350	ANSI 1/4" SDS Drill Bit for Rotary Hammer Drills

NOTE: It is the responsibility of the installer to determine the application-specific details under which a code approval or listing was granted. Contact Elco Construction Products for more information.

	Elco Cat. No.	Description
	HFZE360	7/32" Tanged Drill Bit for Hammer Drills
	HFZE380	7/32" SDS Drill Bit for Rotary Hammer Drills
	HFZE290	Tool for HFZG580/ HFZG590/HFZG600/ HFZG610 components
\$ <u>5</u> 0	ELY100	Drill Bit Adapter for 7/32" drill bit

** Installation into Concrete/Masonry Applications

Insert tanged bit (HFZE340) in bit holder (HFZE240), or use SDS bit (HFZE350). Drill hole, then slide concrete drive socket (HFZE220) over bit and onto hex. Insert anchor into socket and install. Parts can also be installed in concrete using standard 1/4" masonry bit to drill hole and use HFZE215 drive socket to set anchor.

Steel Applications

Average Ultimate Value (lbs)*

Cat. Rod					Steel T	hickne	ss	
No.	Size	Shank	.062"	.074"	.104"	.125"	.1875"	.250"
End-Drille	d Ancho	rs						
HFZG160	1/4-20	1/4-20	786	1139	1738	2376	4694	5994
HFZG450	3/8-16	1/4-20	922	1351	2273	2488	N/A	N/A
HFZG470	3/8-16	1/4-20	786	1139	1738	2376	4694	5994
HFZG471	3/8-16	1/4-20	3435	4024	4279	4692	5812	5909
HFZG490	3/8-16	1/4-20	786	1139	1738	2376	4694	5994
HFZG491	3/8-16	1/4-20	3435	4024	4279	4692	5812	5909
HFZG510	3/8-16	1/4-20	N/A	N/A	N/A	N/A	3677	5207
HFZG511	3/8-16	1/4-20	3435	4024	4279	4692	5812	5909
HFZG530	3/8-16	1/4-20	786	1139	1738	2376	4694	5994
HFZG540	3/8-16	1/4-20	786	1139	1738	2376	4694	5994
Cat Rod			Steel Thickness					
Cat.	Rod				steel I	nickne	55	
Cat. No.	Rod Size	Shank	.062"		.104"		ss .189''	.248"
	Size		.062"					.248''
No.	Size	nors	.062'' 1739					.248 " 2809
No. Cross-Drill	Size led Anch	ors 1/4-20		.074"	.104"	.111"	.189"	
No. Cross-Drill HFZH155	Size ed Anch 1/4-20 3/8-16	ors 1/4-20	1739	.074'' 1944	.104'' 2420	.111" 2570	.189"	2809
No. Cross-Drill HFZH155 HFZH455	Size ed Anch 1/4-20 3/8-16 3/8-16	1/4-20 1/4-20	1739 1860	.074'' 1944 2071	.104'' 2420 2516	. 111" 2570 2606	.189'' 2809	2809 N/A
No. Cross-Drill HFZH155 HFZH455 HFZH475	Size ed Anch 1/4-20 3/8-16 3/8-16	1/4-20 1/4-20 1/4-20	1739 1860 1739	.074" 1944 2071 1944	.104" 2420 2516 2420	. 111" 2570 2606 2570	.189'' 2809 2809	2809 N/A 2809
No. Cross-Drill HFZH155 HFZH455 HFZH475 HFZH476	Size ed Anch 1/4-20 3/8-16 3/8-16 3/8-16 3/8-16	1/4-20 1/4-20 1/4-20 1/4-20	1739 1860 1739 2756	.074" 1944 2071 1944 2753	.104" 2420 2516 2420 2809	.111" 2570 2606 2570 2809	.189" 2809 2809 2809	2809 N/A 2809 2809
No. Cross-Drill HFZH155 HFZH455 HFZH475 HFZH476 HFZH495	Size ed Anch 1/4-20 3/8-16 3/8-16 3/8-16 3/8-16 3/8-16	1/4-20 1/4-20 1/4-20 1/4-20 1/4-20	1739 1860 1739 2756 1739	.074" 1944 2071 1944 2753 1944	.104" 2420 2516 2420 2809 2420	2570 2606 2570 2809 2570	.189" 2809 2809 2809 2809	2809 N/A 2809 2809 2809
No. Cross-Drill HFZH155 HFZH455 HFZH475 HFZH475 HFZH476 HFZH495 HFZH495	Size ed Anch 1/4-20 3/8-16 3/8-16 3/8-16 3/8-16 3/8-16	1/4-20 1/4-20 1/4-20 1/4-20 1/4-20 1/4-20	1739 1860 1739 2756 1739 2756	.074" 1944 2071 1944 2753 1944 2753	104" 2420 2516 2420 2809 2420 2809	2570 2606 2570 2809 2570 2809	.189" 2809 2809 2809 2809 2809	2809 N/A 2809 2809 2809 2809

