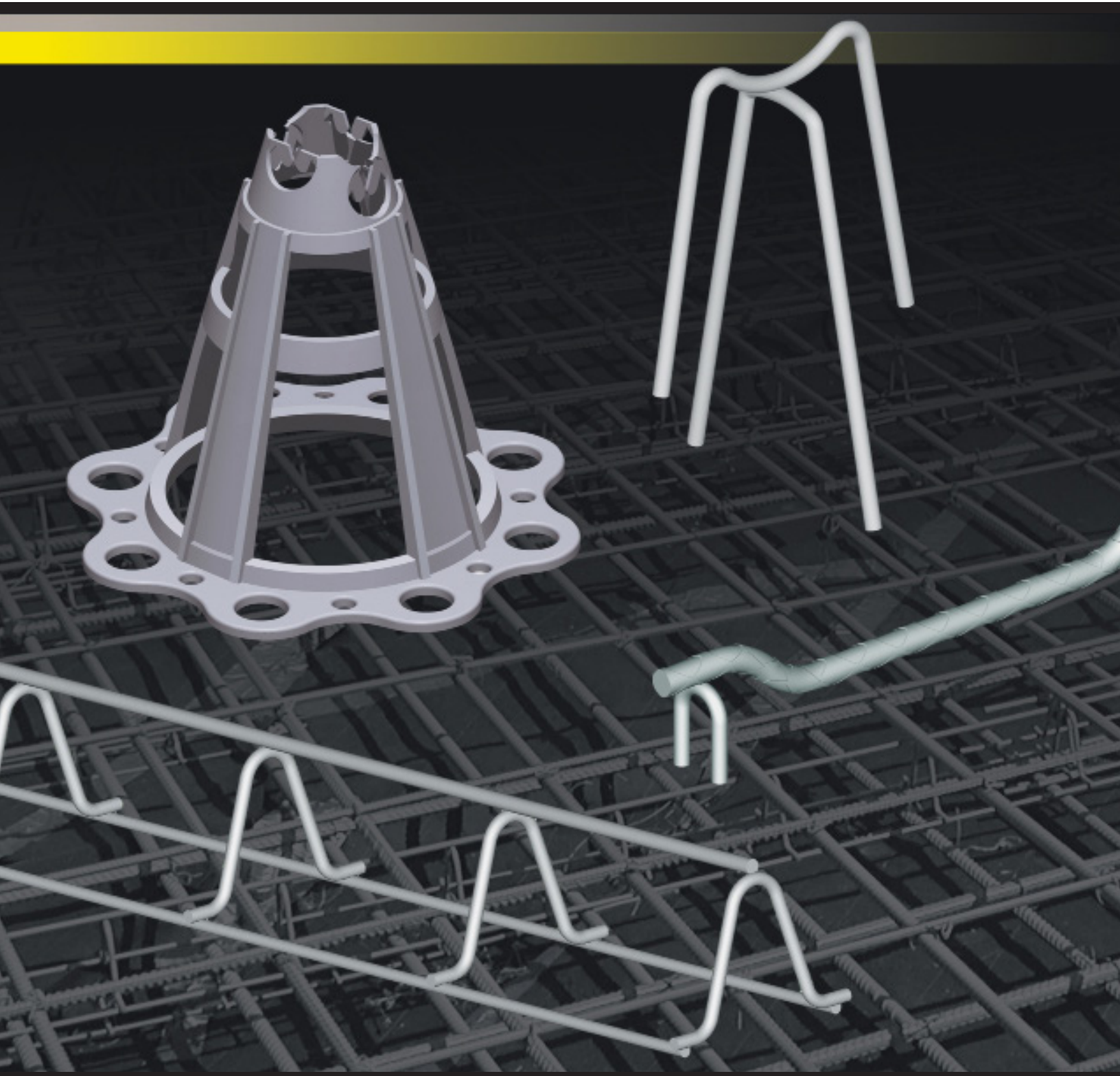


Reinforcing





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Leviat is the new name of CRH's construction accessories companies worldwide.

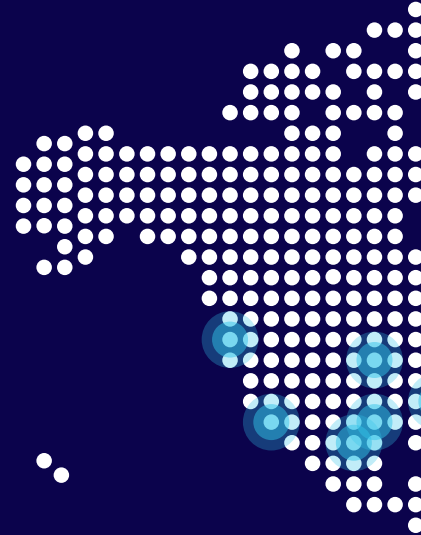
Under the Leviat brand, we have united the expertise, skills and resources of Meadow Burke and its sister companies to create a world leader in fixing, connecting and anchoring technology.

The products you know and trust, including Meadow Burke, will remain an integral part of Leviat's comprehensive brand and product portfolio. As Leviat, we can offer you an extended range of specialist products and services, greater technical expertise, a larger and more agile supply chain and better, faster innovation.

By bringing together CRH's construction accessories family as one global organisation, we are better equipped to meet the needs of our customers, and the demands of construction projects, of any scale, anywhere in the world.

