

B3019 - Adjustable Metal Deck Ceiling Bolt

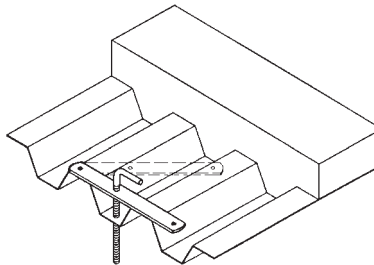
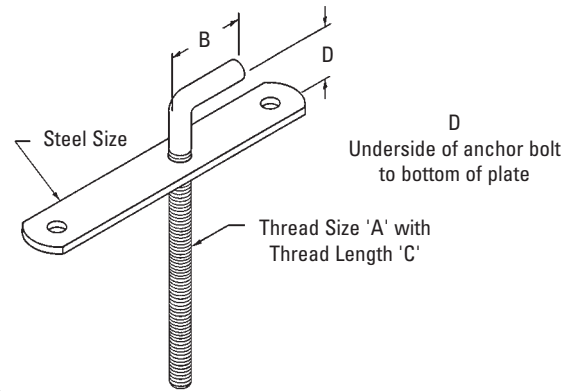
Size Range: 3/8"-16 thru 3/4"-10 rod

Material: Steel

Function: For use in metal deck formed concrete to attach hanger rods. Allows for pre-positioning of hanger rods in poured concrete decks.

Finish: Plate: Plain Steel. Rod: Electro-Galvanized. Contact Cooper B-Line for alternative finishes and materials.

Order By: Part number and finish. Contact customer service for custom rod lengths.



Part No.	Thread Size A	B		Thread Length C		D		Steel Size		Design Load		Approx. Wt./100	
		in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	Lbs	(kN)	Lbs.	(kg)
B3019-3/8	3/8"-16	2 1/2"	(63.5)	6 3/8"	(161.9)	1 1/4"	(31.7)	7 Ga. x 1 1/4" x 10"	(4.5 x 31.7 x 254.0)	730	(3.25)	80	(36.3)
B3019-1/2	1/2"-13	2 1/2"	(63.5)	6 1/2"	(165.1)	1 1/4"	(31.7)	7 Ga. x 1 1/4" x 10"	(4.5 x 31.7 x 254.0)	1350	(6.00)	99	(44.9)
B3019-5/8	5/8"-11	2 1/2"	(63.5)	6 3/4"	(171.4)	1 1/4"	(31.7)	7 Ga. x 1 1/4" x 10"	(4.5 x 31.7 x 254.0)	2160	(9.61)	129	(58.5)
B3019-3/4	3/4"-10	2 1/2"	(63.5)	6 3/16"	(157.2)	2 1/4"	(57.1)	1/4" x 3" x 10"	(6.3 x 76.2 x 254.0)	3230	(14.37)	238	(107.9)

B2499 - Concrete Insert

Size Range: 5/8"-11 thru 1 1/2"-6 rod

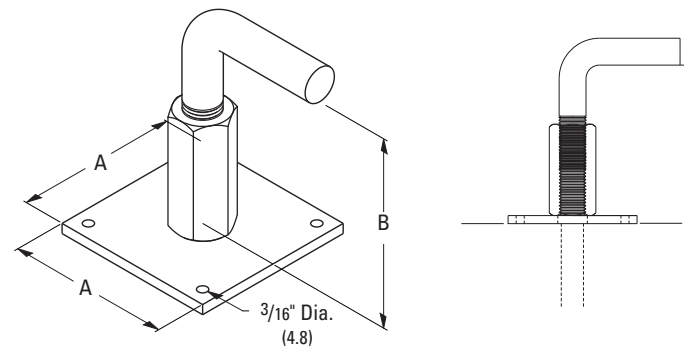
Material: Steel

Function: Designed to be embedded in concrete to provide a point of support for 5/8"-11 thru 1 1/2"-6 rod or bolt sizes.

