www.MeadowBurke.com

2014

Innovating Reinforcing Construction

MeadowBurke®

Meadow Burke

1 TYPICAL SPANS
Scale: 1/2" = 1'-0"

2 GENERAL NOTES:
1. SCREED WORK LOADS SHOWN APPLY TO CONDITIONS REFRESENTED ON THIS DRAWING ONLY, AND DO NOT APPLY TO ANY OTHER CONDITION OR ANY MODIFICATION TO THIS DRAWING.
2. ALL LUMBER IS TO BE NO. 2 SYP, OR EQUAL
A) SYSTEM WORK LOAD = 10 PSF
B) LIVE LOAD = 50 PSF
C) UNIT WEIGHT OF CONCRETE = 160 PCF
D) BASE WEIGHT = 15 LBS
3. ALUMINUM BEAMS TO BE PROVIDED BY CONTRACTOR ALLOWABLE DESIGN CAPACITY OF EACH BEAM NOT TO EXCEED 210 PLF.
4. HAUNCH FORMWORK DESIGNED BY OTHER
5. DOUBLE 16" TJI L/360 FORM-I JOIST PROVIDED BY CONTRACTOR ALLOWABLE DESIGN CAPACITY
6. REFER TO
(WHERE NECE

INTERIOR FORMING SPACING TABLE

CASES	L3	L3			
CASE 1	16'-8" AND LESS	16'-8" MAX			
CASE 2	16'-10" TO 18'-10"	3'-11" MAX	7'-11" MAX	5'-0" C/C	5,613 LBS
CASE 3	19'-0" TO 22'-8"	13'-3" MAX	10'-3" MAX	4'-0" C/C	5,918 LBS

Innovating Concrete Construction

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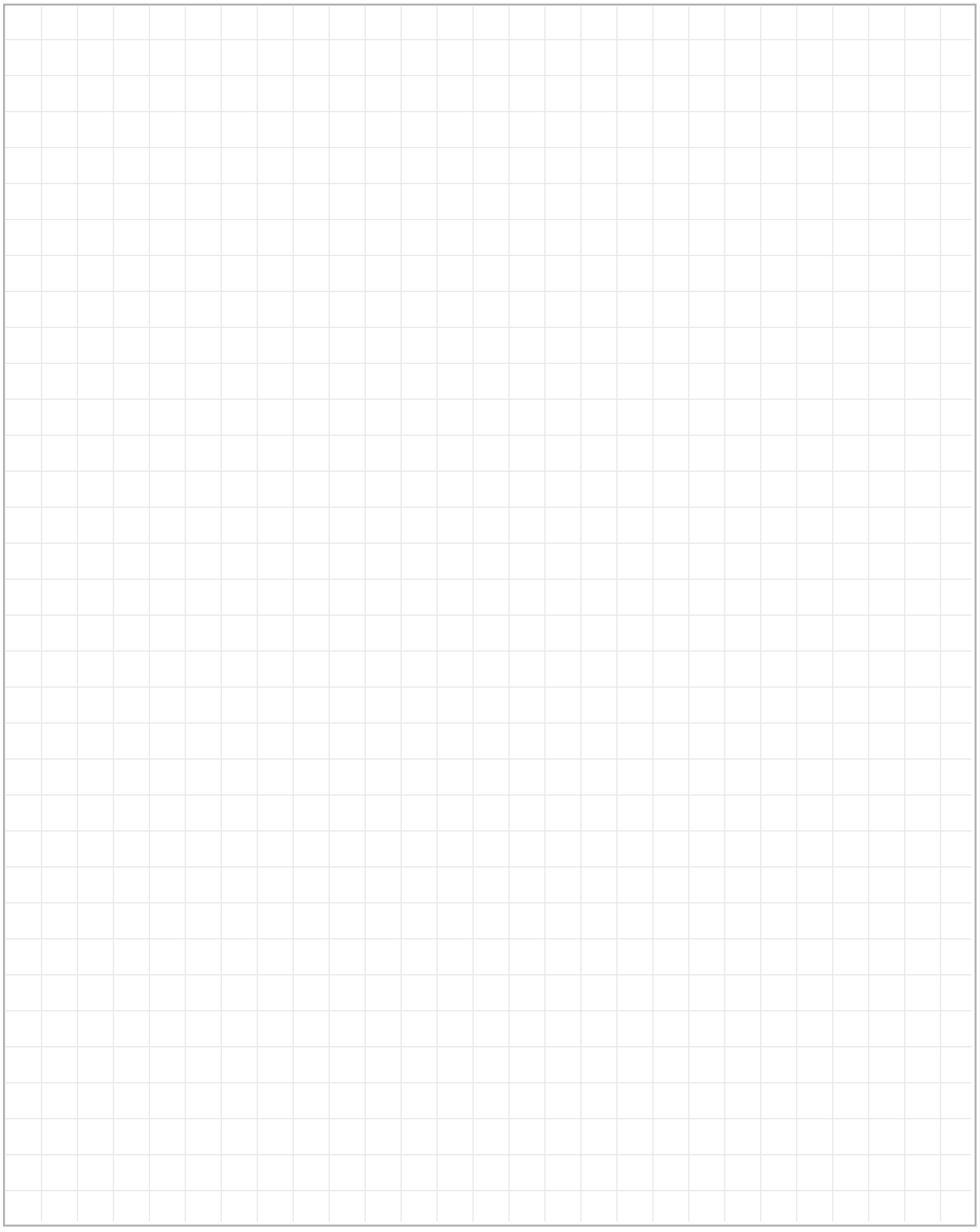
Rebar Splicing Products



Reinforcing Bar Supports

Metal Reinforcing Bar Supports

Meadow Burke metal reinforcing bar supports can be manufactured in compliance with American Concrete Institute (ACI) ACI-SP-66, ACI-315 and ACI-315R.

Quality rebar metal supports are available in the following finishes:

Plastic protected, dipped or tipped.
Stainless steel protected, 1/4" stainless steel tipped.
Stainless steel protected, 3/4" minimum stainless steel tipped.
Plain wire, no protection.

