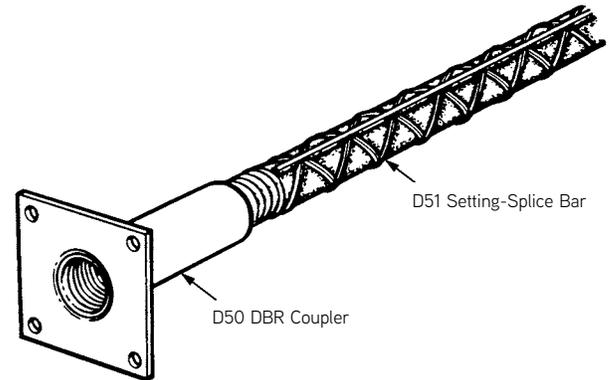


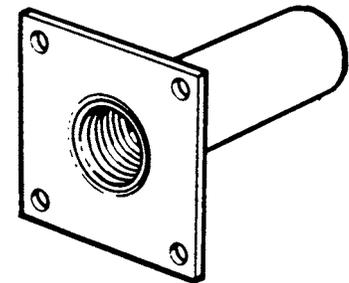
## D50 DBR Coupler System

The DBR Couplers and DBR Setting/Splice Bars are simple, easy to use and familiar to all construction workers. The coupler is fastened to the formwork by nails, screws or a NC threaded bolt of proper diameter and length. The D50 DBR Coupler splice meets or exceeds codes requiring Type 1.



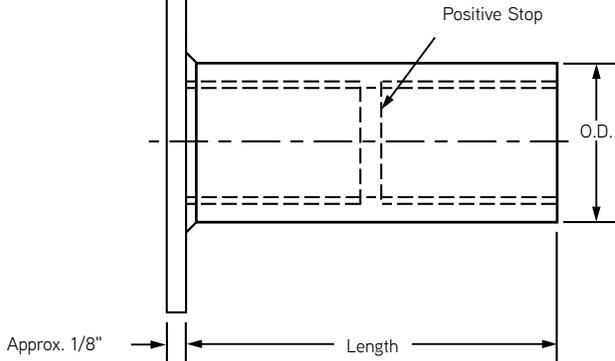
## D50 DBR COUPLER AND DBR SETTING/SPLICE BARS

The Dayton Superior D50 DBR Coupler is fabricated from high quality steel satisfying ASTM A-108 and is tested in accordance with ACI, AASHTO and ASTM standards. DBR Couplers accommodate rebar sizes #4 through #11 and have an internal positive stop to ensure proper thread engagement. Refer to tables for additional specifications.



D50 DBR Coupler

2" x 2" washer for DBR Bar Size #4 through #9, 3" x 3" washer for DBR Bar Size #10 and 11.



### To Order:

Specify: (1) quantity, (2) name, (3) rebar size

### Example:

500 pcs., D50 DBR Couplers, #8 rebar.

### D50 DBR Coupler Selection Chart

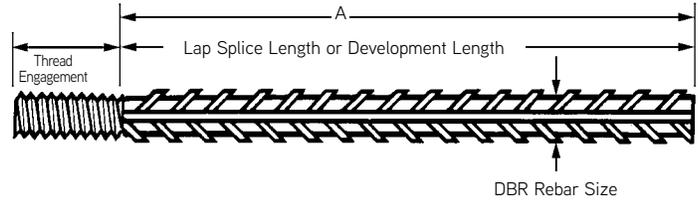
Product Code	Bar Size Designation			Thread Data	O.D. x Length
	US	Metric (mm)	CN (M)		
77098	#4	[13]	[10]	1/2" - 13 UNC	3/4" x 1-7/8"
77100	#5	[16]	[15]	5/8" - 11 UNC	7/8" x 2"
77110	#6	[19]	[20]	3/4" - 10 UNC	1-1/16" x 2-3/8"
77120	#7	[22]	—	7/8" - 9 UNC	1-1/4" x 2-3/4"
77130	#8	[25]	[25]	1" - 8 UNC	1-3/8" x 3-1/8"
77140	#9	[29]	[30]	1-1/8" - 8 UN	1-5/8" x 3-5/8"
77142	#10	[32]	—	1-1/4" - 8 UN	1-3/4" x 4-1/8"
77144	#11	[36]	[35]	1-3/8" - 8 UN	1-15/16" x 4-3/8"

