



Innovative Fastening Technologies

SUSPENDERTM

Threaded Rod Anchors

New Product

featuring an exclusive
dual-directional head*

* Patent-pending design



Steel



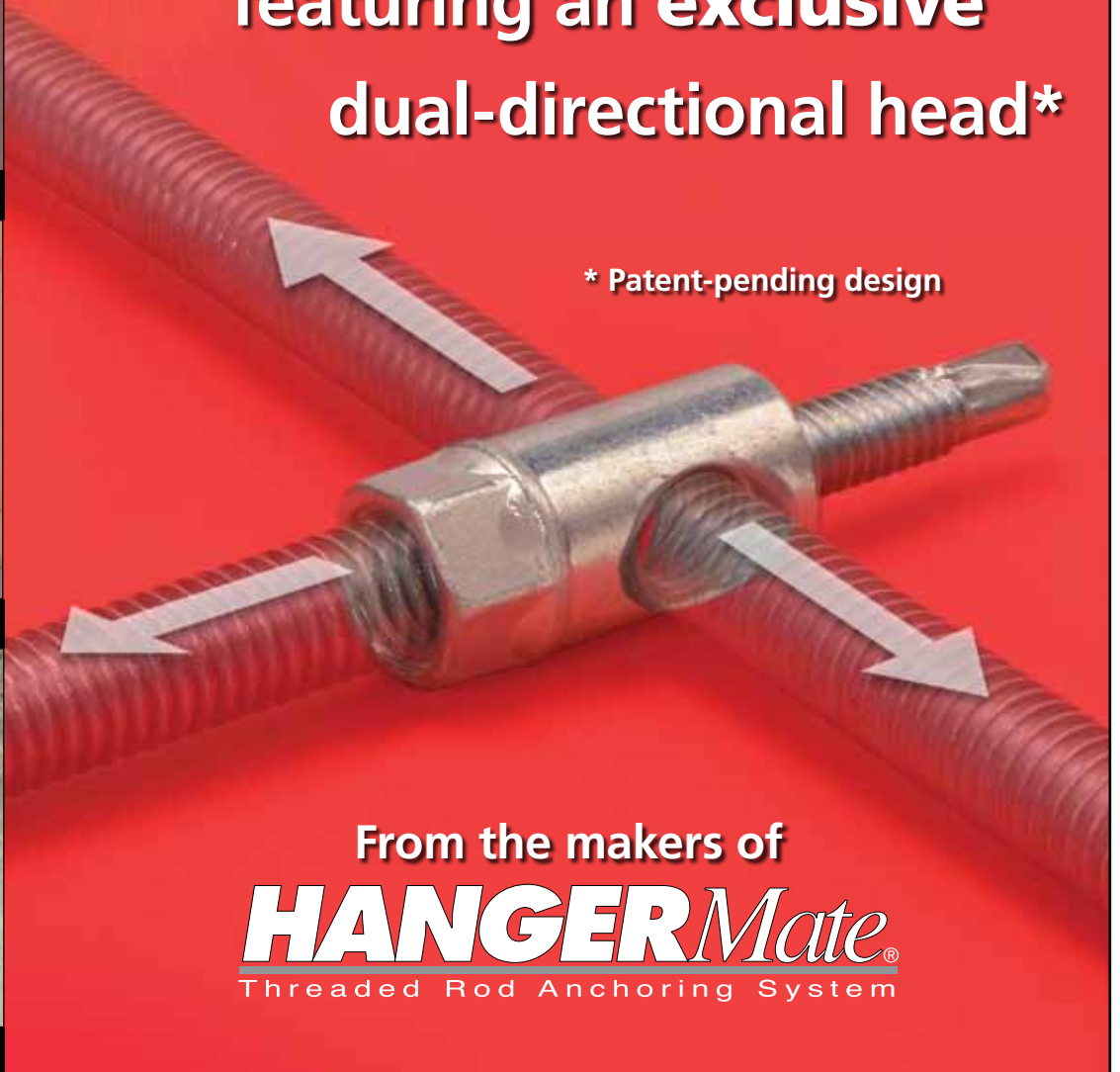
Light-Gauge Steel



Wood



Concrete



From the makers of
HANGER[®]Mate
Threaded Rod Anchoring System



High Performance in Threaded Rod Anchoring

The Next Generation of Engineered Anchors

Elco developed their line of solid, one-piece, cold formed **HangerMate® anchors** to speed installation of all threaded rod applications, including fire sprinkler, HVAC, refrigeration, general piping, and electrical systems. The entire HangerMate system features the **Power of One**: it is engineered so only one driver is needed for all anchor sizes (except HangerMate LG anchors), regardless of the substrate material.



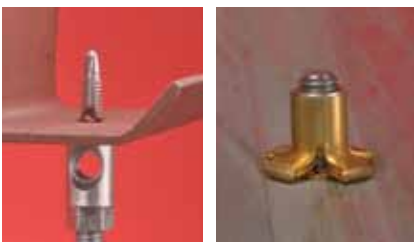
It's About Time: Saving Time = Saving Money

Suspender threaded rod anchors are the next step in the evolution of threaded rod anchoring. These one-piece anchors feature heads that are both end-tapped and cross-tapped to permit both in-line mounting and side-mounting of threaded rod systems, eye rings and more.

Suspender anchors still feature the **Power of One**. Select one driver – socket or sleeve – to drive all anchor sizes (except Suspender LG anchors). The Suspender drive sleeve eases switching between drilling and driving in concrete applications. Just the Suspender drive socket can be used with the self-drilling anchors for wood and steel, or in pre-drilled applications.

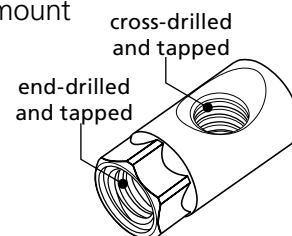
