

CADDY® ROD LOCK Metal Decking Pre-set Anchor

3/8inch, 1/2inch, M10 and M12

Part number	Article Number	Rod Size	Metal Hole Saw Diameter	Drilling Speed	Max. FM® 1951 pipe size
CRLM37EG	N/A	3/8"	3/4" [19mm]	700 - 900 RPM	4" or DN100
CRLMM10EG	390021	M10			
CRLM50EG	N/A	1/2"	7/8" [22mm]	700 - 900 RPM	8" or DN200
CRLMM12EG	390022	M12			

Allowable Tension & Shear Loads for Threaded Rod*						
Steel Type	ASTM®/ ISO® Steel designation	Threaded rod size	Minimum Yield strength	Minimum Tensile strength	Threaded rod itself	
					Allowable Tension Load Lbs [kN]	Allowable Shear Load Lbs [kN]
Standard Carbon Steel Rod	A307, Grade C	3/8"	36.0 ksi	58.0 ksi	2,115 [9.5]	1,090 [4.9]
		1/2"			3,755 [16.9]	1,940 [8.7]
	A36	3/8"	36.0 ksi	58.0 ksi	2,115 [9.5]	1,090 [4.9]
		1/2"			3,755 [16.9]	1,940 [8.7]
High Strength Carbon Steel Rod	A193, Grade B7	3/8"	105.0 ksi	120.0 ksi	4,375 [19.7]	2,255 [10.1]
		1/2"			7,775 [35.0]	4,050 [18.2]
Stainless Steel Rod (SS304/ SS316)	A193, Grade B8/B8M Class 1	3/8"	30.0 ksi	75.0 ksi	2,720 [12.1]	1,400 [6.2]
		1/2"			4,850 [21.6]	2,500 [11.1]
Europe Steel Rod	ISO 898-1, Class 4.6	M10	240 MPa	400 MPa	2,350 [10.5]	1,210 [5.4]
		M12			3,390 [15.1]	1,745 [7.8]

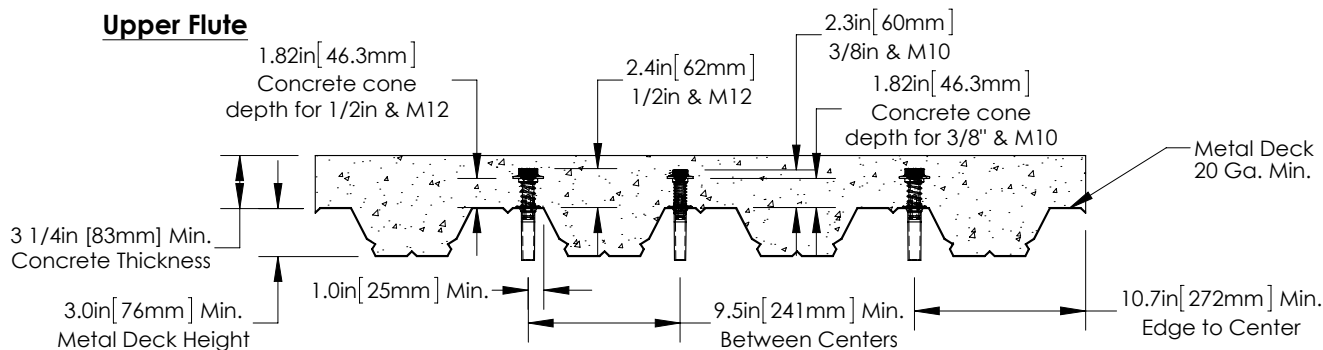
*Do not use a hot dip galvanized threaded rod.

*For in-door applications only.