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HALFEN

thermomass®



3,000

employees

60

locations

25

countries

4

continents

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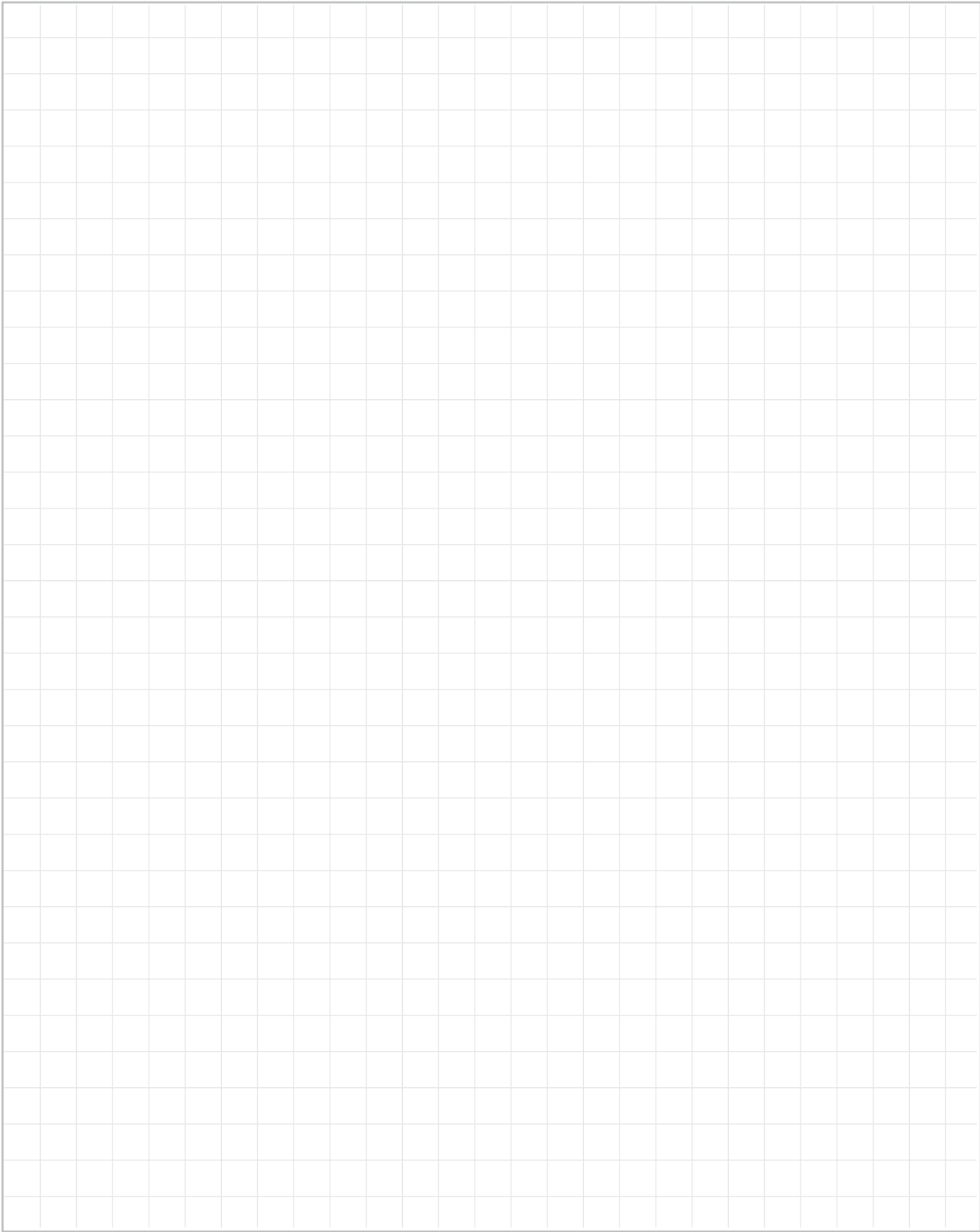
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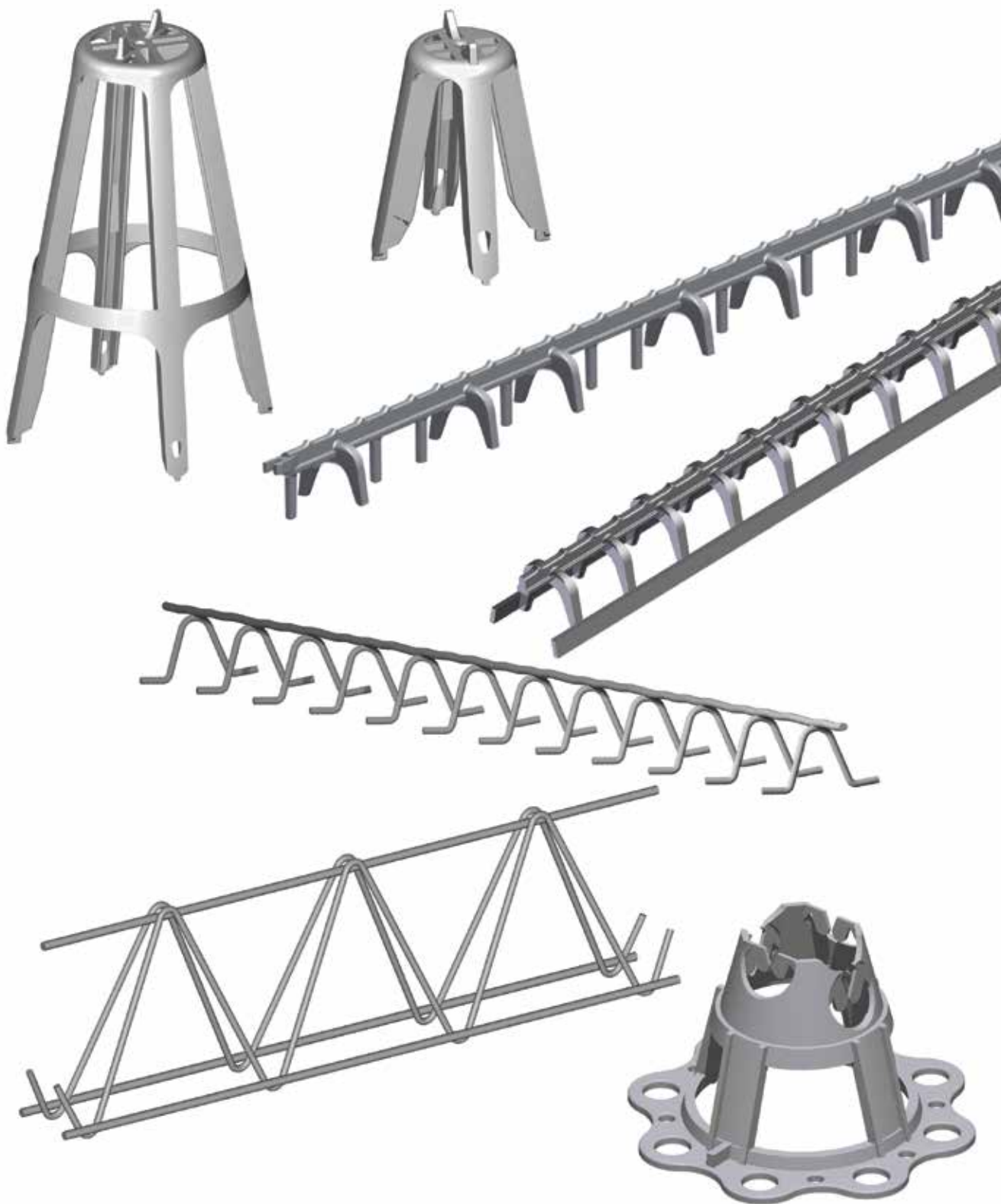
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Meadow Burke metal reinforcing bar supports can be manufactured in compliance with American Concrete Institute (ACI) ACI-SP-66, ACI-315 and ACI-315R.

Quality rebar metal supports are available in the following CRSI Classification for finishes:

Class 1A – Epoxy coated.

Class 3 – Plain wire, no protection.

Also available:

Epoxy coated meeting AASHTO specifications.

Epoxy coated with plastic dipped feet.

Complete plastic coating (100% encapsulate) up to 3" heights. (not available for the Slab Bolster)

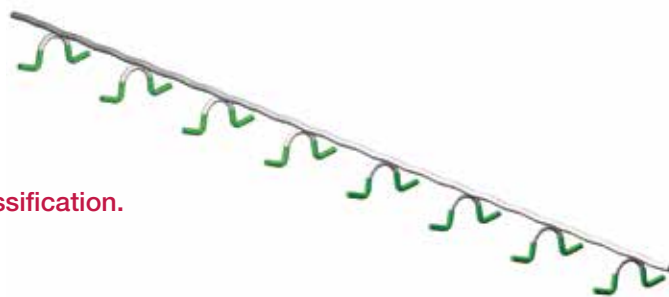
Heights available in ¼" increments.