Also available:

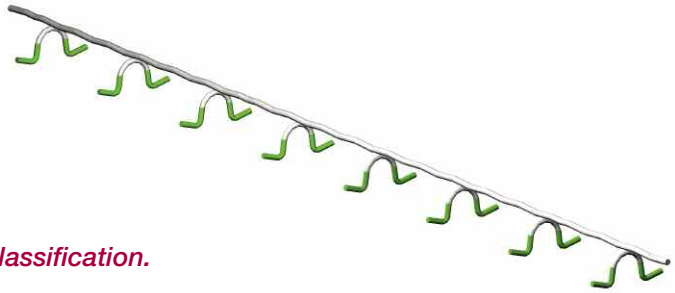
Epoxy coated meeting AASHTO specifications.
Complete plastic coating (100% encapsulate) up to 3" heights.
Epoxy coated with plastic dipped feet.

Notes:

Stainless steel utilized by Meadow Burke in the manufacture of rebar supports conforms to ASTM A-493 and AISI Type 430 and may display some magnetic qualities which shall not be cause for rejection. Heights available in 1/4" increments.

METAL REINFORCING BAR SUPPORTS

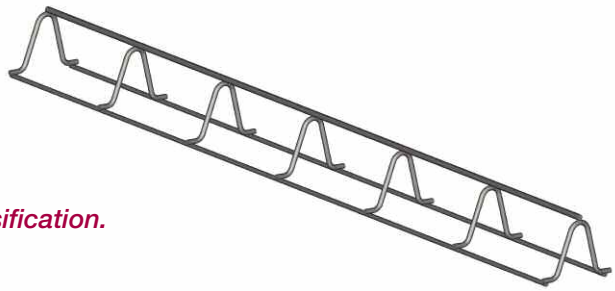
(SB) SLAB BOLSTER



SLAB BOLSTER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
SB	3/4" to 3"	5"	5'-0"

To Order, Specify: quantity, type, height and finish classification.

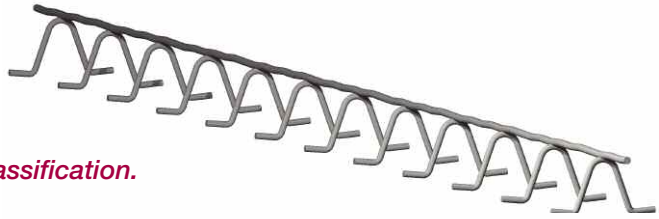
(SBR) SLAB BOLSTER – UPPER



SLAB BOLSTER - UPPER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
SBR	3/4" to 3"	5"	5'-0"

To Order, Specify: quantity, type, height and finish classification.

(BB) BEAM BOLSTER



BEAM BOLSTER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
BB	1" to 5"	2-1/2"	5'-0"

To Order, Specify: quantity, type, height and finish classification.

(UBB) BEAM BOLSTER – UPPER

BEAM BOLSTER - UPPER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
UBB	1" to 5"	2-1/2"	5'-0"

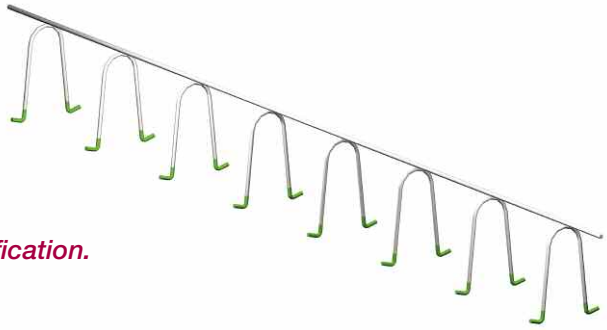
To Order, Specify: quantity, type, height and finish classification.

Metal Reinforcing Bar Supports

(CHC) CONTINUOUS HIGH CHAIR

CONTINUOUS HIGH CHAIR DATA			
Type	Available Height	Leg Spacing (c/c)	Length
CHC	2" to 20"	7-1/2"	5'-0"

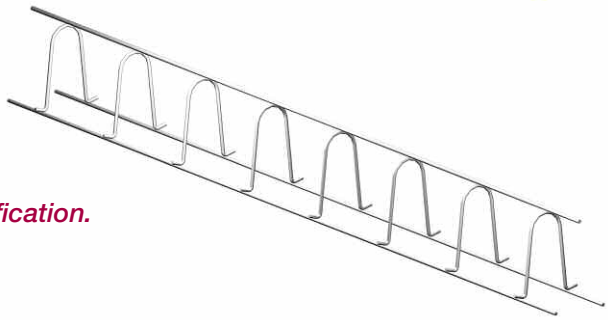
To Order, Specify: quantity, type, height and finish classification.



(UCHC) CONTINUOUS HIGH CHAIR – UPPER

CONTINUOUS HIGH CHAIR - UPPER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
UCHC	2" to 20"	7-1/2"	5'-0"

To Order, Specify: quantity, type, height and finish classification.



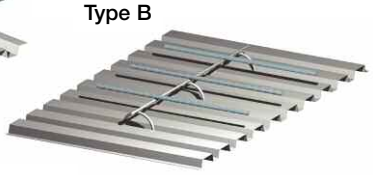
(CHCM) CONTINUOUS HIGH CHAIR – METAL DECK

CONTINUOUS HIGH CHAIR - METAL DECK DATA			
CHCM	Available Height	Leg Spacing (c/c)	Length
Type A	1" to 5"	7-1/2"	5'-0"
Type B	1" to 5"	Varies	5'-0"

To Order, Specify: quantity, name, type A or B, leg spread, height.

Type A

Type B

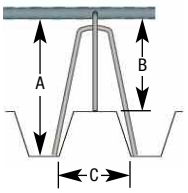


(HCMD) HIGH CHAIR – METAL DECK

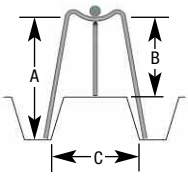
HIGH CHAIR - METAL DECK DATA		
HCMD	Available Height	Height Increments
Type A or B	2" to 15"	1/4"

To Order, Specify: quantity, name, type, A, B and C dimension.

To insure accuracy of order please include metal deck profile.



Type A



Type B

(HC) HIGH CHAIR

HIGH CHAIR DATA		
Type	Available Height	Height Increments
HC	2" to 40"	1/4"

To Order, Specify: quantity, type, height and finish classification.