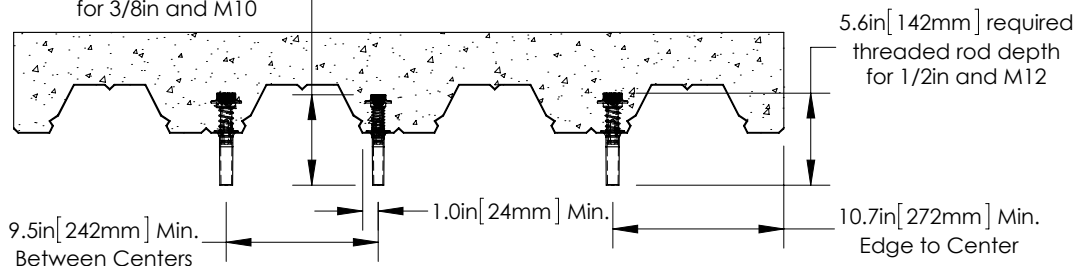
Notes:

1. Allowable tension load = Minimum tensile load x Rod cross-section area x 0.33
2. Allowable Shear load = Minimum tensile load x Rod cross-section area x 0.17

Upper Flute



Lower Flute



WARNING:

1. ERICO products shall be installed and used only as indicated in ERICO product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your ERICO customer service representative.
2. ERICO products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
3. All instructions must be completely followed to ensure proper and safe installation and performance.
4. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.
5. Products that are manufactured using spring steel components shall be used only in a non-corrosive indoor environment.
6. All pipe supports, hangers, intermediate components and structural attachments must ONLY be used as described herein and are NEVER to be used for any other purpose.

NOTE: All load ratings are for static conditions and do not account for dynamic loading such as wind, water or seismic loads, unless otherwise noted.

The customer is responsible for:

- a. Conformance to all governing codes.
- b. The integrity of structures to which the products are attached, including their capability of safely accepting the loads imposed, as evaluated by a qualified engineer.
- c. Using appropriate industry standard hardware as noted above.

SAFETY INSTRUCTIONS:

All governing codes and regulations and those required by the job site must be observed. Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

ASTM is a registered trademark of American Society for Testing and Materials
 FM is a registered certification mark of FM Approvals LLC, LTD
 ISO is a registered trademark of International Organization for Standardization
 NFPA is a registered trademark of National Fire Protection Association, Inc.

CADDY, CADWELD, CRITEC, ERICO, ERIFLEX, ERITECH, and LENTON are registered trademarks of ERICO International Corporation.



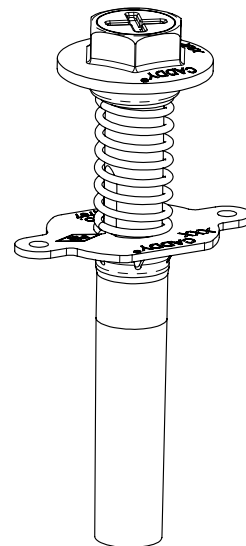
TECHNICAL SUPPORT:
www.erico.com

CFS478_D

1 OF 2

© 2013, 2014 ERICO International Corporation.

ERICO®

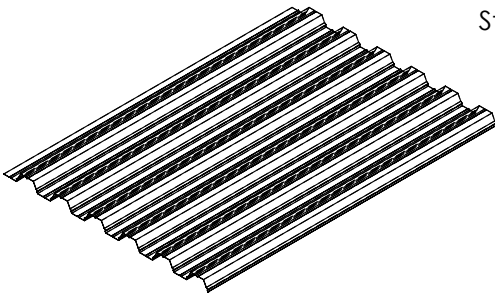


Product Allowable Tension & Shear Loads with Normal-Weight or Light-Weight Concrete (See Notes 1, 2, 3, 4, 5, 6 & 7)

