



# **TECHNICAL DATA SHEET**

## DESCRIPTION

The D250L Bar Lock Coupler is a Type 2 rebar coupler used to connect two pieces of rebar. It consists of a thick walled tube, specially designed lock shear bolts, serrated grip rails, and a center stop pin. The D250L is made from USA melted and rolled steel.

## **APPLICATION**

The D250L Bar Lock Coupler is used to provide a continuous path of mechanical reinforcing from two pieces of the same diameter rebar.

# PRODUCT SPECIFICATION

- Rebar sizes #3 (13mm) through #18 (57mm). Please obtain written verification for compatibility with #3 rebar from Dayton Superior.
- Available in plain, epoxy coated or galvanized finish
- Designed to achieve Type 2 splice when used with grade 60 rebar and Type 1 splice when used with grade 75 rebar.
- When used in conjunction with epoxy-coated Grade 60 rebar, 135% Fy strength is developed.



## **FEATURES**

- Quick and easy installation
- No bar end preparation
- Installation at the job site
- Used in tension, compression, and seismic applications

# **BENEFITS**

- Saves time and money
- No fabrication required
- One product for all applications

# **HOW TO SPECIFY**

Specific:

Mechanical connections shall be Bar Lock® Rebar Splices as manufactured by Dayton Superior Corp.

The mechanical connection shall meet building code requirements of developing in tension and compression as required by\_\_\_\_\_\_ (insert name here). The mechanical connection shall be made from lock shear bolt couplers with serrated gripping rails manufactured from high quality steel. All couplers shall be installed per the manufacturer's approved procedures.

## **TECHNICAL DATA**

Coupler Desig- nation	Barrel Stamp Identifier	Bar Size			Product Specifications			Bolt Specifications		
		US	Metric (mm)	CN (M)	Outside Dia. (in.)	Length (in.)	Weight (lbs)	Bolt Qty.	Head Size (in.)	Nomina Sheer Torque (ft-lb)
3L	3L	#3	[10]		1.3	3.9	1.7	4	0.500	40
4L	4L	#4	[13]	[10]	1.3	5.5	1.7	6	0.500	40
5L	5L	#5	[16]	[15]	1.7	6.3	2.9	6	0.500	80
6L	6L	#6	[19]	[20]	1.9	8.0	4.4	8	0.500	80
7L	7L	#7	[22]	-	1.9	9.8	5.1	10	0.500	80
8L	8L	#8	[25]	[25]	2.4	12.3	8.9	10	0.500	180
9L	9L	#9	[29]	[30]	2.9	11.5	15.1	8	0.625	350
10L	10L	#10	[32]		2.9	14.0	18.5	10	0.750	415
11L	11L	#11	[36]	[35]	3.1	16.5	23.8	12	0.750	415
14L	14L	#14	[43]	[45]	3.5	21.6	35.1	16	0.750	475
18L	18L	#18	[57]	[55]	4.3	32.2	97.8	24	0.750	475

# **APPROVALS / COMPLIANCE**

- ACI 318 Type 2 (ASTM A615 or A706, Grade 60)
- IAPMO UES Listed (ER-0319)
- State Departments of Transportation
- AASHTO
- International Building Code (IBC)

# **INSTALLATION**

- Insert end of the first bar halfway into the coupler to the center pin. Hold bar in place and hand-tighten all bolts.
- 2. Insert end of the second bar halfway into the coupler to the center pin. Hold bar in place and hand-tighten all bolts.
- 3. In a random alternating pattern, tighten all bolts to approximately 50% of the specified bolt torque value.
- 4. In a random alternating pattern, tighten all bolts to approximately 75% of the specified bolt torque value.

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# D250L Bar Lock® L-Series Coupler

REBAR SPLICING

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Tighten all bolts in a random alternating pattern until all bolt heads shear off.

