

## Dowel Bar Splicer System

### D-101-A Straight Dowel Bar Splicer DB-SAE, D-102-A 90° Hooked Dowel Bar Splicer, D-103-A 180° Hooked Dowel Bar Splicer, D-104-A Double-Ended Dowel Bar Splicer

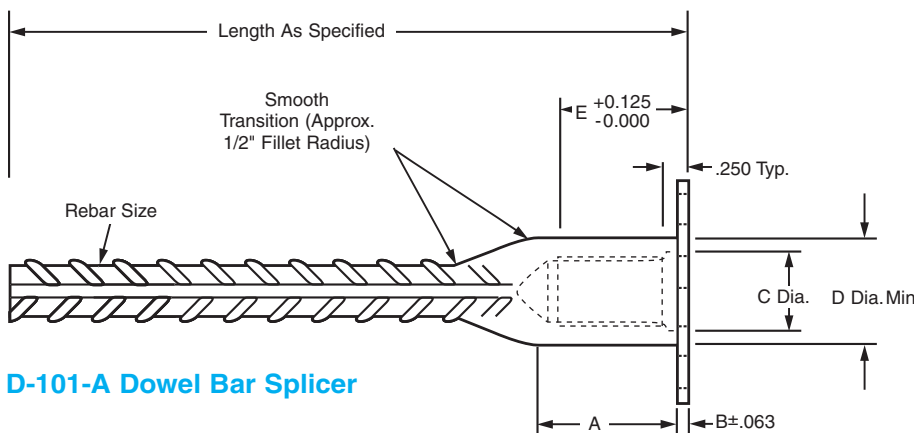
The Dayton Superior Dowel Bar Splicer is a one-piece unit, integrally forged from ASTM A615 grade 60 deformed rebar material. The splicers are available in #4 through #11 rebar sizes to be used in conjunction with the corresponding size dowel- in to accomplish a mechanical splice designed to achieve 160% of specified yield (full mechanical ultimate).

The splicer can be furnished straight (D-101-A) cut to length, 90° and 180° hooked (D-102-A and D-103-A) and double- ended (D-104-A) in plain or epoxy coated finish. The splicer can also be special-ordered with a reduced diameter washer flange or with the washer flange clipped (in more than one direction, if required) to provide adequate concrete cover, or to avoid interference.

The D-104-A Double-Ended Dowel Bar Splicer is used to establish a direct load path through a concrete section, thus avoiding multiple hooked rebar and eliminating rebar congestion. The double-ended unit can be configured in a "U" shape for special applications.

Bar Size	Thread Size	A	B	C	D	E	Flange Diameter	Minimum P <sub>ult</sub> Range = 95% F <sub>U</sub> Actual or 160% F <sub>y</sub> Specified*
#4 [#13]	5/8"-11 UNC	1-1/8"	1/8"	11/16"	55/64"	1"	1-7/8"	19,200 lbs.
#5 [#16]	3/4"-10 UNC	1-9/16"	1/8"	13/16"	1-3/64"	1-1/8"	2-1/16"	29,760 lbs.
#6 [#19]	7/8"-9 UNC	1-11/16"	1/8"	15/16"	1-15/64"	1-1/4"	2-1/4"	42,400 lbs.
#7 [#22]	1"-8 UNC	1-27/32"	1/8"	1-1/16"	1-27/64"	1-3/8"	2-7/16"	57,600 lbs.
#8 [#25]	1-1/8"-8 UN	2-1/16"	1/8"	1-3/16"	1-19/32"	1-1/2"	2-5/8"	75,840 lbs.
#9 [#29]	1-1/4"-8 UN	2-3/16"	1/8"	1-5/16"	1-25/32"	1-5/8"	2-13/16"	96,000 lbs.
#10 [#32]	1-7/16"-8 UN	2-7/16"	1/8"	1-1/2"	2"	1-13/16"	3"	121,920 lbs.
#11 [#36]	1-9/16"-8 UN	2-9/16"	1/8"	1-5/8"	2-7/32"	1-15/16"	3-1/4"	149,760 lbs.