This new system allows you to **consolidate your inventory** to complete a project. It **decreases downtime** required to retrieve the correct part. Many styles are Factory Mutual (FM) approved or Underwriters Lab (UL) listed (see selection guide).

Speed installation of fire sprinkler, HVAC, refrigeration, general piping, and electrical systems plus strut channels, cable trays, suspended ceiling grids, bridle rings and eye-rods: find out just how **versatile and beneficial** the Suspender anchoring system can be.

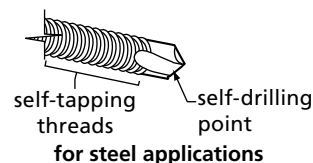


Features & Benefits

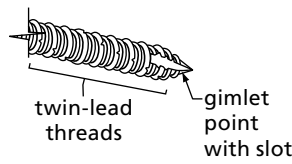
- Solid, one-piece, cold formed and machined anchor
 - Head won't spin off during installation
- New head style: both end- and cross-drilled to accept vertical/in-line and horizontal/side-mount applications
 - Decreases part numbers required to complete a project
 - Accept 3/8-16 or 1/4-20 threaded components



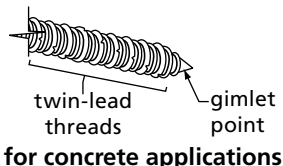
- Entire system requires only one driver (except for Suspender LG anchors)



- EZE270-I adapter allows installation of 1/2-13 threaded rod components



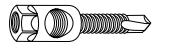
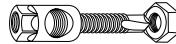

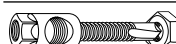
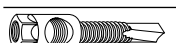

- Different thread and point styles available to meet the requirements of specific application materials





- LG style allows installation of threaded rod systems into light-gauge metals

	For Rod Size	Steel Thickness	Elco Catalog No.	Description	Listings and Approvals							
					Vertical/Inline Mount				Horizontal/Cross Mount			
					UL Pipe Size	UL Steel Thick.	FM Pipe Size	FM Steel Thick.	UL Pipe Size	UL Steel Thick.	FM Pipe Size	FM Steel Thick.

