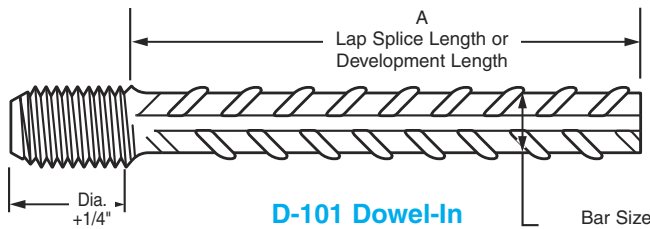


## Dowel Bar Splicer System

### D-101 Dowel-in, D-102 90° Hooked Dowel-in, D-103 180° Hooked Dowel-in, D-104 Double-Ended Dowel-in

The Dayton Superior Dowel-In is available Straight (D-101), 90° and 180° Hooked (D-102 and D-103) and Double-Ended (D-104). Each is manufactured from grade 60 deformed rebar material and is available in rebar sizes #4 through #11 in plain or epoxy coated finish. The threaded end of the Dowel-In is enlarged by forging, before threading, to ensure that the cross-sectional area of the bar is not reduced by the threading operation. This design feature assures full ultimate strength of the rebar. Dowel-ins are configured to facilitate easy installation and can be easily assembled by hand. On larger projects, such as highway paving, a centrifugal chuck on an electric or air-powered drill motor can be employed to speed installation. See the D-49 Magna Jaw on Page 65.



#### 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 (see below).

#### Example:

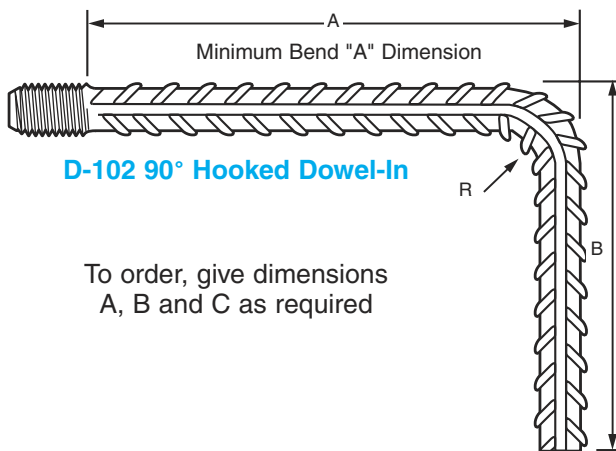
600, D-102 90° Hooked Dowel-Ins, #5 rebar, A=14", B=8"

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.)		
Bar Size	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> Stress = 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

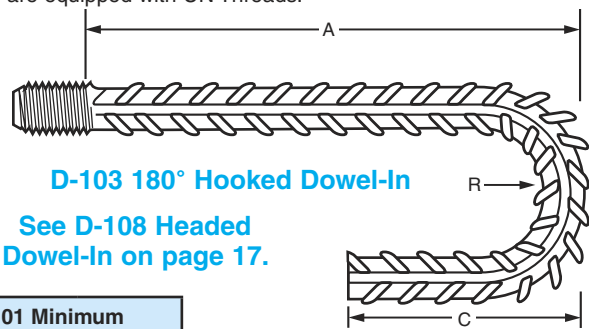
P<sub>y</sub>=Minimum Yield Strength of bar.

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

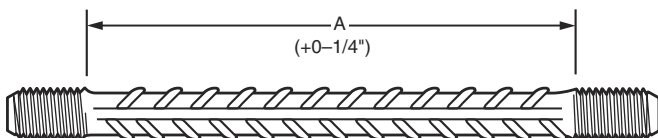
\*\*Loads shown based on 160% f<sub>y</sub> specified.



To order, give dimensions A, B and C as required



**D-103 180° Hooked Dowel-In**  
See D-108 Headed Dowel-In on page 17.



**D-104 Double-Ended Dowel-In**

D-101 Minimum MFG. Length DI DOWEL INS	
#4 (#13)	9"
#5 (#16)	9"
#6 (#19)	9 1/4"
#7 (#22)	9 1/4"
#8 (#25)	15 1/2"
#9 (#29)	15 1/2"
#10 (#32)	15 3/4"
#11 (#36)	16"
#14 (#43)	24"
#18 (#57)	24"

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" *

D-104 Minimum Length Double End Dowel Ins.	
#4 (#13)	8" **
#5 (#16)	8" **
#6 (#19)	8" **
#7 (#22)	8" **
#8 (#25)	14" **
#9 (#29)	14" **
#10 (#32)	14" **
#11 (#36)	14" **

NOTE: To be manufactured as Single End

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

\*\* Plus thread each end.