Product and Warranty Information

- Code listings and approvals require that HangerMate® anchors be installed with HangerMate drive sockets.
- Shoulders of installed HangerMate anchors must be flush to the metal, masonry or wood substrate materials. HangerMate anchors should not be subjected to vibratory or shock loads resulting from such applications as anchorings for reciprocating machinery, crane rails or hoists.
- Care should be taken to not damage HangerMate anchors or the substrate into which they are installed when loading pipe, installing cable tray, or otherwise suspending components from HangerMate anchors. Failure to do so may result in significant loss of holding power.
- As with all cutting tools and fasteners, normal safety precautions should be observed to avoid electrical installations, other utilities and reinforcement bars; careful use will provide the utmost safety and reliability.
- The wearing of safety glasses by users and persons in the vicinity is required by Federal Law.

This literature was prepared as an introductory summary of the HangerMate threaded rod anchoring system from Elco Construction Products and is not, therefore, intended to describe all hazards, limitations, warnings, precautions, etc. pertaining to the use of the product. The information and data presented herein are believed to be accurate and reliable, however, due to the wide variety of possible intervening factors, the suitability of the product for the use intended is the sole responsibility of the user. Specifications and other information contained herein supersede all previously published material and are subject to change without notice.

All HangerMate anchors are warranted to be manufactured free from defects in material and workmanship. Under this warranty, Elco Construction Products will provide, at no charge, replacement product for any HangerMate anchors proven to be defective when installed in accordance with our published recommendations and in applications considered by us as suitable for this product. This warranty is in lieu of any and all warranties, expressed or implied, and in no case will Elco Construction Products be liable for incidental, liquidated or consequential damages.

Light-gage Steel Applications

Cat No.	HFZ	G580	HFZG590		HFZG600	
Max. Pipe Diameter	2.	2.5"			4"	
Min. Steel Thickness	22	ga.	18 ga		16 ga	
Ultimate Tensile Load ¹						
Gage	26	22	20	1	L8	16
Ultimate Tensile Load	848	1025	1153	14	110	1880

Wood Applications

Average Ultimate Value (lbs)*

		. ,			
Cat No.	Rod Size	Anchor Shank	Douglas Fir	Southern Pine	Hemfir
End-Drilled	Anchors				
HFZG315	1/4-20	5/16-14	2487	2162	1768
HFZG650	3/8-16	5/16-14	2487	2162	1768
HFZG670	3/8-16	5/16-14	2487	2162	1768
Cross-Drill	ed Anchors				
HFZH320	1/4-20	5/16-14	1801	1460	1451
HFZH665	3/8-16	5/16-14	1801	1460	1451
	-				

Concrete Applications

Average Ultimate Value (lbs)* Cat No. Rod Size Anchor Shank 3650 PSI Concrete **End-Drilled Anchors** HFZG365 1/4-20 5/16-14 2188 HFZG730 3/8-16 5/16-14 2188 **Cross-Drilled Anchors** 2767 HFZH370 1/4-20 5/16-14 HFZH735 2767 3/8-16 5/16-14

HangerMate® MP Anchors – End-drilled Product Only

Average Ultimate Value (lbs)

Application Material	Performance Values: End-drilled Product Only
Southern Pine	1541
16 ga. steel	880
14 ga. steel	1106
12 ga. steel	1754
1/8" steel	2505

2933

* Performance Testing Notes:

Concrete (3300 psi)

- The loads indicated are average ultimate values achieved under laboratory conditions and appropriate safety factors should be applied for design purposes.
- NFPA (National Fire Protection Assoc.) minimum fastening requirements are five times the weight of a 15 foot section of water filled pipe plus 250 lbs. This is 1475 lbs. for 4" pipe.
- All test values were obtained using 3/8-16 rod. When 1/4-20 rod is used, the strength of the rod may be less than the pull-out values of the anchors.
- 4) Loads were determined by testing products in the orientation for which they were designed to be used. End-drilled parts were pulled in line with the anchor's axis while cross-drilled parts were tested with the force perpendicular to the axis.

Distributed by:



Hurripanel[™] Fasteners 2128 Springwood • Carrollton, TX 75006 1.972.417.8882 toll-free 1. 877.424.7616 www.hurripanelfasteners.com