Suspenders™ Anchors for Steel Applications*

	3/8-16	.060"-.210"	EZD470-I†	1/4-20 X 1 #3 point	4"	12 ga.	4"	12 ga.	4"	12 ga.	4"	12 ga.
				1/4-20 X 1 #3 point w/nuts	4"	16 ga.	4"	16 ga.	4"	16 ga.	4"	16 ga.
	3/8-16	.060"-.210"	EZD490-I†	1/4-20 X 1-1/2 #3 point	4"	12 ga.	4"	12 ga.	4"	12 ga.	4"	12 ga.
				1/4-20 X 1-1/2 #3 point w/nuts	4"	16 ga.	4"	16 ga.	4"	16 ga.	4"	16 ga.
	3/8-16	.187"-.500"	EZD510-I†	1/4-20 X 1-1/2 #5 point	4"	12 ga.	4"	12 ga.	4"	12 ga.	4"	12 ga.
				1/4-20 X 1-1/2 #5 point w/nuts	4"	16 ga.	4"	16 ga.	4"	16 ga.	4"	16 ga.

Light-Gauge (LG) Steel

	1/4-20	26 ga.-.187"	EZG610-I	collapsing insert	N/A	N/A	N/A	N/A	May only be used in vertical/inline mount applications			
	3/8-16	26 ga.-.187"	EZG620-I	collapsing insert	4"	22 ga.	4"	22 ga.				

*These products ship with nuts, for applications that require nuts to qualify for the UL Listing and/or FM Approval shown.

	Installs Rod Size	Elco Catalog No.	Description	Listings and Approvals			
				Vertical/Inline Mount		Horizontal/Cross Mount	
				UL Pipe Size	FM Pipe Size	UL Pipe Size	FM Pipe Size


Suspenders Anchors for Wood Applications

	3/8-16	EZD650-I	5/16 X 2-1/4	4"	4"	4"	
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Suspenders Anchors for Concrete Applications

	3/8-16	EZD730-I	5/16 X 2-1/4		4"		4"
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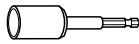
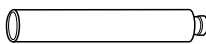

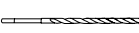

Suspenders MP (Multi-Purpose) Anchors for Steel, Wood or Concrete Applications


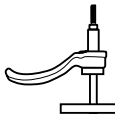

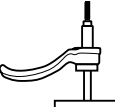
	3/8-16	EZD930-I	1/4-10X2	NA	NA	NA	NA
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NOTE: It is the responsibility of the installer to determine the application-specific details under which a code approval or listing was granted. Contact Elco Construction Products for more information.

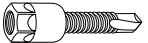
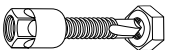
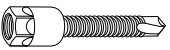
NOTE: 1/4" Rod Adapter EZE270-I on following page.

Installation Tools




	Elco Cat. No.	Description
Steel and Wood Applications		
	EZE415	Drive Socket
Concrete Applications		
	EZE420	Drive Sleeve
	EZE240	Drill Bit Adapter
	EZE340	ANSI 1/4" Tanged Drill Bit for Hammer Drills
	EZE350	ANSI 1/4" SDS Drill Bit for Rotary Hammer Drills

	Elco Cat. No.	Description
Light-Gauge Steel Applications		
	EZE320	25/64 Drill Bit with Stop Collar
	EZE290	Manual Tool
	EZE330	19/32 Drill Bit with Stop Collar
	EZE490	Manual Tool

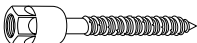
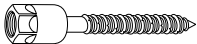
HangerMate® Anchors for Steel Applications

	Rod Size	Steel Thickness	Elco Cat. No.	Description	UL Pipe Size	UL Steel Thickness	FM Pipe Size	FM Steel Thickness
	1/4-20	.060 – .250	EZG160-I	1/4-20X1 #3 point	N/A	N/A	N/A	N/A
	3/8-16	.060 – .250	EZG471-I	1/4-20X1 #3 point w/nuts	4"	0.060"	4"	16 ga.
	3/8-16	.060 – .250	EZG530-I	1/4-20X2 #3 point			4"	0.125"

HangerMate Anchors for Wood Applications

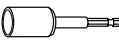
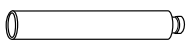