METAL REINFORCING BAR SUPPORTS

(SB) SLAB BOLSTER

SLAB BOLSTER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
SB	¾" to 3"	5"	5'-0"

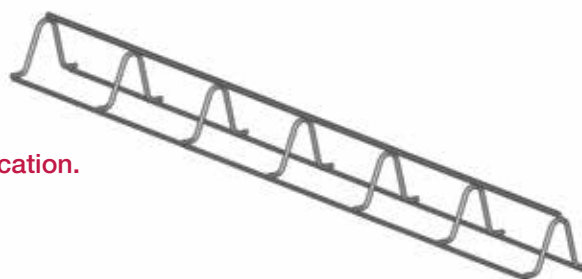
To Order, Specify: quantity, type,height and finish classification.



(SBR) SLAB BOLSTER – UPPER

SLAB BOLSTER - UPPER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
SBR	¾" 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"	2-½"	5'-0"

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



(BBU) BEAM BOLSTER – UPPER

BEAM BOLSTER - UPPER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
BBU	1" to 5"	2-½"	5'-0"

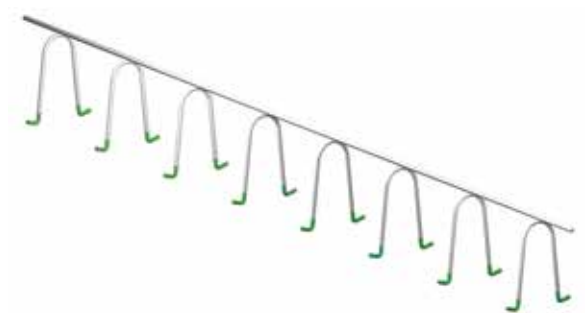
To Order, Specify: quantity, type,height and finish classification.



(CHC) CONTINUOUS HIGH CHAIR

CONTINUOUS HIGH CHAIR DATA			
Type	Available Height	Leg Spacing (c/c)	Length
CHC	2" to 20"	7-1½"	5'-0"

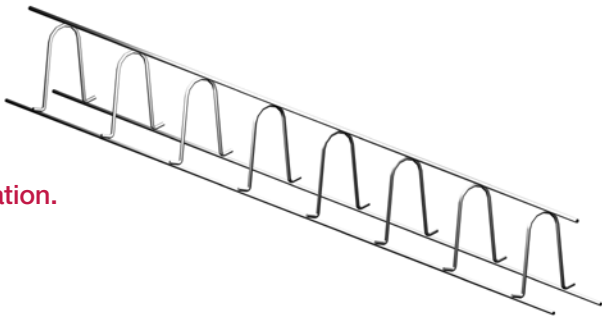
To Order, Specify: quantity, type, height and finish classification.



(CHCU) CONTINUOUS HIGH CHAIR – UPPER

CONTINUOUS HIGH CHAIR - UPPER DATA			
Type	Available Height	Leg Spacing (c/c)	Length
CHCU	2" to 20"	7-1½"	5'-0"

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



(HC) HIGH CHAIR

HIGH CHAIR DATA		
Type	Available Height	Height Increments
HC	2" to 40"	¼"

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

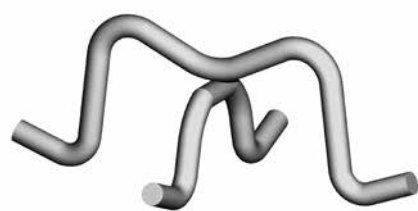


(Available with metal or plastic sand plate)

(BC) BAR CHAIR

BAR CHAIR DATA		
Type	Available Height	Height Increments
BC	¾" to 2"	¼"

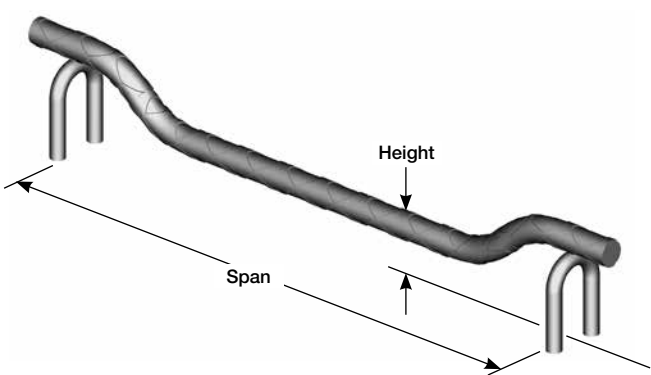
To Order, Specify: quantity, type, height and finish classification.



(UJC) JOIST CHAIR – UPPER

JOIST CHAIR - UPPER DATA		
Type	Available Height	SPAN
UJC	-1" to +3-½"	14"

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

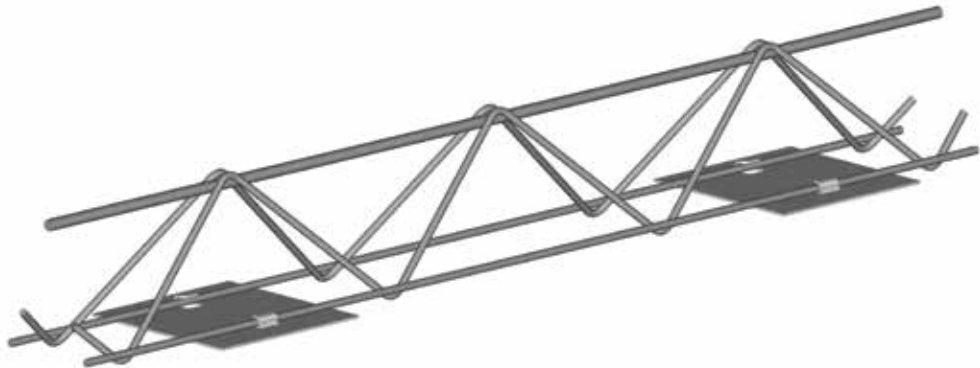


WIRE GIRDER – DOUBLE

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.



TUFF PLUS SB – SLAB BOLSTER

The Tuff Plus SB is a composite slab bolster that is used to provide accurate cover for lower mats of steel reinforcement in concrete elements. Suitable for a wide range of uses, the Tuff Plus SBslab bolster can be used in Tilt-Up Concrete Construction, Precast Concrete Construction, Post Tensioned Concrete and other Cast in place applications. The Tuff Plus SB, all plastic slab bolster, may also be used as side form spacers in vertical formwork.

The Tuff Plus SB slab bolster is fabricated from fiber filled gray composite material designed to blend with the concrete surface, if exposed. Top bar corrugations are placed on 1" centers to visually aid rebar placement. The Tuff Plus SB plastic slab bolster is manufactured in true 60" lengths, eliminating assembly and expedites field placement.

TUFF PLUS SBR – SLAB BOLSTER with RUNNER

The Tuff Plus SBR Slab Bolster with Runner, is typically used to provide accurate and efficient placement of upper mats of steel reinforcement in concrete elements. The Tuff Plus SBR is a composite slab bolster upper that can be used in Bridge, Tilt-up, Precast, Post Tension and other segments of concrete construction.