Normal-Weight or Light-Weight Concrete having 3,000 psi [20.7 Mpa] minimum compression strength										
Threaded Rod Steel Type	Threaded rod size	Flute Location in Deck	Min. Concrete Thickness from the Upper Flute Inch [mm]	Minimum End Distance Inch [mm]	Minimum Spacing Inch [mm]	Minimum Flute edge Distance Inch [mm]	Ultimate Tension Load Lbs [kN]	Ultimate Shear Load Lbs [kN]	Allowable Tension Load Lbs [kN]	Allowable Shear Load Lbs [kN]
A307, Grade C	3/8"	Upper	3-1/4" [83mm]	10.7" [272mm]	9.5" [241mm]	1.0" [25mm]	5,400 [24.0]	3,270 [14.6]	1,800 [8.0]	1,090 [4.9]
		Lower					3,320 [14.9]	3,270 [14.6]	830 [3.7]	818 [3.7]
	1/2"	Upper					7,110 [32.0]	3,350 [15.1]	2,370 [10.6]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]
A36	3/8"	Upper					5,400 [24.0]	3,270 [14.6]	1,800 [8.0]	1,090 [4.9]
		Lower					3,320 [14.9]	3,270 [14.6]	830 [3.7]	818 [3.7]
	1/2"	Upper					7,110 [32.0]	3,350 [15.1]	2,370 [10.6]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]
A193, Grade B7	3/8"	Upper					5,400 [24.0]	3,350 [15.1]	1,800 [8.0]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]
	1/2"	Upper					7,110 [32.0]	3,350 [15.1]	2,370 [10.6]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]
A193, Grade B8/B8M Class 1 (SS304/ SS316)	3/8"	Upper					5,400 [24.0]	3,350 [15.1]	1,800 [8.0]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]
	1/2"	Upper					7,110 [32.0]	3,350 [15.1]	2,370 [10.6]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]
Europe ISO Class 4.6	M10	Upper					4,700 [20.9]	3,350 [15.1]	1,567 [7.0]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]
	M12	Upper					7,110 [32.0]	3,350 [15.1]	2,370 [10.6]	1,117 [5.0]
		Lower					3,320 [14.9]	3,350 [15.1]	830 [3.7]	838 [3.8]

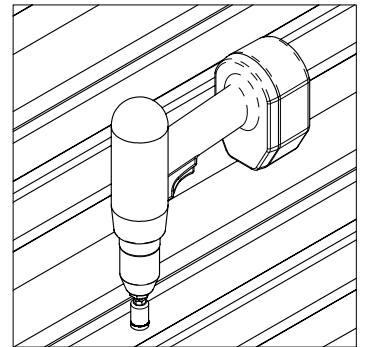
Notes:

1. Allowable tension & shear load capacities are calculated using an applied safety factor of 3.0 for installations in the upper flute and 4.0 for installations in the lower flute
2. Metal Deck shall be 20-gauge [1.00mm] minimum and metal deck height between the top flute and bottom flute shall be 3" [76mm] minimum.
3. Shear loads shall be applied flush with metal deck outer surface
4. Allowable working load must be the lesser of product allowable tension & shear loads showing above table.
5. NFPA® 13 design requirements are 5 times the weight of the water filled pipe plus 250 lbs.
6. MSS requires the safety factor of 3.5
7. Allowable loads for anchors to resist short term loads such as earthquake or wind may be increased by 33.33% for the duration of the load where permitted by code.

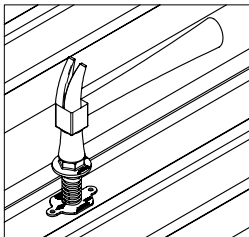
Assembly Instructions:

Step 1 - Assemble the necessary metal decking.

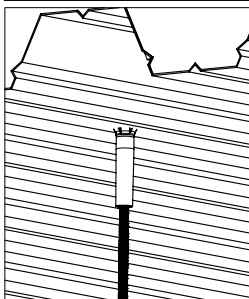
Step 2 - Cut a hole using a metal hole saw sized appropriately to the anchor to be used. See Sheet 1 for sizes.



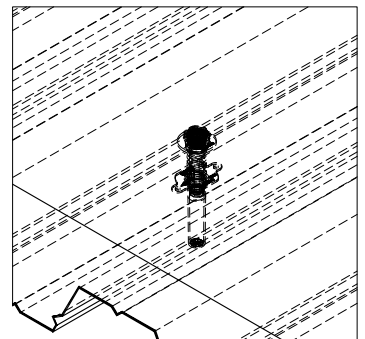
Step 3 - Assemble anchor into the hole in the decking using a hammer. Ensure that the anchor is straight vertically with the correct height.



Step 4 - Pour concrete over decking and anchor.



Step 5: Push-in the threaded rod.



CADDY, CADWELD, CRITEC, ERICO, ERIFLEX, ERITECH, and LENTON are registered trademarks of ERICO International Corporation.

TECHNICAL SUPPORT:
www.erico.com

CFS478_D

2 OF 2

© 2013, 2014 ERICO International Corporation.

ERICO