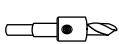
	Rod Size	Elco Cat. No.	Description	UL Pipe Size	FM Pipe Size
	1/4-20	EZG315-I	5/16X2-1/4	NA	NA
	3/8-16	EZG650-I	5/16X2-1/4	4"	4"
	3/8-16	EZG670-I	5/16X3	4"	4"

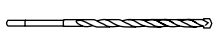

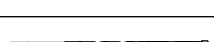
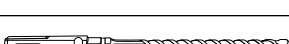
HangerMate Anchors for Concrete Applications

	1/4-20	EZG365-I	5/16X2-1/4	NA	NA
	3/8-16	EZG730-I	5/16X2-1/4		4"

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.


Installation Tools

	Elco Cat. No.	Description
	EZE215	Drive Socket
	EZE220	Drive Sleeve
	EZE240	Drill Bit Adapter
	EZE320	25/64 Drill Bit with Stop Collar

	Elco Cat. No.	Description
	EZE340	ANSI 1/4" Tanged Drill Bit for Hammer Drills
	EZE350	ANSI 1/4" SDS Drill Bit for Rotary Hammer Drills
	EZE360	7/32" Tanged Drill Bit for Hammer Drills
	EZE380	7/32" SDS Drill Bit for Rotary Hammer Drills

1/2" Threaded Rod Adapter for Both Suspender™ and HangerMate® Anchors

All Materials

	Rod Size	Elco Cat. No.	Description	Listings and Approvals	
				Vertical/Inline Mount	
				UL Pipe Size	FM Pipe Size
	1/2-13	EZE270-I	1/2-13 Internally-threaded anchor with 3/8-16 external thread (fits Suspender and HangerMate anchors for 3/8-16 rod)	NA	NA



Power of One

1

Select **one** tool – sleeve or socket – to **install all** Suspender anchors*

*Except for Suspender LG Anchors EZD610-I and EZD620-I.
For concrete, a standard 1/4" drill bit can be used with the drive sleeve.



Performance Data for Suspender™ and HangerMate® Anchors



Average Ultimate Value (lbs)* Steel Applications

Cat. No.	Rod Size	Anchor Shank	Steel Thickness					
			.062"	.074"	.104"	.125"	.1875"	.250"
EZD470-I	3/8-16	1/4-20	786	1139	1738	2376	4694	NA
EZD470-I with nuts	3/8-16	1/4-20	3435	4024	4279	4692	5812	NA
EZD490-I	3/8-16	1/4-20	786	1139	1738	2376	4694	NA
EZD490-I with nuts	3/8-16	1/4-20	3435	4024	4279	4692	5812	NA
EZD510-I	3/8-16	1/4-20	N/A	N/A	N/A	N/A	3677	5207
EZD510-I with nuts	3/8-16	1/4-20	3435	4024	4279	4692	5812	5909

Light-gage Steel Applications

Cat. No.	Rod Size	Gage				
		26	22	20	18	16
EZG610-I	1/4-20	848	1025	1153	1410	1880
EZG620-I	3/8-16	—	1500	1500	1500	1880

Wood Applications

Cat. No.	Rod Size	Anchor Shank	Douglas Fir	Southern Pine	Hem-fir
EZD650-I	3/8-16	5/16-14	2487	2162	1768

Concrete Applications

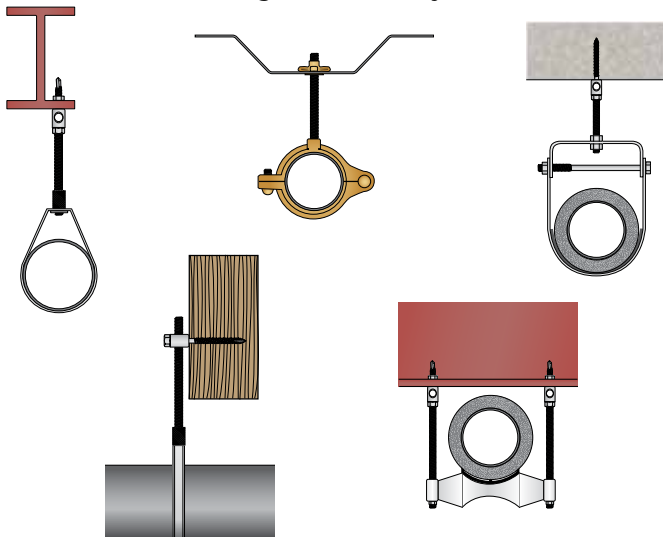
Cat. No.	Rod Size	Anchor Shank	3650 PSI Concrete	
			Vertical/In-Line Applications	Horizontal/Cross Applications
EZD730-I	3/8-16	5/16-14	2188	2767