The Tuff Plus SBR Slab Bolster Upper, is fabricated from fiber filled composite material. Top bar corrugations are located at 1" centers to aid in rebar placement. The Tuff Plus SBR with Runner is a direct replacement for metal slab bolster upper.

X-TUFF BEAM BOLSTER

X-Tuff Beam Bolster is a new rebar support manufactured in the U.S. using high-performance PC/ABS plastic for best-in-class strength and durability.

MB TUFF CHAIR

MB Tuff Chair is engineered for strength, durability, recoverability and consistent ruggedness, and are available in a range of heights from ¾" to 10".

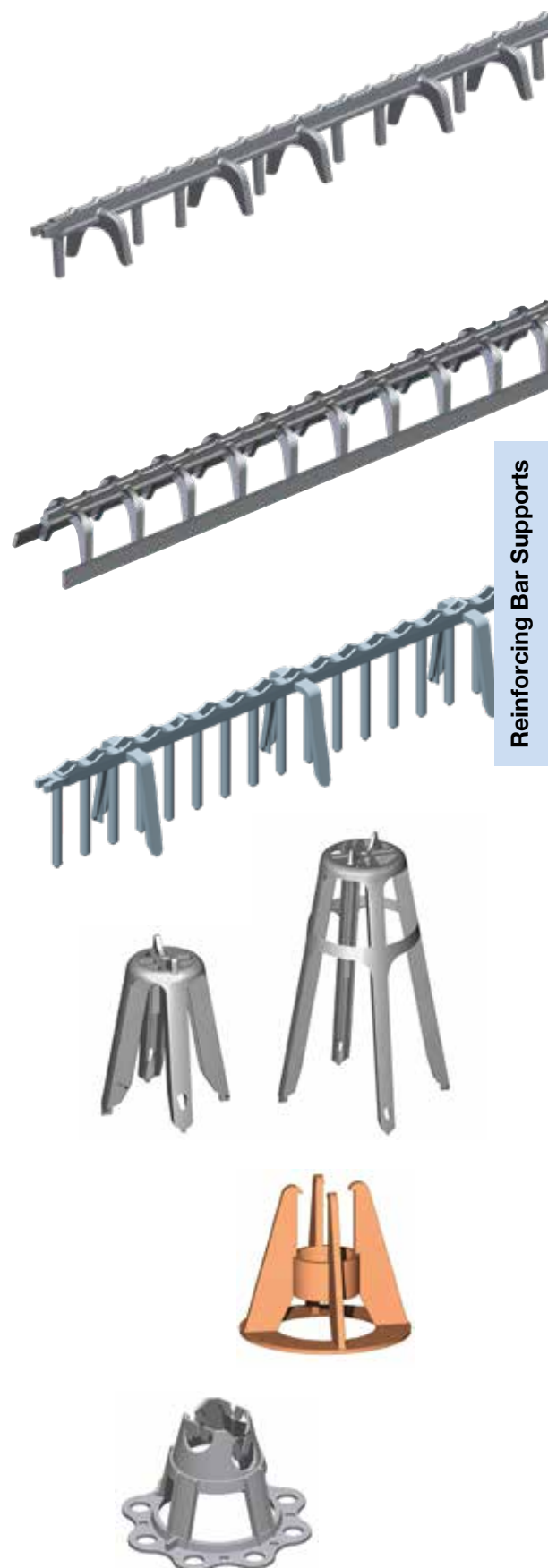
(IC) INTERSECTIONAL CHAIR

The IC Intersectional Chair or is designed for use at the intersection of two crossing lengths of post tensioning cable 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 ½" PT cable or up to #5 rebar, and is available in 1-½" cover height.

(MBCB) MESH BAR CHAIR WITH BASE

The Mesh Bar Chair with Base (MBCB) is a light duty, composite 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 1-½" to 4". It can be used to support up to a #5 rebar.

To order any of these products, specify: quantity, type and height.

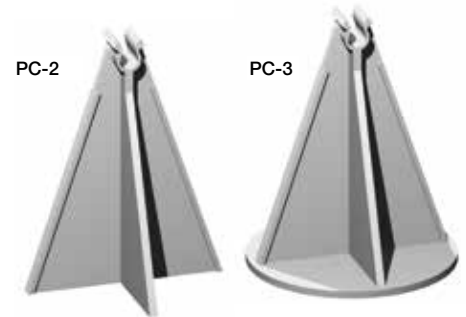


PC-2 SNAP-ON MESH CHAIR

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 PC-2 is available in heights from ¾" to 2-½". The PC-3 is available in heights from 1-½" to 3". Both Chairs will accommodate wire mesh 4 ga. to 10 ga.

To Order, Specify: quantity, type and height.

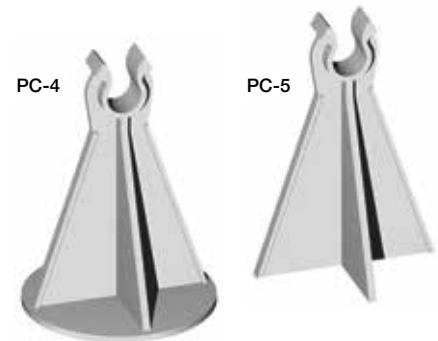


PC-4 SNAP-ON PAVING CHAIR WITH BASE

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 ¾" to 7" and the Snap-On Bar Chair for #3 to #7 rebar (PC-5) is available in heights from ¾" to 3".

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 ⅝" through 4" concrete cover.

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



BC-2 BAR CAP

The BC-2 Bar Cap protects users from scrapes, cuts and torn clothing caused by protruding rebar. It is not intended for use as an impalement protector. The BC-2 accepts rebar sizes #3 through #8.

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





BT Couplers

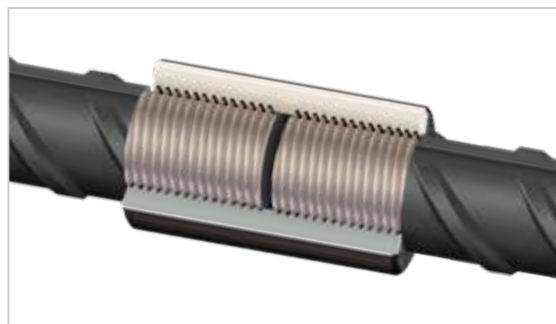
Type 1 & Type 2HS Rebar Splicing System



Meadow Burke BT Couplers are versatile and robust Type 1 & Type 2HS Splicing Systems used to mechanically connect rebar sections in segmental pours as an alternative to traditional dowel bars. The three-part system consists of a Splice Bar, Coupler and Setting Bar that meets the mechanical splice strength requirements of ACI-318-19 when used to splice grade 60 rebar.

FEATURES

- Improved performance: Exceeds ACI-318-19 Type 1 & Type 2HS splice requirements and maintains reinforcing steel continuity independent of concrete cover.
- Saves time and money: Reduces costly form repairs by eliminating drilling of forms and simplifies form stripping.
- Available in standardized lengths (sizes #4 – #11) and configured to order.