**Note:** Threads on #9, #10 and #11 couplers are UN not NC.

## D51 DBR Straight Bar Threaded One End

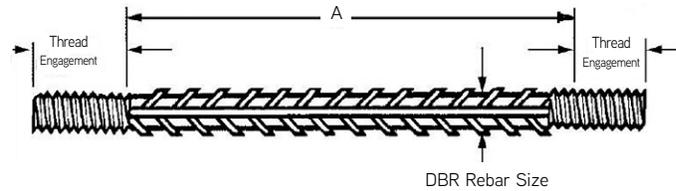
D51 Straight Bar Selection Chart

Bar Size Designation			Thread Data	Thread Engagement
US	Metric (mm)	CN (M)		
#4	[13]	[10]	1/2" - 13 UNC	3/4"
#5	[16]	[15]	5/8" - 11 UNC	7/8"
#6	[19]	[20]	3/4" - 10 UNC	1-1/16"
#7	[22]	—	7/8" - 9 UNC	1-1/4"
#8	[25]	[25]	1" - 8 UNC	1-7/16"
#9	[29]	[30]	1-1/8" - 8 UN	1-11/16"
#10	[32]	—	1-1/4" - 8 UN	1-15/16"
#11	[36]	[35]	1-3/8" - 8 UN	2-1/16"



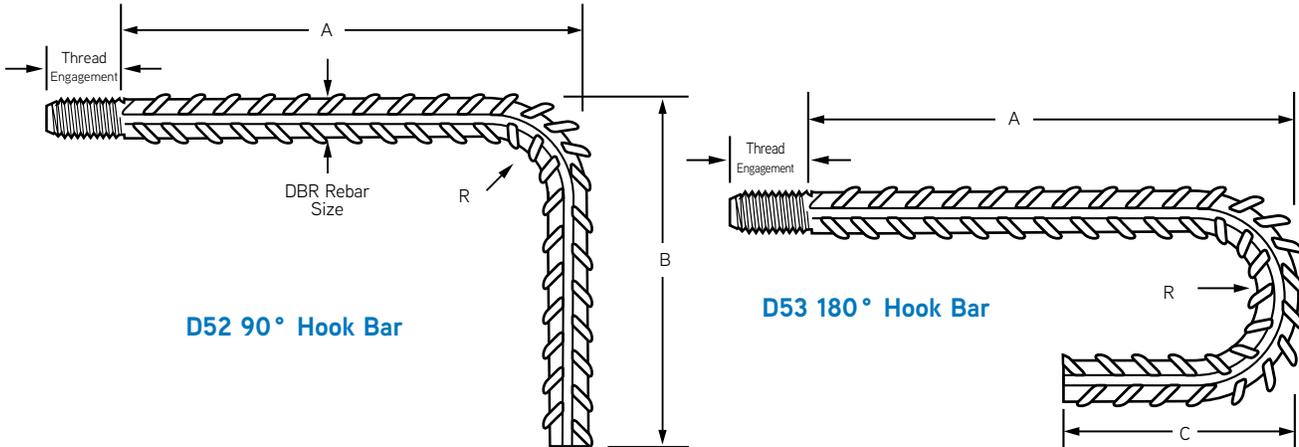
## D54 DBR STRAIGHT BAR THREADED BOTH ENDS

**Note:** Color coded removable plastic caps available on request.  
 D51 overall length is required length less one half of coupler length.  
 D54 overall length is required length less coupler length minus 5/16".



## D52 DBR 90° HOOK BAR AND D53 180° HOOK BAR THREADED ONE END

D52 and D53 Hook Bar Selection Chart



Bar Size Designation			Thread Data	Thread Engagement	B* Standard For D52	B Standard For D53	D Standard For D53	R Standard
US	Metric (mm)	CN (M)						
#4	[13]	[10]	1/2" - 13 UNC	3/4"	4-1/2"	9-3/4"	4-1/2"	1-1/2"
#5	[16]	[15]	5/8" - 11 UNC	7/8"	5-1/2"	12"	5"	1-7/8"
#6	[19]	[20]	3/4" - 10 UNC	1-1/16"	7"	23"	6"	2-1/4"
#7	[22]	—	7/8" - 9 UNC	1-1/4"	8"	24"	7"	2-5/8"
#8	[25]	[25]	1" - 8 UNC	1-7/16"	9"	25"	8"	3"
#9	[29]	[30]	1-1/8" - 8 UN	1-11/16"	11"	31"	10-3/8"	4-3/4"
#10	[32]	—	1-1/4" - 8 UN	1-15/16"	12"	32"	11-5/8"	5-3/8"
#11	[36]	[35]	1-3/8" - 8 UN	2-1/16"	14"	33"	12-7/8"	6"

### To Order:

Specify: (1) quantity, (2) name, (3) bar size (4) dimension "B" (as specified on plans) (5) dimension "C" or "D" and (6) dimension "R"

### Example:

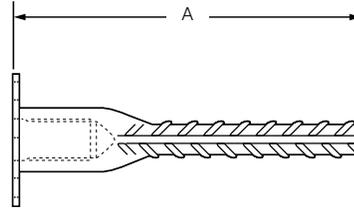
500 pcs., D52 90° Hook Bar, #6, B=7", C=20", R=2"

**Notes:** Color coded removable plastic caps available on request.  
 \* Based on "R" minimum as shown. Standard dimensions are to CRSI standard by pin size.