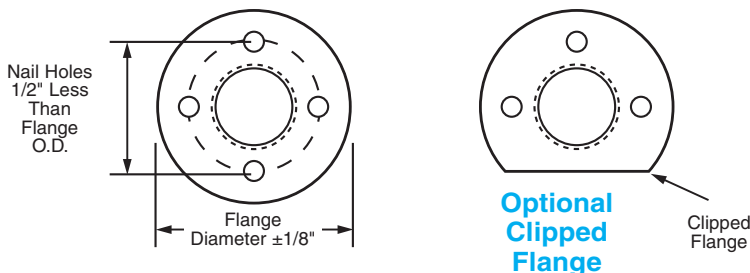
\*Loads shown based on 160% f<sub>y</sub> specified



D-101-A Dowel Bar Splicer

D-101-A Minimum MFG. Length DB-SAE	
#4 (#13)	12"
#5 (#16)	14"
#6 (#19)	16"
#7 (#22)	16"
#8 (#25)	16"
#9 (#29)	16"
#10 (#32)	16"
#11 (#36)	16"

NOTE: To be manufactured as Single End



**Note:** No. 4, 5 and 6 splicers, 18", 24" and 36" long will usually have a stamped metal plug to protect threads; all other sizes will have a plastic cap plug.

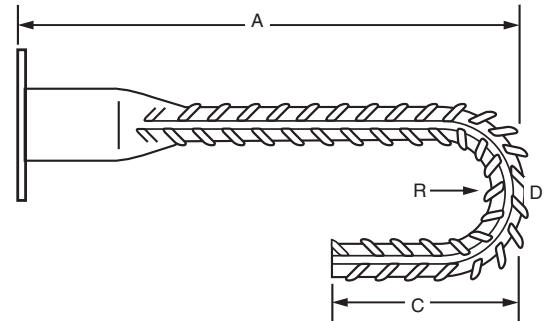
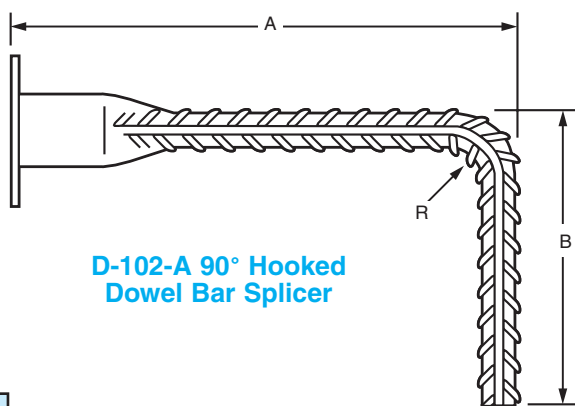
## Dowel Bar Splicer System

Bar Size	Specified or Required Dowel Bar			Recommended Dowel Bar Splicer and Dowel-In						
	Grade 60 Rebar Loads (lbs.)			System Thread Size*	DB-SAE Bar Size	Dowel-In Bar Size	System Stress Area (min.)	Completed Splice (lbs.)		
	P <sub>y</sub>	1.25 P <sub>y</sub>	P <sub>ult</sub>					P <sub>y</sub>	1.25 P <sub>y</sub>	Minimum P <sub>ult</sub> Range = 95% F <sub>u</sub> Actual or 160% F <sub>y</sub> Specified**
#4 [#13]	12,000	15,000	18,000	5/8"-11	#4	#4	.20	12,000	15,000	19,200
#5 [#16]	18,600	23,250	27,900	3/4"-10	#5	#5	.31	18,600	23,250	29,760
#6 [#19]	26,400	33,000	39,600	7/8"-9	#6	#6	.44	26,400	33,000	42,400
#7 [#22]	36,000	45,000	54,000	1"-8	#7	#7	.60	36,000	45,000	57,600
#8 [#25]	47,400	59,250	71,100	1-1/8"-8	#8	#8	.79	47,400	59,250	75,840
#9 [#29]	60,000	75,000	90,000	1-1/4"-8	#9	#9	1.00	60,000	75,000	96,000
#10 [#32]	76,200	95,250	114,000	1-7/16"-8	#10	#10	1.27	76,200	95,250	121,920
#11 [#36]	93,600	117,000	140,400	1-9/16"-8	#11	#11	1.56	93,600	117,000	149,760

P<sub>y</sub>=Minimum Yield Strength of bar.