BT COUPLERS SPLICING PERFORMANCE				
Bar Size	Nominal Area (inch ²)	Grade 60 Rebar Yield Strength (lbs)	Type 1 125% Yield Strength (lbs)	Type 2HS 90 KSI Tensile Strength (lbs)*
#4	0.20	12,000	15,000	18,000
#5	0.31	18,600	23,250	27,900
#6	0.44	26,400	33,000	39,600
#7	0.60	36,000	45,000	54,000
#8	0.79	47,400	59,250	71,100
#9	1.00	60,000	75,000	90,000
#10	1.27	76,200	95,250	114,300
#11	1.56	93,600	117,000	140,400

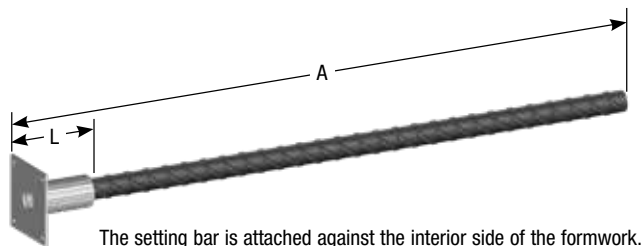
*ASTM A615 and A706 compliant

The Three-part Mechanical Connect System

STANDARD LENGTH SETTING BARS

Type I Item Number	Type II Item Number	Rebar Size	Grade 60 Finish: Plain	"A" Length (inch)
	MBR2610430F	#4	RC-61-T2 Setting Bar	30"
	MBR2610448F	#4	RC-61-T2 Setting Bar	48"
	MBR2610530F	#5	RC-61-T2 Setting Bar	30"
Contact	MBR2610536F	#5	RC-61-T2 Setting Bar	36"
Meadow Burke	MBR2610548F	#5	RC-61-T2 Setting Bar	48"
	MBR2610636F	#6	RC-61-T2 Setting Bar	36"
	MBR2610648F	#6	RC-61-T2 Setting Bar	48"
	MBR2610760F	#7	RC-61-T2 Setting Bar	60"

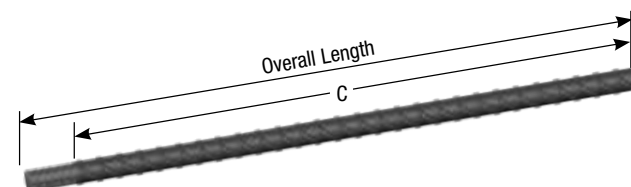
Additional lengths are available for Type I & II upon request



STANDARD LENGTH SPLICE BARS

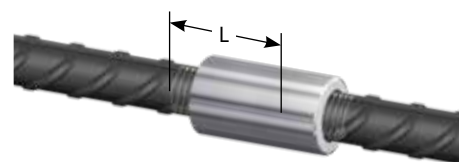
Type I Item Number	Type II Item Number	Rebar Size	Grade 60 Finish: Plain	"C" Length (inch)
	MBR2610430M	#4	RC-61-T2 Splice Bar	30"
	MBR2610448M	#4	RC-61-T2 Splice Bar	48"
	MBR2610530M	#5	RC-61-T2 Splice Bar	30"
Contact	MBR2610536M	#5	RC-61-T2 Splice Bar	36"
Meadow Burke	MBR2610548M	#5	RC-61-T2 Splice Bar	48"
	MBR2610636M	#6	RC-61-T2 Splice Bar	36"
	MBR2610648M	#6	RC-61-T2 Splice Bar	48"
	MBR2610760M	#7	RC-61-T2 Splice Bar	60"

Additional lengths are available for Type I & II upon request



TYPE I COUPLER DETAIL

Standard Coupler PN# (plain finish)	Flange Coupler PN# (plain finish)	Rebar Size	Couple Thread Size	"L" Length (inch)	Diameter (inch)	Weight (lbs.)
MB860501	MB860502	#4	½-13 UNC	1.875	0.875	0.24
MB860651	MB860652	#5	¾-11 UNC	2.125	1.000	0.34
MB860801	MB860802	#6	¾-10 UNC	2.250	1.125	0.41
MB860951	MB860952	#7	¾-9 UNC	2.625	1.250	0.57
MB861101	MB861102	#8	1-8 UNC	3.250	1.500	1.08
MB861251	MB861252	#9	1-½-7 UNC	3.750	1.625	1.39
MB861401	MB861402	#10	1-¼-7 UNC	4.250	2.000	2.61
MB861551	MB861552	#11	1-¾-6 UNC	4.750	2.000	2.66



TYPE II COUPLER DETAIL

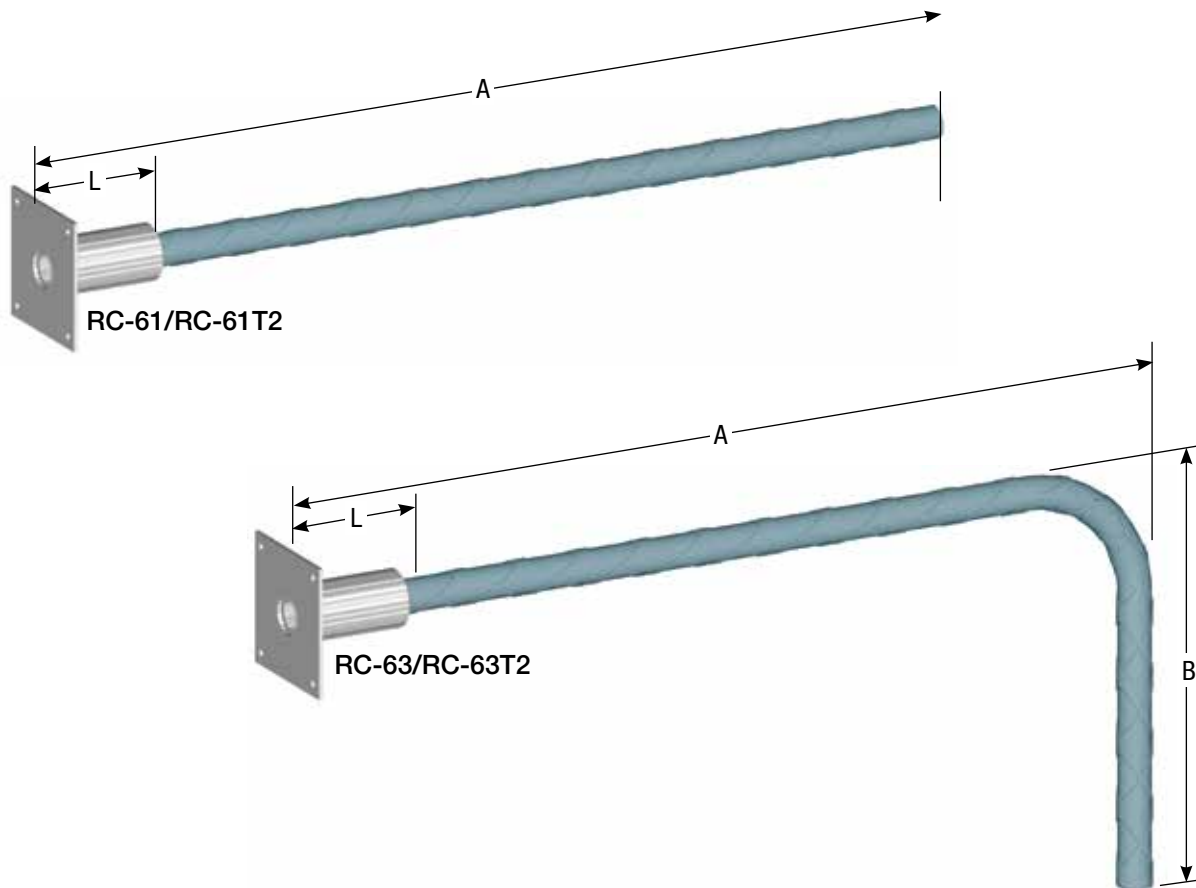
Standard Coupler PN# (plain finish)	Flange Coupler PN# (plain finish)	Rebar Size	Couple Thread Size	"L" Length (inch)	Diameter (inch)	Weight (lbs.)
MB860551	MB860552	#4	¾-11 UNC	1.250	1.000	0.17
MB860681	MB860682	#5	¾-10 UNC	1.625	1.125	0.25
MB860851	MB860852	#6	¾-9 UNC	2.250	1.250	0.40
MB860981	MB860982	#7	1-8 UNC	2.500	1.500	0.70
MB861151	MB861152	#8	1-½-8 UN	2.750	1.625	0.88
MB861281	MB861282	#9	1-¼-8 UN	3.000	2.000	1.70
MB861451	MB861452	#10	1-¾-8 UN	3.250	2.125	1.84
MB861581	MB861582	#11	1-¾-8 UN	3.625	2.250	2.19