## D51A DBR Straight Bar Threaded One End

D51A Straight Bar Selection Chart

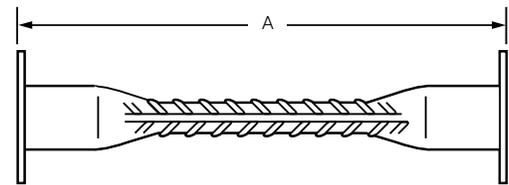
Bar Size Designation			Thread Data	A Thread Engagement
US	Metric (mm)	CN (M)		
#4	[13]	[10]	1/2" - 13 UNC	3/4"
#5	[16]	[15]	5/8" - 11 UNC	7/8"
#6	[19]	[20]	3/4" - 10 UNC	1-1/16"
#7	[22]	—	7/8" - 9 UNC	1-1/4"
#8	[25]	[25]	1" - 8 UNC	1-7/16"
#9	[29]	[30]	1-1/8" - 8 UN	1-11/16"
#10	[32]	—	1-1/4" - 8 UN	1-15/16"
#11	[36]	[35]	1-3/8" - 8 UN	2-1/16"



D51A Dowel Bar Splicer

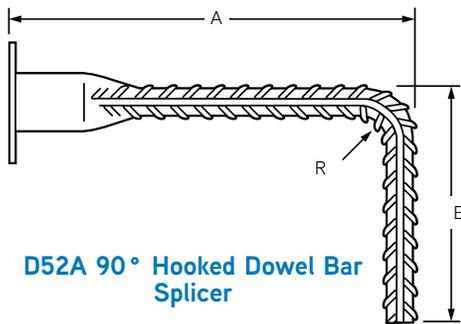
## D54A DBR STRAIGHT BAR THREADED BOTH ENDS

**Note:** Color coded removable plastic caps available on request.  
 D51A overall length is required length less one half of coupler length.  
 D54A overall length is required length less coupler length minus 5/16".

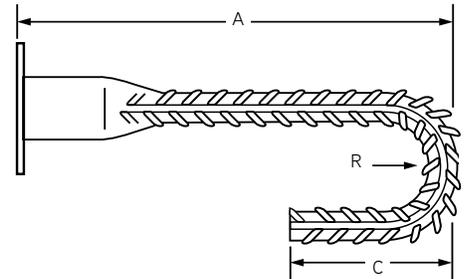


D54A Double-Ended Dowel Bar Splicer

## D52A DBR 90° HOOK BAR AND D53A 180° HOOK BAR THREADED ONE END



D52A 90° Hooked Dowel Bar Splicer



D53A 180° Hooked Dowel Bar Splicer

D52A and D53A Hook Bar Selection Chart

Bar Size Designation			Thread Data	Thread Engagement	B* Standard For D52A	B Standard For D53A	D Standard For D53A	R Standard
US	Metric (mm)	CN (M)						
#4	[13]	[10]	1/2" - 13 UNC	3/4"	4-1/2"	9-3/4"	4-1/2"	1-1/2"
#5	[16]	[15]	5/8" - 11 UNC	7/8"	5-1/2"	12"	5"	1-7/8"
#6	[19]	[20]	3/4" - 10 UNC	1-1/16"	7"	23"	6"	2-1/4"
#7	[22]	—	7/8" - 9 UNC	1-1/4"	8"	24"	7"	2-5/8"
#8	[25]	[25]	1" - 8 UNC	1-7/16"	9"	25"	8"	3"
#9	[29]	[30]	1-1/8" - 8 UN	1-11/16"	11"	31"	10-3/8"	4-3/4"
#10	[32]	—	1-1/4" - 8 UN	1-15/16"	12"	32"	11-5/8"	5-3/8"
#11	[36]	[35]	1-3/8" - 8 UN	2-1/16"	14"	33"	12-7/8"	6"

**Notes:** Color coded removable plastic caps available on request.

\* Based on "R" minimum as shown. Standard dimensions are to CRSI standard by pin size.