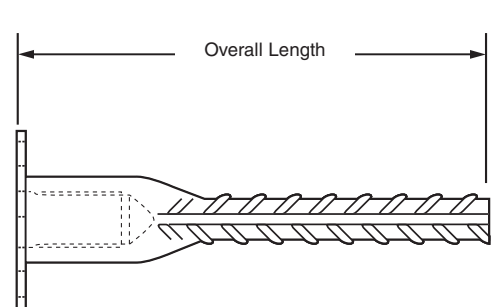
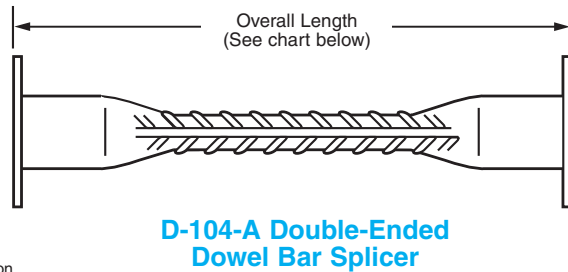
\*5/8", 3/4", 7/8" and 1" sizes have UNC Threads. 1-1/8" and larger sizes are equipped with UN Threads.

\*\*Loads shown based on 160% f<sub>y</sub> specified.



Bending DB or DI 90° only Minimum "A" Dimension	
#4 [#13]	4" *
#5 [#16]	5" *
#6 [#19]	6" *
#7 [#22]	7" *
#8 [#25]	8" *
#9 [#29]	9" *
#10 [#32]	10" *
#11 [#36]	11" *

\* Tolerance on Bending Plus 0 / Minus 1" on "A" Dimension



D-104-A Double-Ended Min. Lengths		Tolerance Overall Length
#4 [#13]	12" O.A.	+0 - 3/8"
#5 [#16]	12" O.A.	+0 - 3/8"
#6 [#19]	14" O.A.	+0 - 1/2"
#7 [#22]	16" O.A.	+0 - 5/8"
#8 [#25]	16" O.A.	+0 - 3/4"
#9 [#29]	16" O.A.	+0 - 1"
#10 [#32]	16" O.A.	+0 - 1"
#11 [#36]	16" O.A.	+0 - 1"

See D-108 Headed Dowel Bar Splicer on page 17.

### To Order:

Specify: (1) quantity, (2) name, (3) bar size (should be equivalent to the rebar being substituted for on the structural drawings), (4) dimensions required.

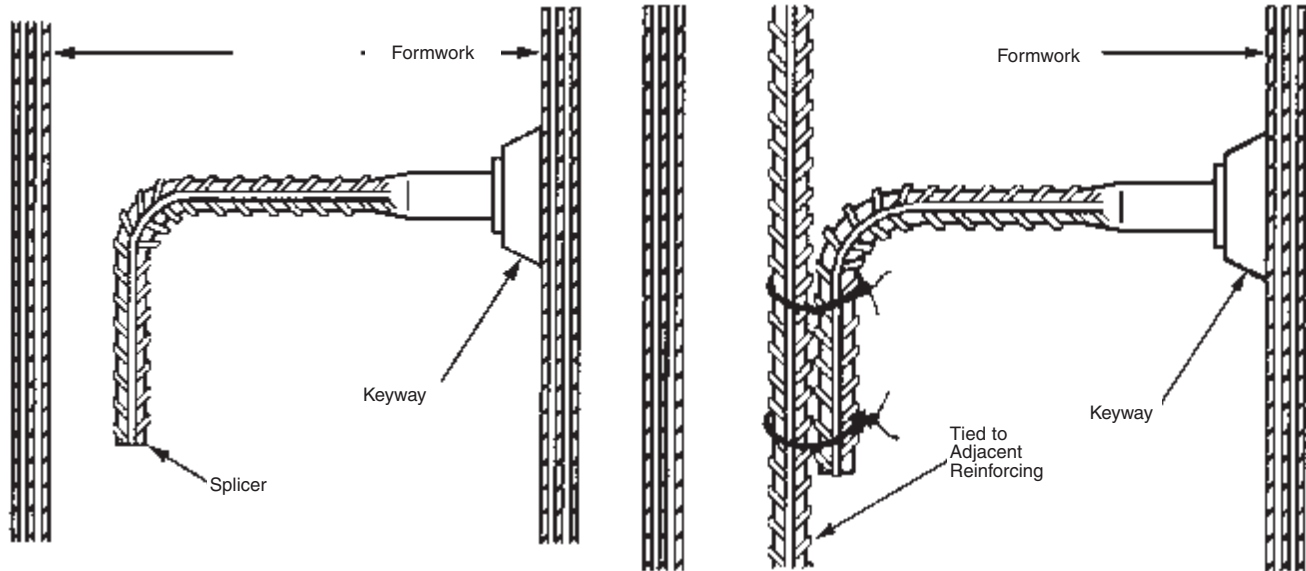
### Example:

600, D-101-A Dowel Bar Splicers, #5 rebar, 36" long.