Suspender MP (Multi-Purpose) Anchors

Material	Value	Material	Value
Southern Pine	541	12 ga. Steel	1754
16 ga. Steel	880	1/8" Steel	2505
14 ga. Steel	1106	Concrete (3300 PSI)	2933

Sample Applications

Attach Loop, Clamp Ring and Clevis Hangers and Shoes to Hang Piping for Sprinkler, General Plumbing and Other Systems



Average Ultimate Value (lbs)* Steel Applications

Cat. No.	Rod Size	Anchor Shank	Steel Thickness					
			.062"	.074"	.104"	.125"	.1875"	.250"
EZG160-I	1/4-20	1/4-20	786	1139	1738	2376	4694	5994
EZG471-I	3/8-16	1/4-20	3435	4024	4279	4692	5812	5909
EZG530-I	3/8-16	1/4-20	786	1139	1738	2376	4694	5994

Wood Applications

Cat#	Rod Size	Anchor Shank	Douglas Fir	Southern Pine	Hemfir
EZG315-I	1/4-20	5/16-14	2487	2162	1768
EZG650-I	3/8-16	5/16-14	2487	2162	1768
EZG670-I	3/8-16	5/16-14	2487	2162	1768

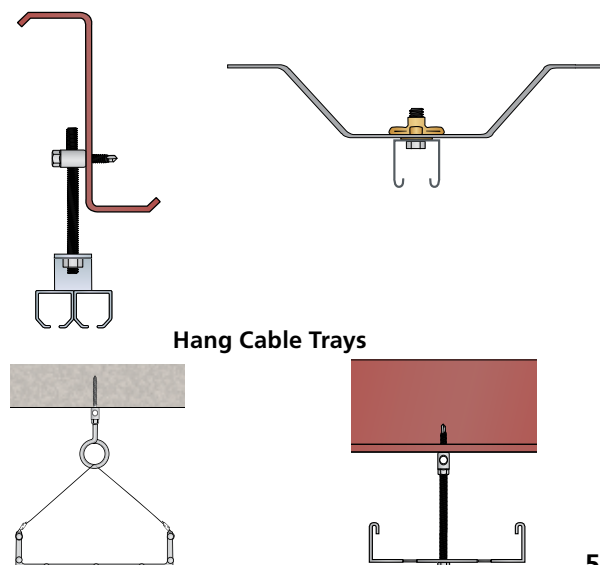
Concrete Applications

Cat#	Rod Size	Anchor Shank	3650 PSI Concrete
EZG365-I	1/4-20	5/16-14	2188
EZG730-I	3/8-16	5/16-14	2188

*Performance Testing Notes (both Suspender and HangerMate Anchors):

1. The loads indicated are average ultimate values achieved under laboratory conditions and appropriate safety factors should be applied for design purposes.
2. 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.
3. 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.