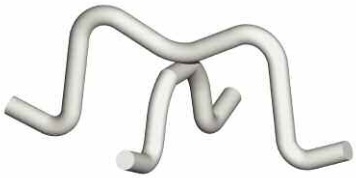
(Available with metal or plastic sand plate)

Metal Reinforcing Bar Supports

(BC) BAR CHAIR

BAR CHAIR DATA		
Type	Available Height	Height Increments
BC	3/4" to 2"	1/4"

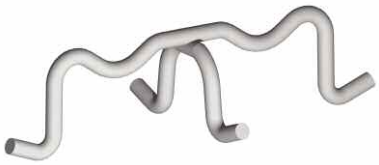
To Order, Specify: quantity, type, height and finish classification.



(JC) JOIST CHAIR

JOIST CHAIR DATA		
Type	Available Height	Height Increments
JC	3/4" to 2"	1/4"

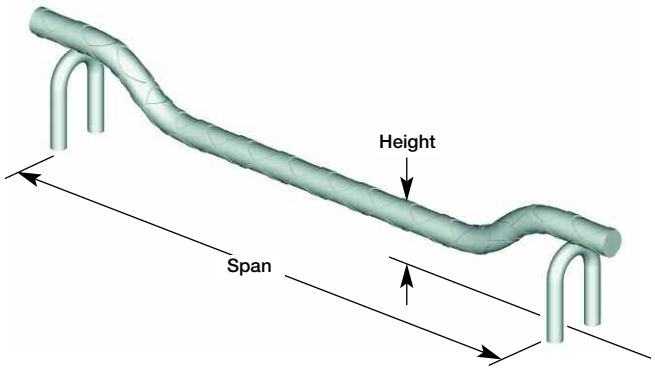
To Order, Specify: quantity, type, height and finish classification.



(UJC) JOIST CHAIR – UPPER

JOIST CHAIR - UPPER DATA		
Type	Available Height	SPAN
UJC	-1" to +3-1/2"	14"

To Order, Specify: quantity, type, height and finish classification.

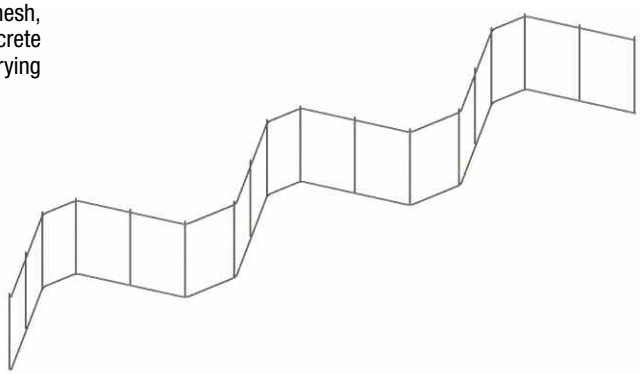


(CS) CONTINUOUS SUPPORT (ZIG-ZAG)

CS Continuous Support (Zig-Zag) is a steel support for horizontal wire mesh, structural fabric or reinforcing bars and an excellent spacer for vertical steel in concrete walls. The support is very stable, it will not slide or tip and has excellent load carrying capacity. It is easy to install and can be bent around voids and/or partitions.

CONTINUOUS SUPPOR (ZIG-ZAG) DATA			
Type	Available Height	Height Increments	Length
CS	2" to 12"	1/4"	8'-0"

To Order, Specify: quantity, type, height and finish classification.

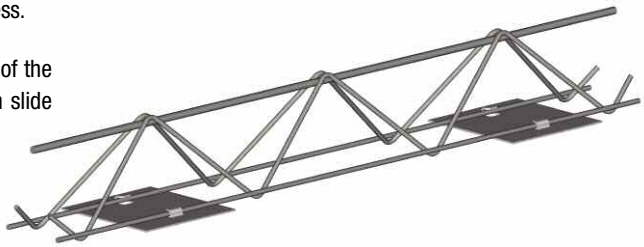


WIRE GIRDER – DOUBLE

The Wire Girder – Double is designed to quickly and accurately position wire mesh in large slab-on-grade applications. The girder is available in heights from 3" to 9" in 1" increments and in lengths up to 40'. Optional snap-on sand plates are available for use on sandy soils to prevent the girder from turning during concrete placement. When using on a firm casting bed, the snap-on plates are not a necessity but will give better support on slabs exceeding 6" in thickness.

The optional snap-on plates are field installed by simply squeezing the bottom runners of the girder inward until they slip inside the plate tabs. Release of the runners will let them slide under the tabs and be held firmly in place by the tabs.

To Order Specify: quantity, type, height & length.
To Order Optional Snap-On Plate, Specify: quantity and type.



Plastic Reinforcing Bar Supports

(SB) SLAB BOLSTER

The SB Slab Bolster is fabricated from fiber-filled composite material. They are gray in color to blend with the concrete. The top bar corrugations are on 1" centers to aid rebar placement. It is available in 5' lengths and heights from 3/4" to 4" in 1/4" increments.

To Order, Specify: quantity, type and height.

(IC) INTERSECTIONAL CHAIR

The IC Intersectional Chair or is designed for use at the intersection of two crossing lengths of post tensioning cables rebar to correctly position and firmly hold the two bars in place. The large support base gives added benefit when used on vapor barriers or soft fill. The chair fits 1/2" PT cable or up to #5 rebar, and is available in most heights from 1-1/2" to 7" in 1/2" increments.

To Order, Specify: quantity, type and height.

(MBCB) MESH BAR CHAIR WITH BASE

The MBCB Mesh Bar Chair with Base is a special high chair with sand plate for use on soft surfaces and/or slab on grade to correctly position and hold the wire mesh securely in place. Each size chair is designed to service two mesh positioning heights. It is available in heights from 5/8" to 4". Can support up to #5 rebar crossing over up to #3 rebar.

To Order, Specify: quantity, type and height.

PC-2 SNAP-ON MESH CHAIR
PC-3 SNAP-ON MESH CHAIR WITH BASE

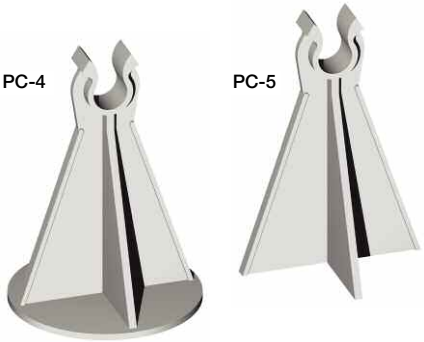
The PC-2 and PC-3 Snap-On Mesh Chairs are economical heavy duty, four sided chairs that quickly snap onto 4 ga. to 10 ga. mesh to correctly position it in the slab. The Snap-On Mesh Chair is available in most heights from 3/4" to 3" and the Snap-On Mesh Chair With Base is available in heights from 1-1/2" to 4". Both Chairs will accommodate wire mesh 4 ga. to 10 ga.