\*\* Based on barrels forged on each end. For lengths less than minimum - please check with Tremont - we may supply forged DB one end, DI with Coupler & nailer washer other end.

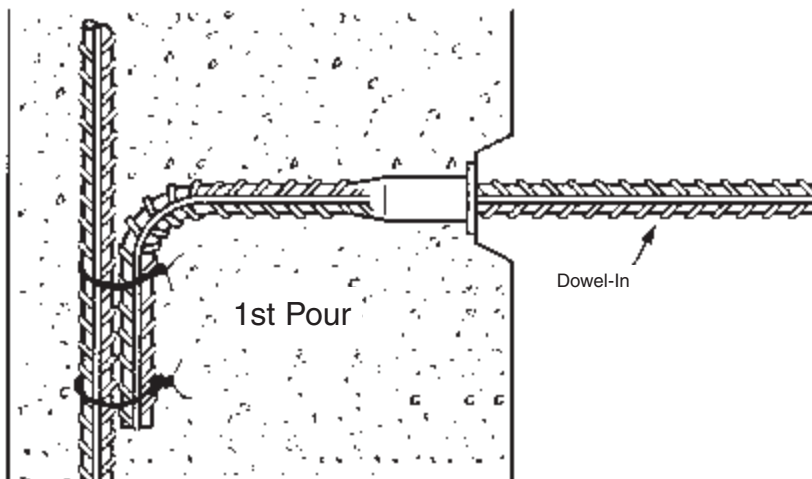
## Typical Dowel Bar Splicer System Installation

Threaded Splicing Systems

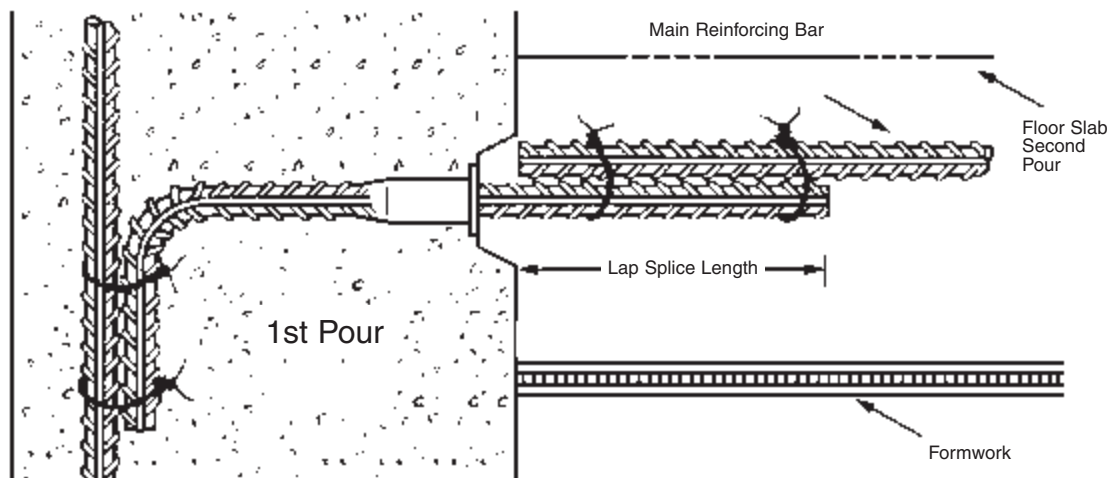


**1.** Set forms, and nail or screw Splicer to form key.

**2.** Place required reinforcing steel.



**3.** After first pour has properly set, remove the formwork and screw Dowel-Ins into the exposed splicers.



**4.** Place second pour formwork and reinforcing steel.