Mount Struts and Tracking Systems for Electrical Systems, Ceiling Grids and More





Threaded Rod Hanger Cross Reference

Steel Applications

Part Description	Rod Size	Vertical/Horizontal	 Threaded Rod Anchors Part No.	Original Hangermate® Part No.†	ITW Sammys® Part No.
1/4-20 x 1 No. 3 point w/nuts	3/8-16 rod	Both	EZD470-I	EZG450	DST10
				EZG470	DSTR1
				EZG471	DSTR516
				EZH455	SWD10
				EZH475	SWD15
1/4-20 x 1-1/2 No. 3 point w/nuts	3/8-16 rod	Both	EZD490-I	EZH476	SWDR1
				EZG490	DST15
				EZG491	SWD15
				EZH495	DST516
				EZH496	SWDR516
1/4-20 x 1-1/2 No. 5 point w/nuts	3/8-16 rod	Both	EZD510-I	EZG510	TEK50
				EZG511	DSTR1 1/2
				EZH515	SWT15
				EZH516	SWDR1-1/2
1/4-20 x 1 No. 3 point	1/4-20 rod	Vertical	EZG160-I	–	DSTR100
1/4-20 x 1 No. 3 point w/nuts	3/8-16 rod	Vertical	EZG471-I	–	DSTR516
1/4-20 x 2 No. 3 point	3/8-16 rod	Vertical	EZG530-I	–	DST20

Wood Applications

Part Description	Rod Size	Vertical/Horizontal	Suspender Part No.	Original Hangermate® Part No.†	ITW Sammys Part No.
5/16 x 2-1/4	3/8-16 rod	Both	EZD650-I	EZG650 EZH665	GST10
					GST20
					GST25-380
					SWG10
					SWG20
5/16 x 2-1/4	1/4-20 rod	Vertical	EZG315-I	–	SWG25-380
5/16 x 2-1/4	3/8-16 rod	Vertical	EZG650-I	–	GST200
					GST10
					GST20
5/16 x 3	3/8-16 rod	Vertical	EZG670-I	–	GST25-380
					GST30

Concrete Applications

Part Description	Rod Size	Vertical/Horizontal	Suspender Part No.	Original Hangermate® Part No.†	ITW Sammys Part No.
5/16 x 2-1/4	3/8-16 rod	Both	EZD730-I	EZG730	CST20
				EZH735	SWC20
5/16 x 2-1/4	1/4-20 rod	Vertical	EZG365-I	–	CST200
5/16 x 2-1/4	3/8-16 rod	Vertical	EZG730-I	–	CST20

Specialty Applications

Part Description	Rod Size	Vertical/Horizontal	Suspender Part No.	Original Hangermate® Part No.†	ITW Sammys Part No.
1/4-10 x 2 No. 2 point	3/8-16 rod	Both	EZD930-I	–	–
1/4-20 Insert	1/4-20 rod	Both	EZG610	–	XP200
3/8-16 Insert	3/8-16 rod	Both	EZG620	EZG580	XP20
				EZG590	XP35
1/2" Adapter	1/2-13 rod	Both	EZE270 (NOTE: Must be used in conjunction with any Suspender or HangerMate 3/8 rod hanger)	–	EZG600
					GST2
					GST3
					DST2.0
					DSTR1.0
					DSTR5.16
					DST5.16
					TEK5.0
					CST2

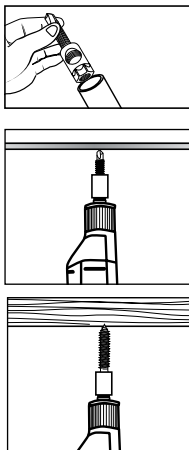


Installation Instructions

Steel or Wood Applications

Suspender anchors drill their own holes in metal and wood applications, so pre-drilling is unnecessary. Insert the Suspender EZE415 (HangerMate EZE215) drive socket in your drive tool, then place the anchor in the socket.

Simply position the self-drilling point of the anchor at the intended point of installation, and drive the anchor. The hex drive will automatically disengage when anchor is seated.

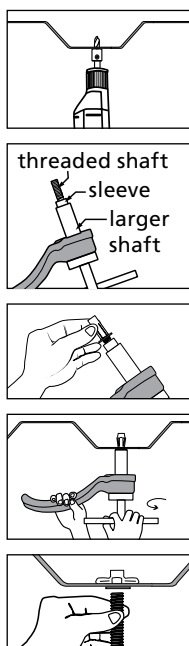


Light-Gage Steel Applications

For EZG610-I anchor use EZE320 or other 25/64" drill bit to drill a hole in the metal. For EZG620-I anchor use EZ330 or other 19/32" drill bit to drill hole in the metal.