### To Order:

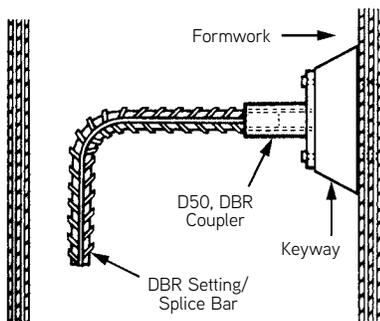
Specify: (1) quantity, (2) name, (3) bar size (4) dimension "B" (as specified on plans) (5) dimension "C" or "D" and (6) dimension "R"

### Example:

500 pcs., D52A 90° Hook Bar, #6, B=7", C=20", R=2"

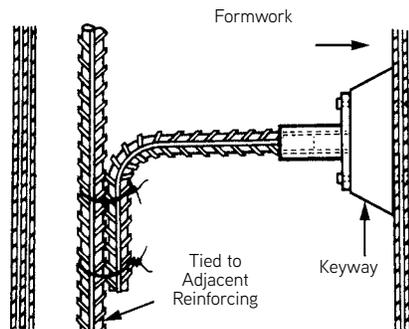
Bar Size Designation			Reinforcing Bar Area (in <sup>2</sup> )	Minimum Yield (lbs)	Minimum Ultimate (lbs)	Thread Data	Thread Data		
US	Metric (mm)	CN (M)					Thread Tensile Stress Area (in <sup>2</sup> )	125% f <sub>y</sub> Min. Requirements (lbs)	Minimum Ultimate Tensile Stress (psi)
#4	[13]	[10]	0.20	12,000	18,000	1/2"—13 NC	0.1419	15,000	105,708
#5	[16]	[15]	0.31	18,600	27,900	5/8"—11 NC	0.226	26,250	102,876
#6	[19]	[20]	0.44	26,400	39,600	3/4"—10 NC	0.334	33,000	98,802
#7	[22]	—	0.60	36,000	54,000	7/8"—9 NC	0.462	45,000	97,403
#8	[25]	[25]	0.79	47,400	71,100	1"—8 UNC	0.606	59,250	97,772
#9	[29]	[30]	1.00	60,000	90,000	1-1/8"—8 UN	0.790	75,000	94,937
#10	[32]	—	1.27	76,200	114,300	1-1/4"—8 UN	1.000	95,250	95,250
#11	[36]	[35]	1.56	93,600	140,400	1-3/8"—8 UN	1.233	117,000	94,891

## How to Install the DBR Coupler System



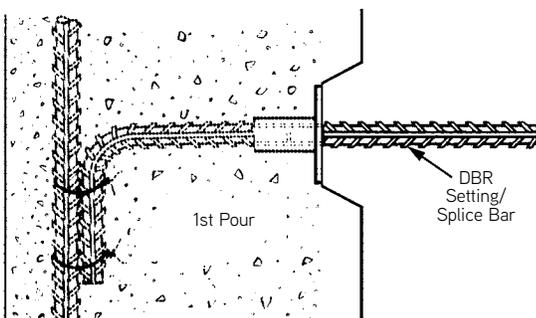
**Step 1**

A DBR Setting/Splice Bar is threaded into the D50 coupler until the positive thread stop is reached. The D50 DBR coupler is then fastened to the formwork with nails, screws or bolts.



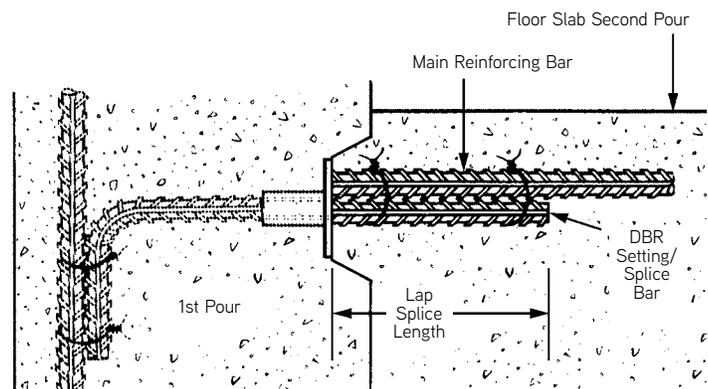
**Step 2**

The DBR Setting/Splice Bar is tied off to adjacent reinforcing steel, for proper support during concrete placement as well as to maintain the required lap splice length.



**Step 3**

After the formwork is stripped, a second DBR Setting/Splice Bar is threaded into the exposed end of the D50 coupler until the stop is reached.



**Step 4**

The DBR Setting/Splice bar is tied to the adjacent reinforcing steel maintaining the proper lap splice length. The dowel bar replacement is now complete, ready for final concrete placement.