BT Couplers are sold as an engineered component system, proof tested and third party certified. Under no circumstances will Meadow Burke permit the mixing other manufactures splicing parts with genuine MB components.

SETTING BAR ASSEMBLIES

Meadow Burke BT 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/RC-61T2) model is furnished straight for standard lap splice applications and the Setting Bar (RC-63/RC-63T2) is furnished with a 90° bend. All setting bars are manufactured to furnished job specifications.

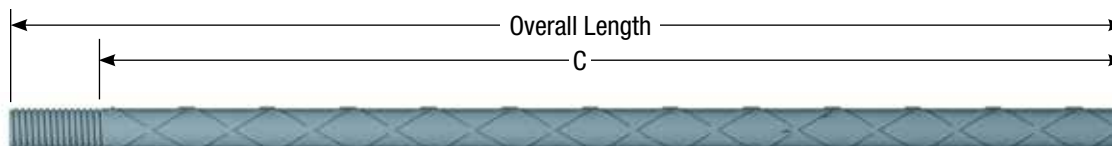


To Order, Specify:

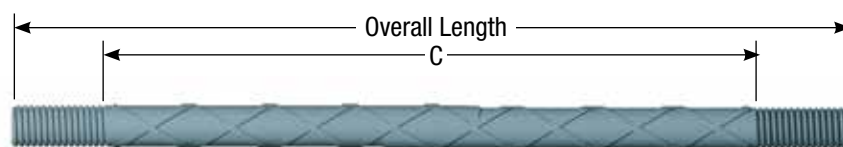
For Setting Bar (RC-61/RC-61T2) – quantity, type, rebar size and overall length. (“A” + “L”)

For Setting Bar (RC-63/RC-63T2) – quantity, type, rebar size, “A” and “B” dimensions.

SPLICE BARS



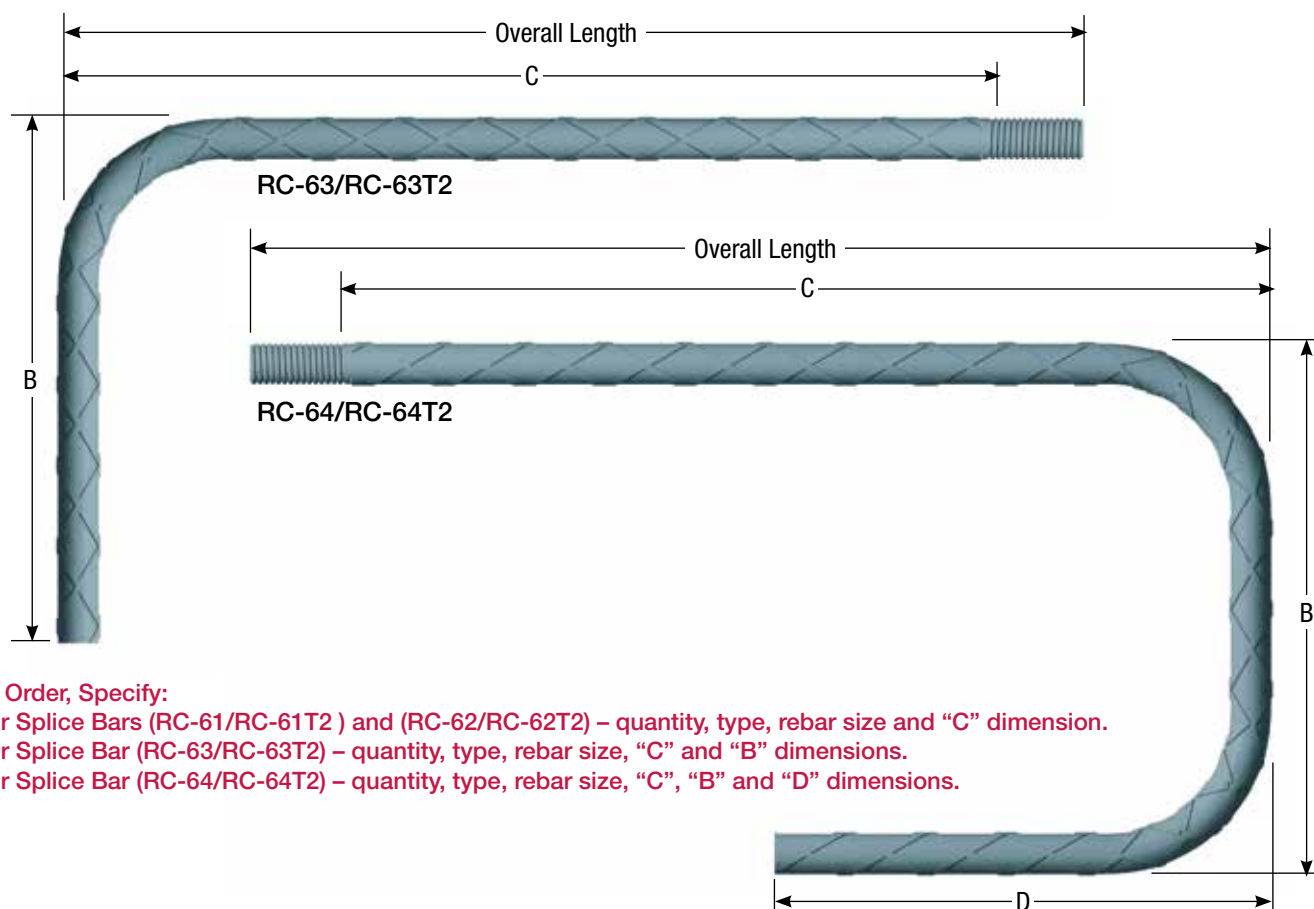
RC-61/RC-61T2



RC-62/RC-62T2

Meadow Burke BT 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/RC-61T2 straight, RC-63/RC-63T2 90° bend, RC-62/RC-62T2 threaded at both ends and with a RC-64/RC-64T2 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.