Use the proper manual tool (EZE290 tool for EZG610-I anchors; EZE490 tool for EZG620-I anchors). Thread anchor onto threaded shaft of tool. Rotate shaft clockwise until head of anchor hits tool sleeve.

Insert anchor fully into drilled hole. Turn shaft clockwise until firm resistance is felt. Turn shaft counterclockwise to break threads of tool loose from insert. Thread rod or component into Suspender anchor.



Suspender LG tools speed installation of LG anchors into light-gage steel.

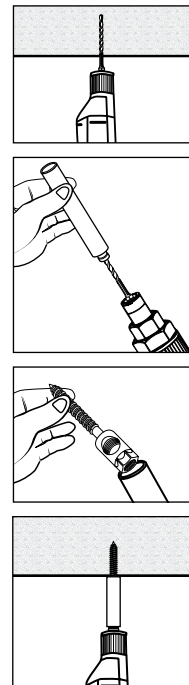


Concrete/Masonry Applications

For SDS-drive drills, use Elco drill bit EZE350; for keyed chuck-type drills, use Elco tanged bit EZE340 installed in adapter EZE240. Drill at least 2-1/2" into the concrete.

Slide concrete drive sleeve EZE420 (HangerMate EZE220) over bit and onto hex. Insert anchor into socket and install. Drive until the SafetySet feature seats the anchor and disengages.

Parts can also be installed in concrete using a standard 1/4" masonry bit to drill the hole and using the Suspender EZE415 (HangerMate EZE215) drive socket to set the anchor.



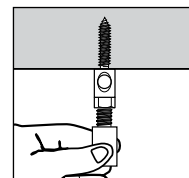
Suspender drill bits are engineered for accurate drilling in concrete applications.



The EZE220 drive sleeve slips over drill bits to ease installation of Suspender anchors in concrete.

Installation of EZE270-I Adapter For 1/2-13 Threaded Rod

Simply install any 3/8" HangerMate anchor as required, then thread the EZE270-I adapter into it.



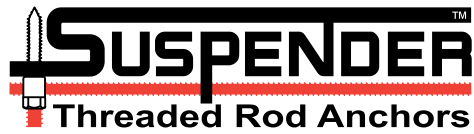
NOTE: Use of adapter does not increase performance value of 3/8" Suspender anchor. Check corresponding 3/8" anchor specifications for load-carrying capacity and add appropriate safety factor.

NOTES: 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.

Shoulders of installed Suspender anchors must be flush to the metal, masonry or wood substrate materials. Suspender 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 Suspender anchors or the substrate into which they are installed when loading pipe, installing cable tray, or otherwise suspending components from Suspender anchors. Failure to do so may result in significant loss of holding power.

Complete Suspender product information and technical application assistance is available from Elco Construction Products at 1.800.435.7213



Product and Warranty Information

Fasteners must be used only in compliance with applicable building codes and as approved by authorities having jurisdiction.

To reduce the risk of installation failure resulting in injury or property damage, follow all safety and installation instructions. Follow all installation tool safety instructions.

Code listings and approvals require that Suspenders anchors be installed with Suspenders drive sockets.

Shoulders of installed Suspenders anchors must be flush to the metal, masonry or wood substrate materials. Suspenders anchors should not be subjected to vibratory or shock loads resulting from applications such as anchorings for reciprocating machinery, crane rails or hoists.

Care should be taken to not damage Suspenders anchors or the substrate into which they are installed when loading pipe, installing cable tray, or otherwise suspending components from Suspenders anchors. Failure to do so may result in significant loss of holding power.

As with the use of all cutting tools and fasteners, normal safety precautions should be observed to avoid electrical installations, other utilities and reinforcement bars.

This literature was prepared as an introductory summary of the Suspenders 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.

For complete and up-to-date code listings and approvals, safety and installation instructions, and other information, see. www.elcoconstruction.com.

All Suspenders 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 Suspenders 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.

For applications assistance or more information, please contact:



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