Finish: Plain anchor bolt with Electro-Galvanized coupling. Contact B-Line for alternative finishes and materials.

Note: For rod sizes 3/8"-16 and 1/2"-13, refer to B2501 see page 198.

Order By: Part number and rod size.
For 1 1/8"-7, 1 1/4"-6, and 1 1/2"-6 consult factory.



Part No.	Rod Size	A in. (mm)	Min. Embedment B in. (m)	Max. Recommended Loads (In 3000 lb. (13.34kN) Hard Rock Concrete)		Approx. Wt./100 lbs. (kg)
				lbs.	(kN)	
B2499-5/8	5/8"-11	3" (76.2)	3 1/2" (88.9)	1810	(8.05)	118.0 (53.5)
B2499-3/4	3/4"-10	3" (76.2)	3 1/2" (88.9)	2710	(12.05)	154.0 (69.8)
B2499-7/8	7/8"-9	3" (76.2)	4" (101.6)	3770	(16.77)	210.0 (95.3)
B2499-1	1"-8	3" (76.2)	4" (101.6)	4960	(22.06)	276.0 (125.2)



Consult factory for specifications on rod sizes 1 1/8"-7, 1 1/4"-6, and 1 1/2"-6

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

B2501 - Light Duty Spot Insert - Hanger Application

Size Range: 3/8"-16 & 1/2"-13 rod

Material: Steel

Standard Finish: Electro-Plated

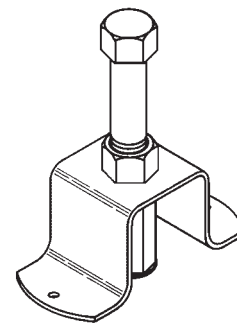
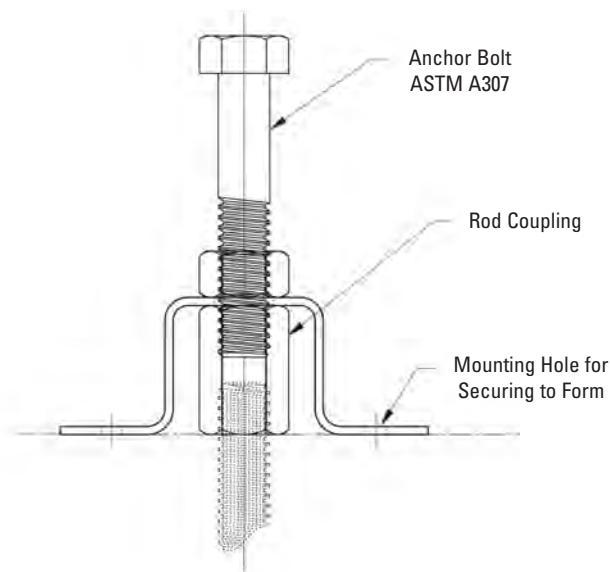
Approvals: 3/8" & 1/2" rod sizes are Underwriters Laboratories listed in the USA (**UL**) and Canada (**cUL**).

Service: Designed to be embedded in concrete for attachment of 3/8"-16 & 1/2"-13 hanger rods.

Ordering: Specify part number and size.

How to Install: Locate and nail to form. Pour concrete and strip forms when set. Remove color coded plug, install rod and lock with jam nut.

Note: Design load is based off of rod sizes. Before installation ensure that concrete is sufficient to carry the load.



Concrete Inserts

B2501 - Data

Part No.	Rod Size	UL Listed	Approx. Wt./C	
			Lbs.	(kg)
B2501-3/8	3/8"-16	Up to 4" IPS	22	(10.0)
B2501-1/2	1/2"-13	Up to 8" IPS	26	(11.8)

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

Concrete Inserts

B2500 - Light Duty Spot Insert

Material: Steel

Function: Designed to be embedded in concrete to attach 1/4"-20 to 7/8"-9 hanger rods.