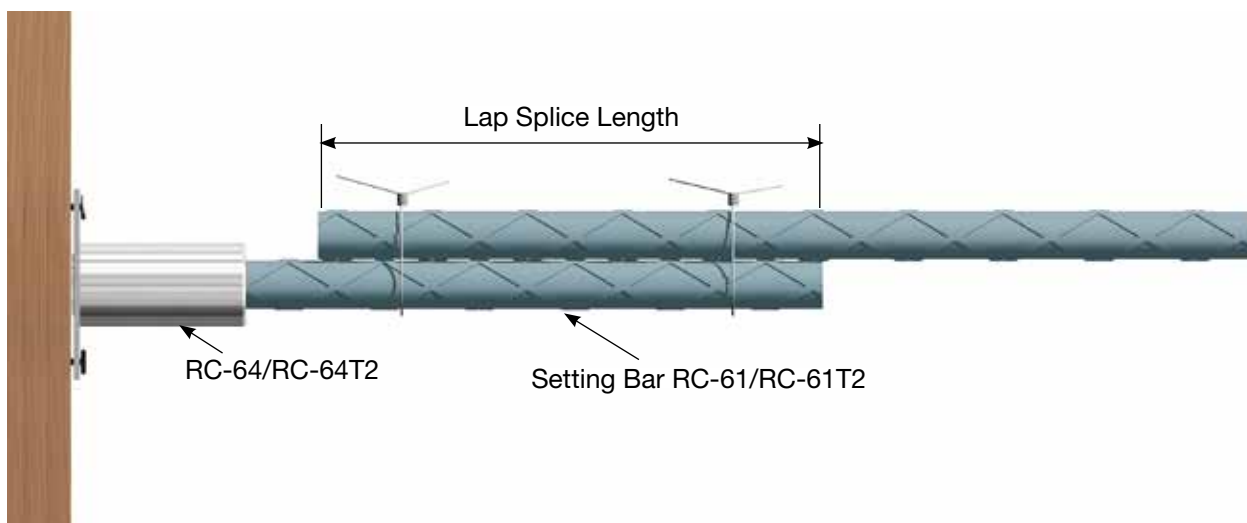
To Order, Specify:

For Splice Bars (RC-61/RC-61T2) and (RC-62/RC-62T2) – quantity, type, rebar size and “C” dimension.

For Splice Bar (RC-63/RC-63T2) – quantity, type, rebar size, “C” and “B” dimensions.

For Splice Bar (RC-64/RC-64T2) – 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)	3,000	44 d_b	55 d_b
	4,000	38 d_b	48 d_b
	5,000	34 d_b	43 d_b
	6,000	31 d_b	39 d_b
	8,000	27 d_b	34 d_b
	10,000	24 d_b	30 d_b
Other Cases (ACI 318-05 section 12.2.2)	3,000	66 d_b	83 d_b
	4,000	57 d_b	72 d_b
	5,000	51 d_b	64 d_b
	6,000	47 d_b	59 d_b
	8,000	41 d_b	51 d_b
	10,000	36 d_b	45 d_b

Table is based on the following criteria:

1. Grade 60 reinforcing steel bars.
2. Normal weight concrete factor $\lambda=1.0$.
3. Uncoated reinforcement factor, $\Psi_e=1.0$.
4. Reinforcement location factor, $\Psi_o=1.0$.



STEP 1 Ensure you are installing the bar size as per plan. Be sure that the protective thread plug is installed in the end of the coupler.



STEP 2 Lay the BT Coupler Setting Bar dowel parallel with rebar to be spliced. Position coupler plate flush against formwork and tie the female BT Coupler to the rebar mat. Be sure the bars are properly supported. Note: Roofing nails can be used to assure the coupler plate stays flush against formwork. The plate on the coupler is not intended to support the weight of the bar, workmen or equipment.



STEP 3 After concrete is placed and forms are stripped, the protective thread plug and face plate of the coupler are visible. The protective thread plug can be easily removed using a screwdriver or pliers.



STEP 4 Remove the bar end protector from the male bar. Visually inspect the thread to make sure it is undamaged and free of rust or debris. If the threads need to be cleaned use a wire brush.

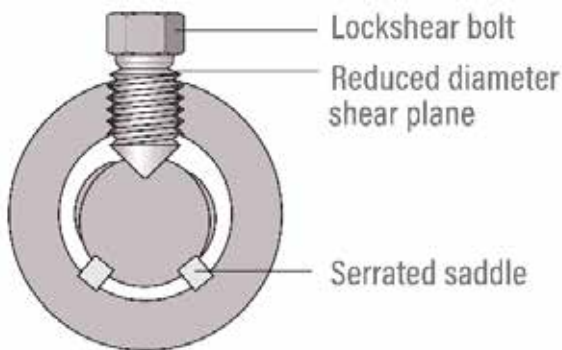


STEP 5 Thread a Splice Bar into Setting Bar until Splice Bar threads bottom out against Coupler Thread Stop, tighten hand tight (10 ft lbs.)

NOTE: In situations where proper positioning of setting or splice bar is not possible after hand tightening assembly, it is acceptable to unscrew one side up to 1 turn to correctly index hooks or bent bar in rebar cage.

MBT Couplers

Type 2 Rebar Splicing System



MBT couplers provide an easy to install, cost-effective method of joining reinforcing bars, particularly when the fixed bar is already in place and space is limited.

Tightening of the shear bolts embeds the conical ends into the rebar, securing it against the serrated saddles. When the predetermined tightening torque is reached, the bolt heads shear off, providing an instant visual check of correct installation.

FEATURES

- Coupler performance meets ACI 318-19 Type 1 & 2 splice requirements
- Maintains steel reinforcing continuity, independent of concrete cover
- No bar end preparation required
- No bar rotation required
- Suitable for static and fatigue loading.
- For use with A-615 / A-706 Grade 60 rebar

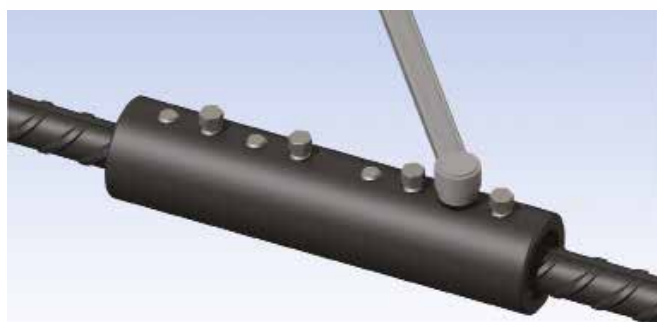
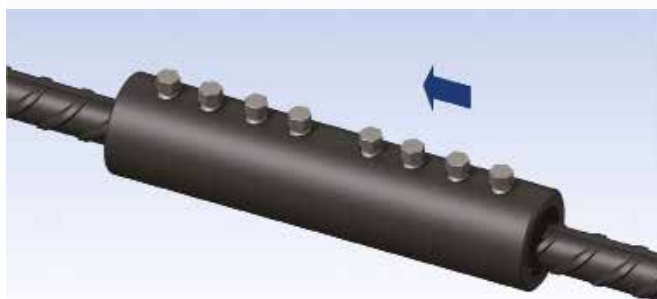
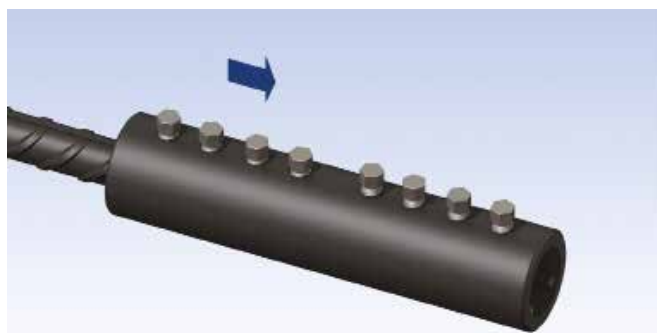