To Order, Specify: quantity, type and height.

PC-4 SNAP-ON PAVING CHAIR WITH BASE
PC-5 SNAP-ON BAR CHAIR

The PC-4 Snap-On Paving Chair and PC-5 Snap-On Bar Chair are substantial plastic bar supports available to support reinforcing steel in various applications. The Snap-On Paving Chair for #3 to #4 rebar or #4 to #6 rebar (PC-4) is available in heights from 3/4" to 7" and the Snap-On Bar Chair for #3 to #7 rebar (PC-5) is available in heights from 3/4" to 3".

To Order, Specify: quantity, type and height.



Plastic Reinforcing Bar Supports

(MB TUFF CHAIR

MB Tuff Chair is engineered for strength, durability, recoverability and consistent ruggedness, and are available in a range of heights from 3/4" to 10". MB Tuff Chair-Slab Bolster available in a range of heights from 3/4" to 4", and 30" lengths

To Order, Specify: quantity, type and height.

PW-11 PLASWHEEL

The PW-11 Plaswheel is designed to quickly snap onto and space vertical or horizontal steel at side walls and columns. They are available to accommodate #2 through #8 rebar and provide 5/8" through 4"concrete cover.

To Order, Specify: quantity, type, bar size and cover.

PW-14 UNISPACER

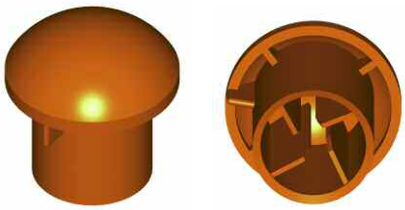
The PW-14 Unispacer is an economical spacer available in one size to provide a 2" concrete cover. It slides onto any rebar up to #14 size and permits rotation and/or movement of the rebar without risk of the spacer coming off.

To Order, Specify: quantity and type.

BC-2, BC-4 BAR CAP

The BC-2 and BC-4 Bar Cap is available in two sizes for the purpose of protection from scrapes, cuts and torn clothing caused by protruding rebar. It is not intended for use as an impalement protector. The small size BC-2 accepts rebar sizes #3 through #8 and the larger size BC-4 accepts rebar from #9 through #14.

To Order, Specify: quantity, type and rebar size.

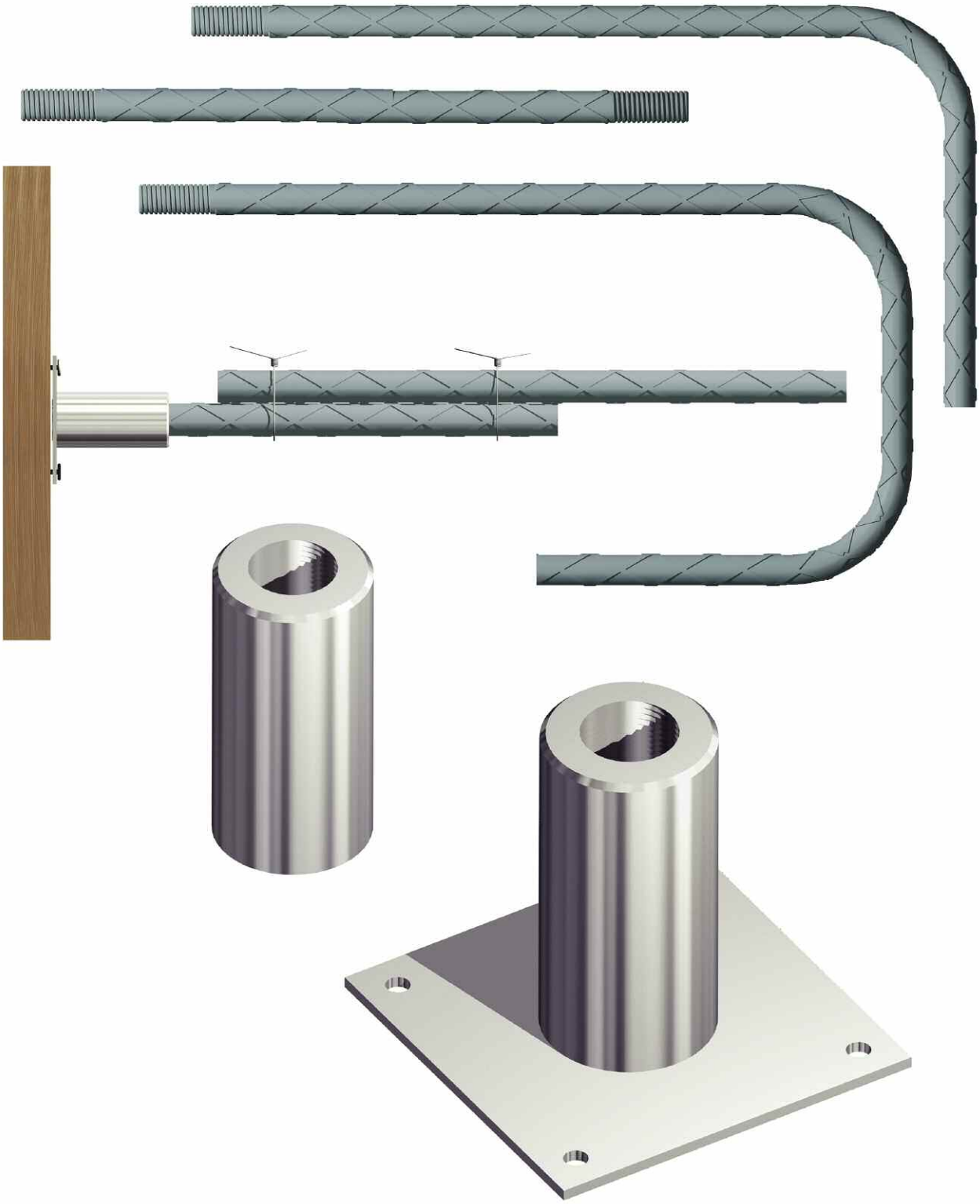


BC-6, BC-8 REBAR SAFETY CAP

The BC-6 and BC-8 Rebar Safety Cap is an OSHA approved impalement protection safety cap. It is available in two sizes; the smaller size BC-6 accepts rebar sizes #3 through #8 and the larger size BC-8 will accommodate rebar sizes #7 through #12.