How to Install: Attach concrete insert to forms and install reinforcing rods as required. After forms are dismantled, the knockout can be removed from the insert. The N2500 insert nut can be installed and the rod fastened to the nut. The rod should touch the inside top of the insert but should not be forced further to avoid damaging the insert.

Approvals: Underwriters Laboratories Listed for maximum pipe size 6" (150). Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 19 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 18.

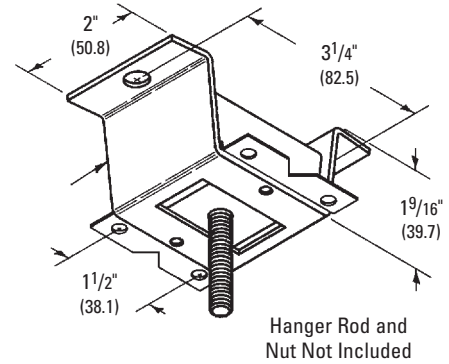
Weight: Approx. Wt./100 - 46 Lbs. (20.8kg)

Finish: Electro-Galvanized.

Order By: Part number and finish.
(Order N2500 nuts separately).

Design Load: Loading based on a straight pull of 600 Lbs. (2.67kN).

Note: Before installation ensure that concrete is sufficient to carry the load.



Material Thickness
12 Gauge (2.6)



N2500 - Steel Insert Nut

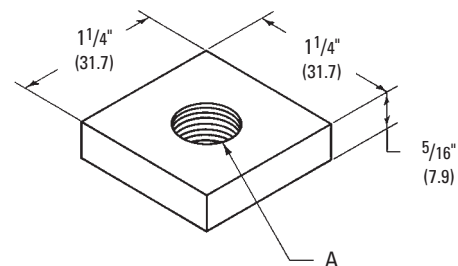
Size Range: 1/4"-20 through 7/8"-9.

Material: Steel

Function: Designed for use with B2500 spot insert.

Finish: Plain or Electro-Galvanized.

Order By: Part number and size.



Part No.	Tap Size A	Approx. Wt./100 Lbs. (kg)
N2500-1/4	1/4"-20	14 (6.3)
N2500-3/8	3/8"-16	13 (5.9)
N2500-1/2	1/2"-13	12 (5.4)
N2500-5/8	5/8"-11	11 (5.0)
N2500-3/4	3/4"-10	11 (5.0)
N2500-7/8	7/8"-9	10 (4.5)

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

B3014 - Malleable Iron Insert

Material: Malleable Iron

Function: Designed to be embedded in concrete to attach 3/8"-16 to 7/8"-9 hanger rods.

How to Install: Attach concrete insert to forms and install reinforcing rods as required. After forms are dismantled, the B3014N nut can be installed and the rod fastened to the nut. The rod should touch the inside top of the insert.

Approvals: Underwriters Laboratories Listed when used with B3014N Insert Nut. Conforms to Federal Specification WW-H-171E & A-A-1192A, Type 18 and Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 18.

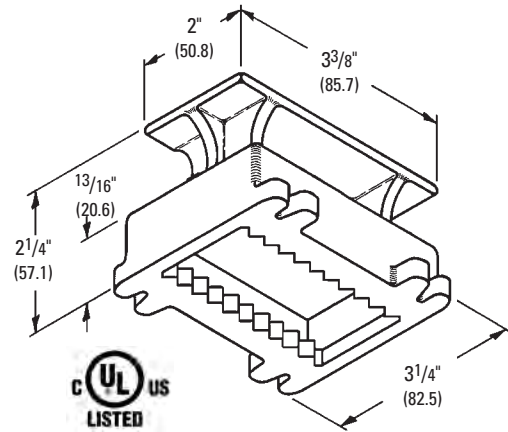
Weight: Approx. Wt./100 - 166 Lbs. (75.3kg)

Finish: Plain or Electro-Galvanized.

Order By: Part number and finish.
(Order B3014N nuts separately).

Design Load: Design Loads based on B3014N malleable iron insert nut below.