MBT COUPLERS INSTALLATION

Leviat MBT Couplers must be correctly installed to ensure that the full working capacity can be achieved. The coupler should be complete with the correct number of bolts and the two serrated strip saddles in place inside the coupler. For correct installation, all the bolts must be tightened until the heads shear off.

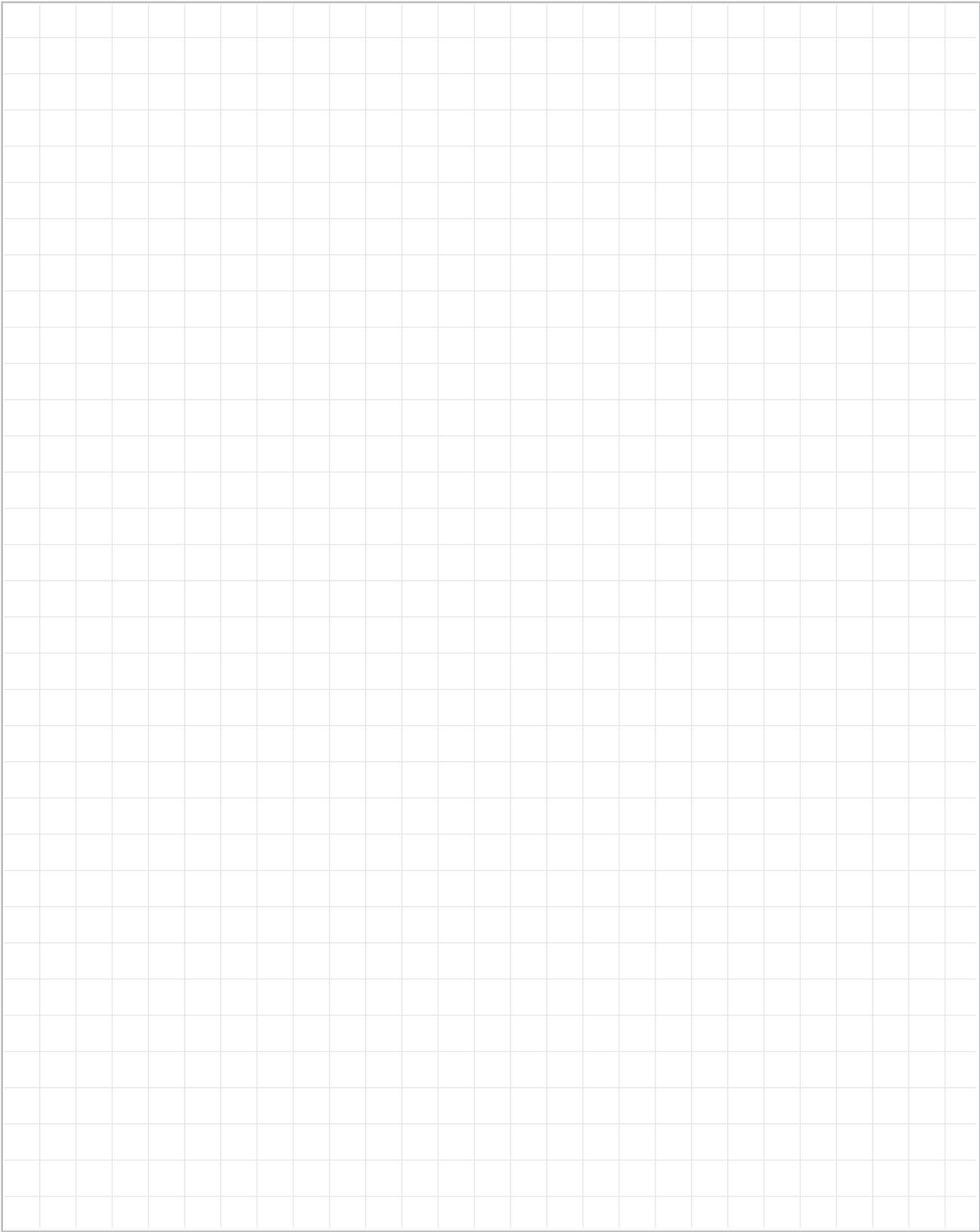
- Place coupler over the end of the bar until center stop is reached. Finger tighten the lock shear bolts onto the bar. Check the alignment and make any necessary adjustments.
- Place other bar end into the coupler until center stop is reached and finger tighten the remaining lock shear bolts. Check the alignment and make any adjustments.
- On one half of the coupler, starting from the center and working towards the end of the coupler, partly tighten all of the lock shear bolts using the appropriate tool*.
- Following the same sequence as in step 4, fully tighten all the lock shear bolts until the bolt heads shear off.
- Steps 4 and 5 to be completed for the other half of the coupler.

* The lock shear bolts should be tightened using a 1" drive pneumatic impact wrench. The air supply hose and fittings should have a minimum inside diameter of 3/4", and provide 100psig operating pressure and 185 cfm of delivered air. For torque retirements under 80 ft-lbs, a smaller impact wrench may be used.



MBT COUPLERS - PRODUCT DATA

Bar Size	Coupler External Diameter	Coupler Length	Type 2 90 KSI Tensile Strength*	Number of Bolts	Bolt Thread	Socket Head	Nominal Bolt Shear Torque	Part Number
#4	1.32 in	5.50 in	18,000 lbs	6	M10	1/2 in	40 ft-lbs	MBT0401T2
#5	1.66 in	6.30 in	27,900 lbs	6	M12	1/2 in	80 ft-lbs	MBT0501T2
#6	1.90 in	8.00 in	39,600 lbs	8	M12	1/2 in	80 ft-lbs	MBT0601T2
#7	1.90 in	9.80 in	54,000 lbs	10	M12	1/2 in	80 ft-lbs	MBT0701T2
#8	2.24 in	12.30 in	71,100 lbs	10	M16	5/8 in	200 ft-lbs	MBT0801T2
#9	2.90 in	12.30 in	90,000 lbs	10	M16	5/8 in	265 ft-lbs	MBT0901T2
#10	2.90 in	12.30 in	114,300 lbs	10	M16	5/8 in	265 ft-lbs	MBT1001T2
#11	3.12 in	16.50 in	140,400 lbs	12	M20	3/4 in	385 ft-lbs	MBT1101T2





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