To Order, Specify: quantity, type and size.

Rebar Splicing Products

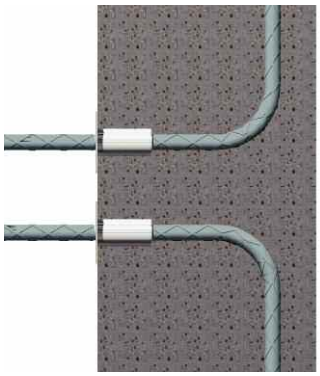


THREADED SPLICE SYSTEM

The Threaded Splice System is designed to eliminate protruding rebar problems. OSHA requirements pertaining to workmen protection from protruding rebar has become a source of added concern and expense. Use of the Threaded Splice System helps eliminate the exposed rebar problem. It offers complete workman safety, reduces costs related to injuries and reduces the need for expensive rebar protectors.

The Threaded Splice System consists of a threaded rebar coupler and a threaded splice bar and complies with ACI 318-05 Type 1, that requires mechanical splices to develop 125% of the specified rebar yield strength. Refer to the Tables for coupler and bar data.

ASTM A-615 GRADE 60 REINFORCEMENT BAR DATA						
Bar Size Designation	Weight (lbs per lineal ft.)	Nominal Diameter	Cross Section Area (sq.in.)	Minimum Loads (lbs)		
				P_y	1.25 P_y	1.5 $P_y = P_{ult}$
#4	0.668	.500	.20	12,000	15,000	18,000
#5	1.043	.625	.31	18,600	23,250	27,900
#6	1.502	.750	.44	26,400	33,000	39,600
#7	2.044	.875	.60	36,000	45,000	54,000
#8	2.670	1.000	.79	47,400	59,250	71,100
#9	3.400	1.125	1.00	60,000	75,000	90,000
#10	4.303	1.250	1.27	76,200	95,250	114,300
#11	5.313	1.410	1.56	93,600	117,000	140,400

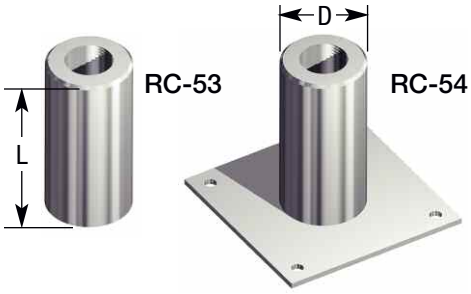


ACI 318 2005 Section (12.14.3.2) requires a full mechanical splice to develop at least 125% of the specified rebar yield strength (P^1). Threaded Rebar Splice must have ultimate strength (P_{ult}) equal to or greater than 125% of the specified rebar yield strength (1.25 P_y).

RC-53 THREADED REBAR COUPLER – SMOOTH
RC-54 THREADED REBAR COUPLER – SMOOTH/FLANGE

The RC-53 Threaded Rebar Coupler – Smooth and RC-54 Threaded Rebar Coupler – Smooth/Flange (RC-54) are available in rebar sizes #4 through #11. They are fabricated from quality bar stock and furnished with an internal positive thread stop. The flanged style is equipped with nail holes in the flange for convenient fastening to the form. Refer to the Table for dimensions and minimum load values.

RC-53 & RC-54 REBAR COUPLER SELECTION DATA						
Coupler Size	Thread Size	Coupler Weight (lbs)	Coupler Length (L)	Coupler O.D. (D)	Optional Flange Size	Ultimate Load (lbs) $P_{ult} = 1.5P_y$
4	1/2 - 13 NC	.24	1-7/8"	7/8"	2 X 2	18,000
5	5/8 - 11 NC	.34	2-1/8"	1"	2 X 2	27,900
6	3/4 - 10 NC	.41	2-1/4"	1-1/8"	2 X 2	39,600
7	7/8 - 9 NC	.57	2-5/8"	1-1/4"	2 X 2	54,000
8	1 - 8 NC	1.08	3-1/4"	1-1/2"	2 X 2	71,100
9	1-1/8 - 7 NC	1.39	3-3/4"	1-5/8"	2-1/2" X 2-1/2"	90,000
10	1-1/4 - 7 NC	2.61	4-1/4"	2"	2-1/2" X 2-1/2"	114,300
11	1-3/8 - 6 NC	2.66	4-3/4"	2"	2-1/2" X 2-1/2"	140,400