Note: Before installation ensure that concrete is sufficient to carry the load.



Horizontal Adjustment:

For 3/8"-16, 1/2"-13, 5/8"-11 rods - Adjustment is 1 3/4" (44.4)

For 3/4"-10, 7/8"-9 rods - Adjustment is 1 3/16" (30.2)



Concrete Inserts

B3014N - Malleable Iron Insert Nut

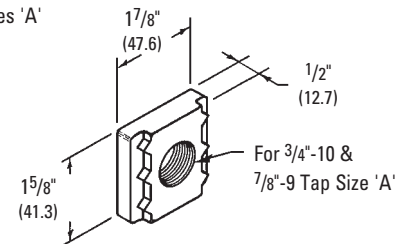
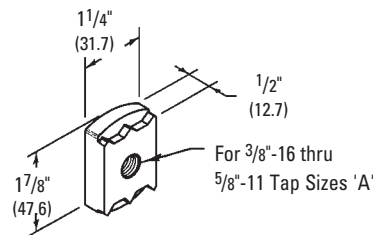
Size Range: 3/8"-20 through 7/8"-9.

Material: Malleable Iron

Standard Finish: Plain or Electro-Galvanized

Service: Designed for use with the B3014 malleable iron insert shown above.

Ordering: Part number and finish.



Part No.	Tap Size 'A'	UL Max. Pipe Size	Design Load*		Approx. Wt./100	
			Lbs.	(kN)	Lbs.	(kg)
B3014N-3/8	3/8"-16	4"	730	(3.25)	22	(10.0)
B3014N-1/2	1/2"-13	8"	1350	(6.00)	22	(10.0)
B3014N-5/8	5/8"-11	10"	1400	(6.23)	20	(9.1)
B3014N-3/4	3/4"-10	10"	1400	(6.23)	29	(13.1)
B3014N-7/8	7/8"-9	10"	1400	(6.23)	29	(13.1)

* When used with B3014 Malleable Iron Insert.



All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

Concrete Inserts

B2505 thru B2508 - Spot Insert

Material: Steel (Stainless steel available on B2505 only)

Standard Finish: Plain or Pre-Galvanized

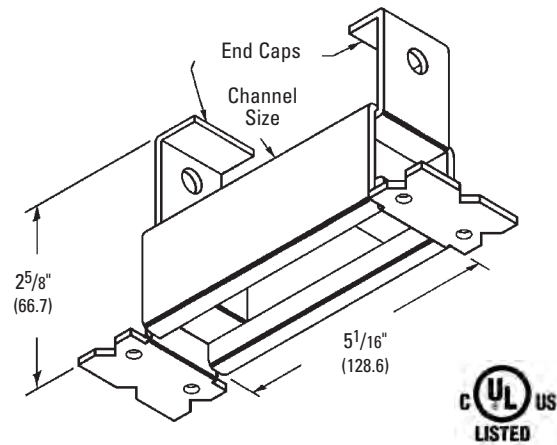
Function: Designed to be embedded in concrete to attach 1/4"-20 to 7/8"-9 hanger rods.

How to Install: Attach concrete insert to forms and install reinforcing rods as required. After forms are dismantled, the channel nut can be installed and the rod fastened to the nut. The rod should touch the inside top of the insert.

Approvals: Underwriters Laboratories Listed. Conforms to Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 18.

Order By: Part number and finish. When supporting 10" (254mm) pipe, order B2505 Insert with 5/8"-11 channel nuts.

Note: For appropriate channel nut selection, see page 17. Before installation ensure that concrete is sufficient to carry the load.



Styrofoam Filled



B2506 shown

Part No.	Channel Size	End Cap Part No.	Design Load		Max. Pipe Size		Approx. Wt./100	
			Lbs.	(kN)	in.	(mm)	Lbs.	(kg)
B2505	B22	B3322	1200	(5.34)	10"	(250)	96	(43.5)
B2506	B32	B3332	1000	(4.45)	8"	(200)	88	(39.9)
B2507	B42	B3342	1000	(4.45)	8"	(200)	77	(34.9)
B2508	B52	B3352	1000	(4.45)	8"	(200)	69	(31.3)

All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.