#### Notes:

- A. Prior to tightening, the serrated rails MUST remain aligned in the same position as they were manufactured. If they are damaged or knocked out of alignment while positioning, installation MUST cease, and a new coupler used.
- B. Bolt tightening MUST be done in a random alternating pattern similar to tightening the lug nuts on an automobile wheel. The torque percentages are just approximations, the main intent is to torque the bolt heads off in 3 passes.
- C. A high-quality, 1" -pneumatic drive, impact wrench with at least 100 psig air flow and 185 CFM of delivered air through a no less than 0.75" hose MUST be used for installation for sizes #8 thru #18. Sizes #4 thru #7 may be installed with smaller impact wrenches.

## **RELATED PRODUCTS**

- D250SCA Bar Lock® Couplers
- D250XL Bar Lock® Couplers

## **HOW TO ORDER**

Specify: (1) quantity, (2) name, (3) bar size, (4) finish Example: 500, D250L Bar Lock® Rebar Couplers, #18, Galvanized

# **ORDERING INFORMATION**

## BAR LOCK® L-SERIES COUPLERS - BLACK

Product Code	Description	Weight
400327	#3 [10MM]	1.67 LB
400226	#4 [13MM]	1.67 LB
400227	#5 [16MM]	2.90 LB
400228	#6 [19MM]	4.44 LB
400229	#7 [22MM]	5.10 LB
400230	#8 [25MM]	8.93 LB
400231	#9 [29MM]	15.09 LB
400232	#10 [32MM]	18.40 LB
400233	#11 [36MM]	21.04 LB
100521	#12 [40MM]	21.04 LB
145831	#14 [43MM]	44.50 LB
142996	#18 [57MM]	73.33 LB

## **BAR LOCK® L-SERIES COUPLERS - EPOXY**

Product Code	Description	Weight
144988	#3 [10MM]	1.67 LB
400235	#4 [13MM]	1.67 LB
400236	#5 [16MM]	2.93 LB
400237	#6 [19MM]	4.44 LB
400238	#7 [22MM]	5.10 LB
400239	#8 [25MM]	8.95 LB
400240	#9 [29MM]	15.12 LB
400241	#10 [32MM]	18.49 LB
400242	#11 [36MM]	23.82 LB
145832	#14 [43MM]	40.00 LB
142997	#18 [57MM]	97.80 LB

## BAR LOCK® L-SERIES COUPLERS - GALVANIZED

Product Code	Description	Weight
145964	#4 [13MM]	1.67 LB
145965	#5 [16MM]	2.90 LB
145966	#6 [19MM]	4.44 LB
145967	#7 [22MM]	5.10 LB
145968	#8 [25MM]	8.94 LB
145970	#10 [32MM]	18.50 LB
145972	#14 [43MM]	31.60 LB
145973	#18 [57MM]	97.80 LB

# **MANUFACTURER**

Dayton Superior Corporation 1125 Byers Road Miamisburg, OH 45342

Customer Šervice: 888-977-9600 Technical Services: 877-266-7732 Website: www.daytonsuperior.com

# **WARRANTY (ACCESSORIES)**

Limited Warranty. Dayton warrants, for a period of 60 days from the date of shipment (three years from the date of shipment in the case of formwork, excluding any consumable Products included with such formwork), that Products and any associated application drawings and engineering services provided by Dayton ("Ancillary Services") will be free from defects in material and workmanship and, in the case of custom designed formwork, that the formwork will meet the specifications set forth in the design drawings approved by Dayton and Customer. Any claim under this warranty must be made in writing within such warranty period. If any Product and/or Ancillary Service covered by a timely claim are found to be defective, Dayton will, within a reasonable time, make any necessary repairs or corrections or, at Dayton's option, replace the Product. Unless pre-authorized by Dayton in writing, Dayton will not accept any charges for correcting defects or accept the return of any Product. This warranty will not apply to any Products that have been subjected to misuse, neglect, storage damage, misapplication, accident or any other damage caused by any person other than Dayton, or that have not been maintained in accordance with Dayton's specifications. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AS TO THE PRODUCTS AND ANCILLARY SERVICES. DAYTON MAKES NO OTHER WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE. THE REMEDIES SET FORTH IN THIS SECTION ARE CUSTOMER'S EXCLUSIVE REMEDY FOR BREACH OF WARRANTY.

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