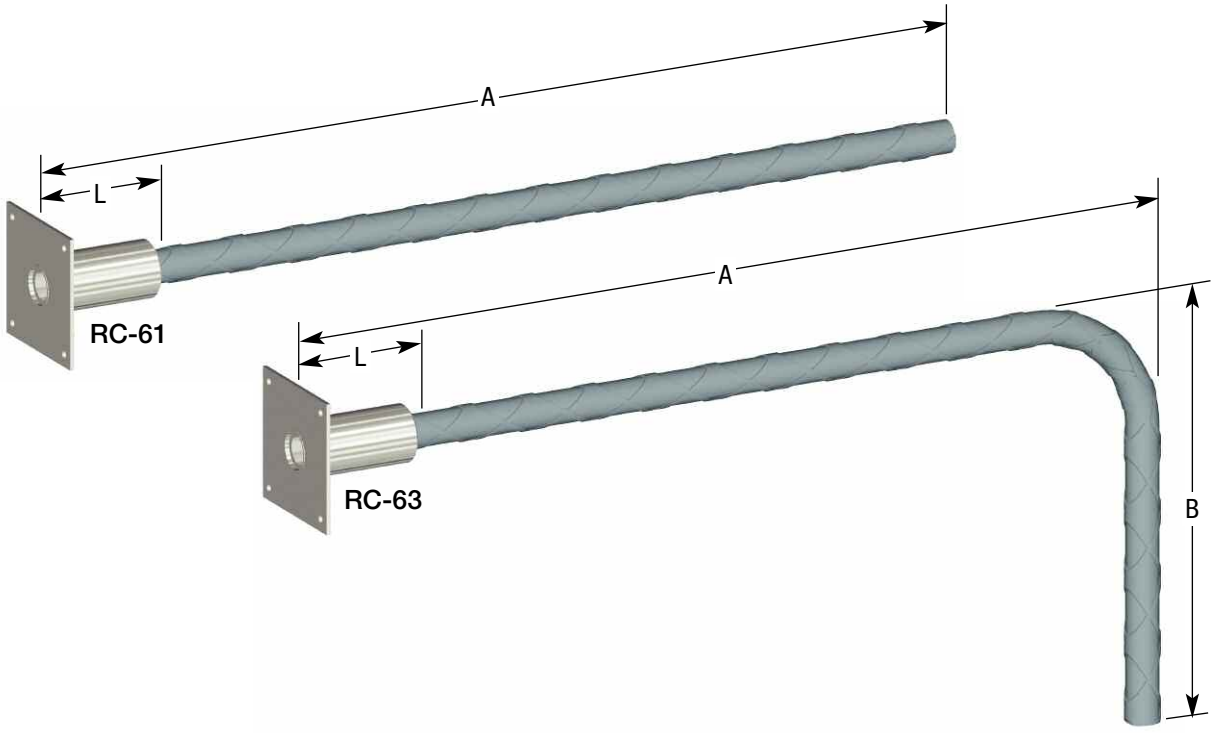


To Order, Specify: quantity, Type and bar size.

Rebar Splicing Products

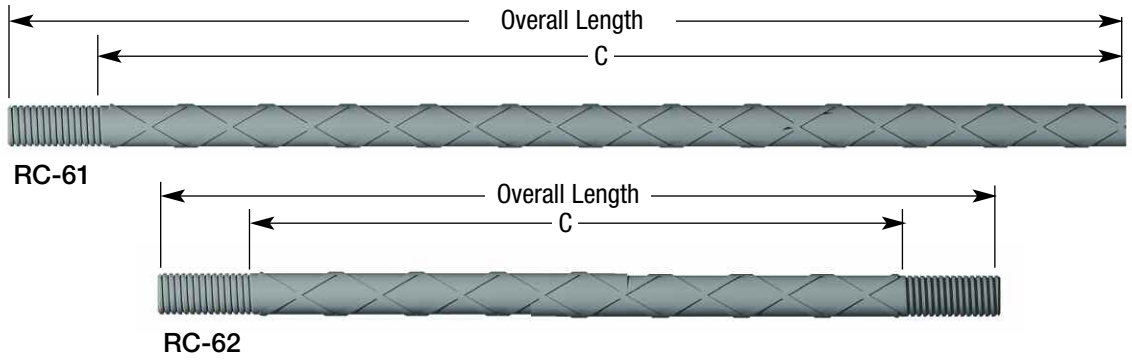
RC-61, RC-63 SETTING BAR ASSEMBLIES

Setting Bars are assemblies comprised of threaded rebar coupler and a length of Grade 60 deformed reinforcing steel threaded on one end. Setting Bars are available in all rebar sizes #4 through #11 and in any required length. The Setting Bar (RC-61) model is furnished straight for standard lap splice applications and the Setting Bar (RC-63) is furnished with a 90° bend. All setting bars are manufactured to furnished job specifications.



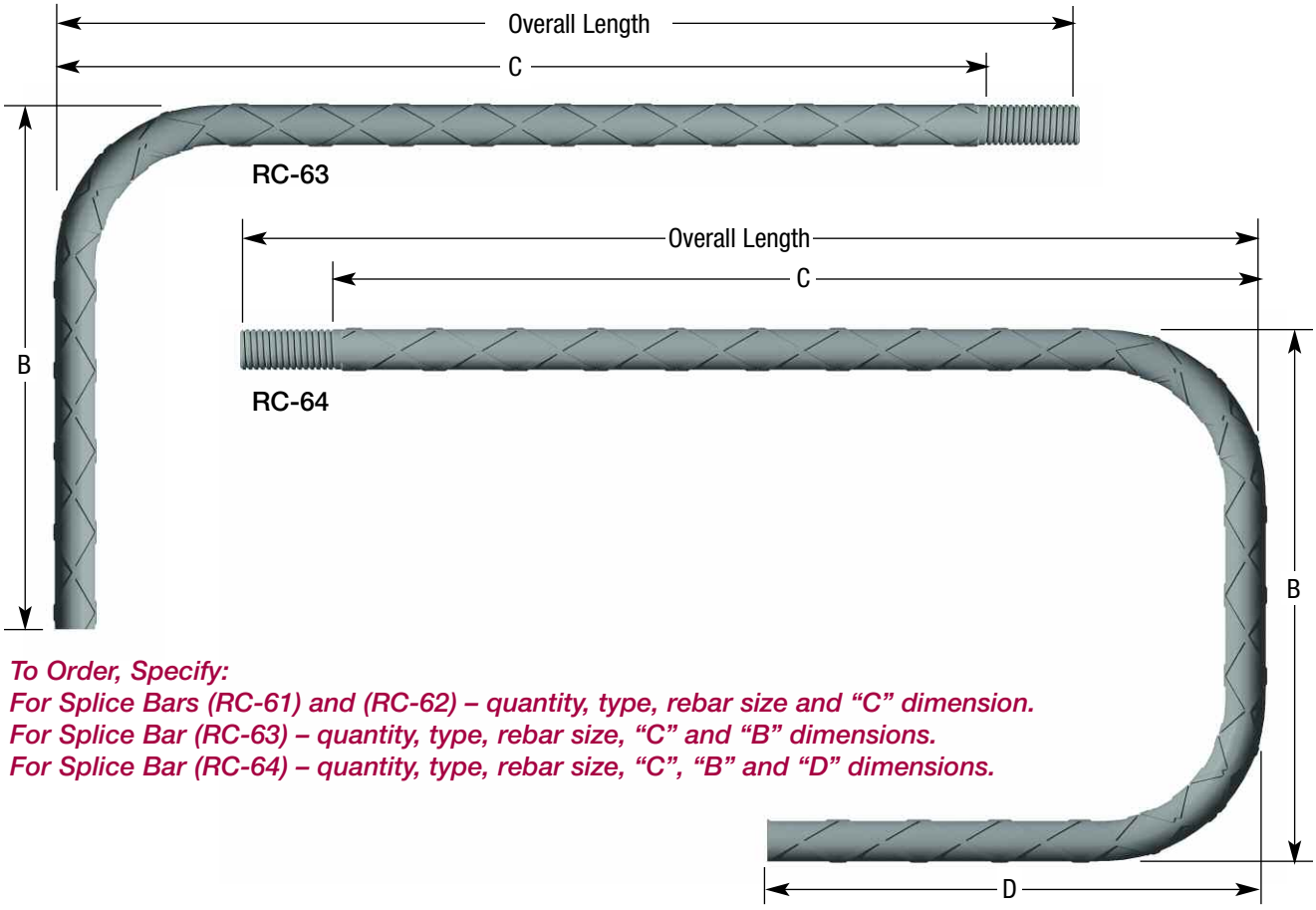
To Order, Specify:
For Setting Bar (RC-61) – quantity, type, rebar size and overall length. (“A” + “L”)
For Setting Bar (RC-63) – quantity, type, rebar size, “A” and “B” dimensions.