B2503 - Heavy Duty Spot Insert

Material: Steel

Standard Finish: Electro-Galvanized

Function: Designed to be embedded in concrete where heavy loads are required in curtain wall applications. Styrofoam end caps prevent concrete seepage into the channel.

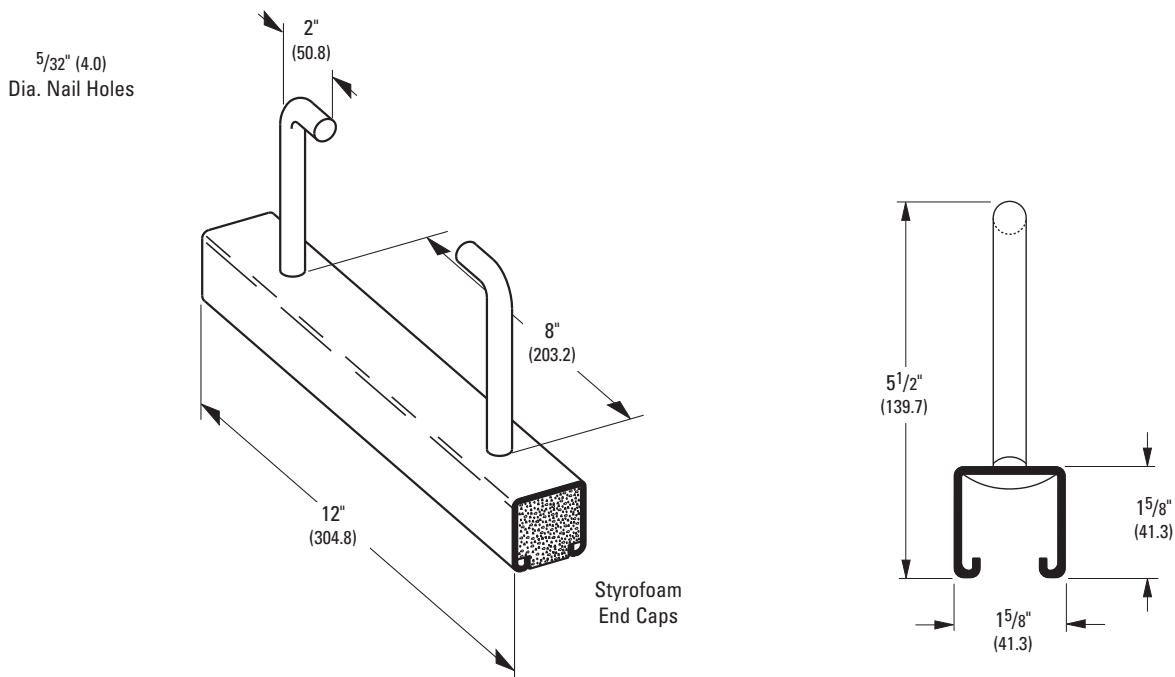
How to Install: Attach concrete insert to forms and install reinforcing rods as required. After forms are dismantled, the channel nut can be installed and the rod fastened to the nut. The rod should touch the inside top of the insert.

Approvals: Conforms to Manufacturers Standardization Society ANSI/MSS SP-69 & SP-58, Type 18.

Design Load: 5000 Lbs. (22.2kN).
Loading based on two N225 channel nuts spaced 3" (76.2mm) on center and a minimum of 2" (50.8mm) from the end of the insert.

Weight: Approx. Wt./100 - 42 Lbs. (19.0kg)

Order By: Part number and finish. Channel nuts are sold separately, see page 17 for appropriate selection.



All dimensions in charts and on drawings are in inches. Dimensions shown in parentheses are in millimeters unless otherwise specified.