RC-61, RC-62, RC-63, RC-64 SPLICE BARS



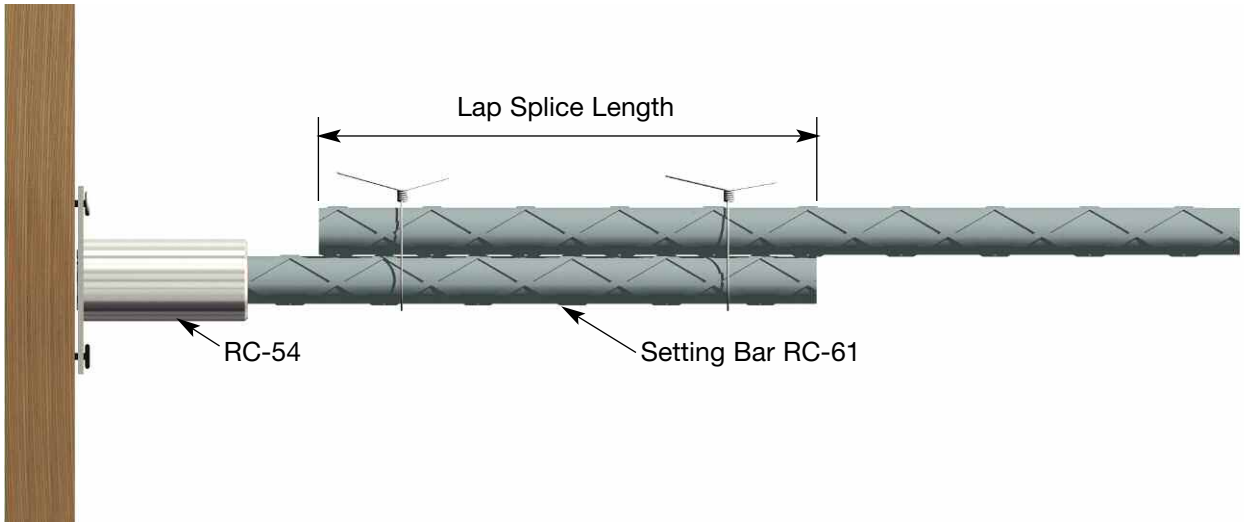
The RC-61, RC-62, RC-63 and RC-64 Splice Bars are manufactured from Grade 60 deformed rebar material and are available in all of the corresponding sizes to the Threaded Rebar Coupler. After the Setting Bar has been placed and the concrete has set the Splice Bar is threaded into the Setting Bar to complete the splice. Splice Bars are available in the following configurations: RC-61 straight, RC-63 90° bend, RC-62 threaded at both ends and with a RC-64 return bend.

For Hook Bar development lengths actual dimensions C, B, D and R are functions of f'_c (concrete strength), PSI and minimums based on ACI-318-05 section 12.5 both code and commentary.



To Order, Specify:
For Splice Bars (RC-61) and (RC-62) – quantity, type, rebar size and "C" dimension.
For Splice Bar (RC-63) – quantity, type, rebar size, "C" and "B" dimensions.
For Splice Bar (RC-64) – quantity, type, rebar size, "C", "B" and "D" dimensions.

TENSION SPLICE LAP LENGTH DATA



LAP SPLICE LENGTH OF DEFORMED BARS IN TENSION			
CASE	f'_c (psi)	No. 6 and Smaller Bars	No. 7 and Larger Bars
Clear spacing of bars or wires being developed or spliced not less than d_b clear cover not less than d_b and stirrups or ties throughout l_d not less than the code minimum or clear spacing of bars or wires being developed or spliced not less than $2d_b$ and clear cover not less than d_b *(ACI 318-05 section 12.2.2)*	3000	44 d_b	55 d_b
	4000	38 d_b	48 d_b
	5000	34 d_b	43 d_b
	6000	31 d_b	39 d_b
	8000	27 d_b	34 d_b
	10000	24 d_b	30 d_b
Other Cases *(ACI 318-05 section 12.2.2)*	3000	66 d_b	83 d_b
	4000	57 d_b	72 d_b
	5000	51 d_b	64 d_b
	6000	47 d_b	59 d_b
	8000	41 d_b	51 d_b
	10000	36 d_b	45 d_b

Table is based on the following criteria:
1. Grade 60 reinforcing steel bars.
2. Normal weight concrete factor λ=1.0.
3. Uncoated reinforcement factor, β=1.0.
4. Reinforcement location factor, α=1.0.

ZAP SCREWLOCK®
DOUBLE ZAP SCREWLOCK®

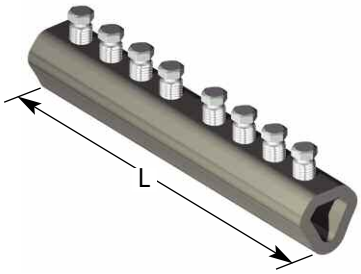
The ZAP Screwlock® is a high strength mechanical rebar connection device available for splicing #4 through #11 rebar. No rebar end preparation is required. Simply insert the ends of the two bars into the connector body. A positive center stop ensures proper installation.

Tightening the lock-bolts generates a positive mechanical interlock as the rebar deformations are pressed into the ductile steel wedge-shaped body of the connector. Visual inspection is easily accomplished; just verify that the heads of the lock-bolts have sheared off during the tightening sequence.

The ZAP SCREWLOCK exceeds 125% of the specified yield strength of the rebar and is approved by or meets the following: ACI-318, ICBO and AASHTO.

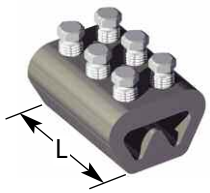
ZAP SCREWLOCK DATA

Bar Size	Nominal Coupler Wt. (lbs)	Coupler Lgth. "L" (in.)	Ave. Dim. "A" (in.)	Dimension "B" (in.)	Number of Screws / Bar	Torque (Ave.) (ft.-lbs.)	Hex Head Ø
#4	1.9	7"	1-1/16"	11/16"	3	50	1/2"
#5	3.7	9"	1-1/8"	3/4"	4	50	1/2"
#6	5.2	11"	1-3/16"	15/16"	5	50	1/2"
#7	7.6	13"	1-1/4"	1-1/16"	5	100	5/8"
#8	10.3	15-1/4"	1-5/16"	1-1/16"	6	100	5/8"
#9	16.9	16-3/4"	1-5/8"	1-1/4"	6	200	3/4"
#10	21.7	19-1/8"	1-11/16"	1-7/16"	7	200	3/4"
#11	24.7	21-1/2"	1-13/16"	1-1/2"	8	200	3/4"



DOUBLE ZAP SCREWLOCK DATA

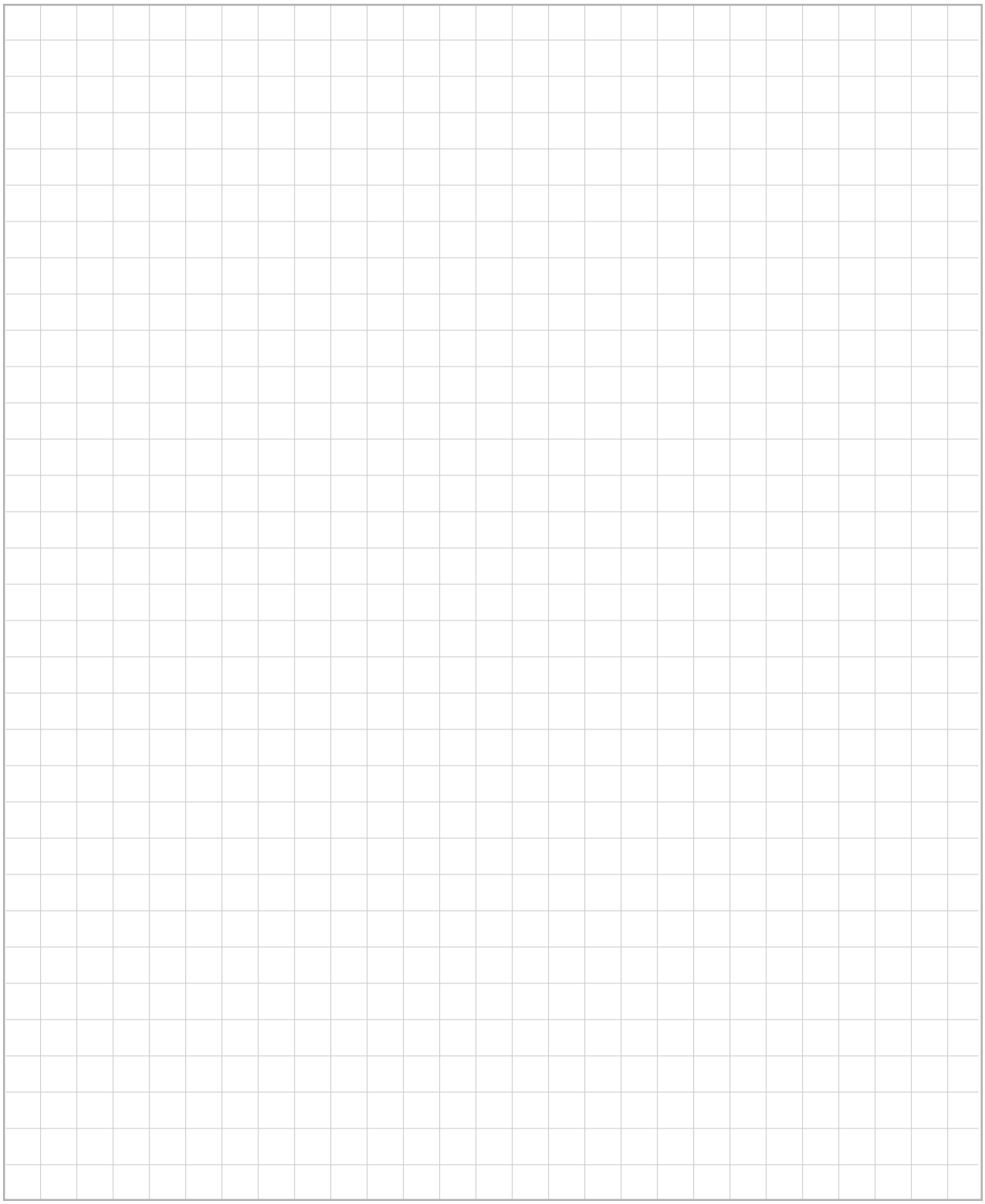
Bar Size	Nominal Coupler Wt. (lbs)	Coupler Lgth. "L" (in.)	Ave. Dim. "A" (in.)	Dimension "B" (in.)	Dimension "S" (in.)	Number of Screws / Bar	Torque (Ave.) (ft.-lbs.)	Hex Head Ø
#4	1.3	2-1/8"	1-1/16"	1/2"	15/16"	2	50	1/2"
#5	2.3	3"	1-1/8"	5/8"	15/16"	3	50	1/2"
#6	3.2	3-7/8"	1-3/16"	3/4"	15/16"	4	50	1/2"



Dimensions are basic for detailing purposes only. Screwlock projection heights vary with location on the rebar. Concrete cover is critical, orientate coupler to obtain dimension "B" shown above.

Note: Dimensions are subject to change without notice. An alternate design may be recommended for the above to suit the application or specification required.

To Order, Specify: quantity, type and rebar size.



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