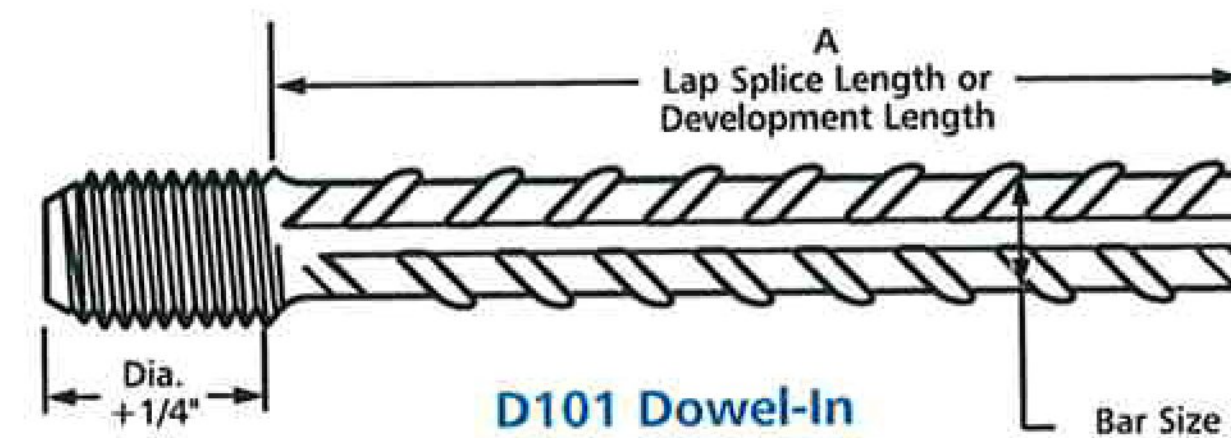


## Dowel Bar Splicer System

### D101 Dowel-In, D102 90° Hooked Dowel-In, D103 180° Hooked Dowel-In, D104 Double-Ended Dowel-In

The Dayton Superior Dowel-In is available Straight (D101), 90° and 180° Hooked (D102 and D103) and Double-Ended (D104). 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 D49 Magna Jaw.



#### 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:

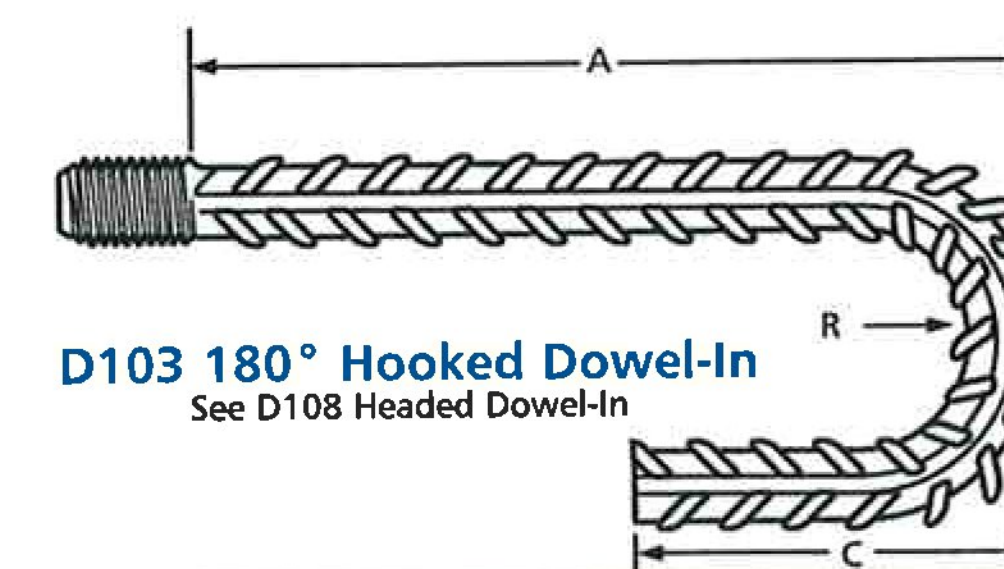
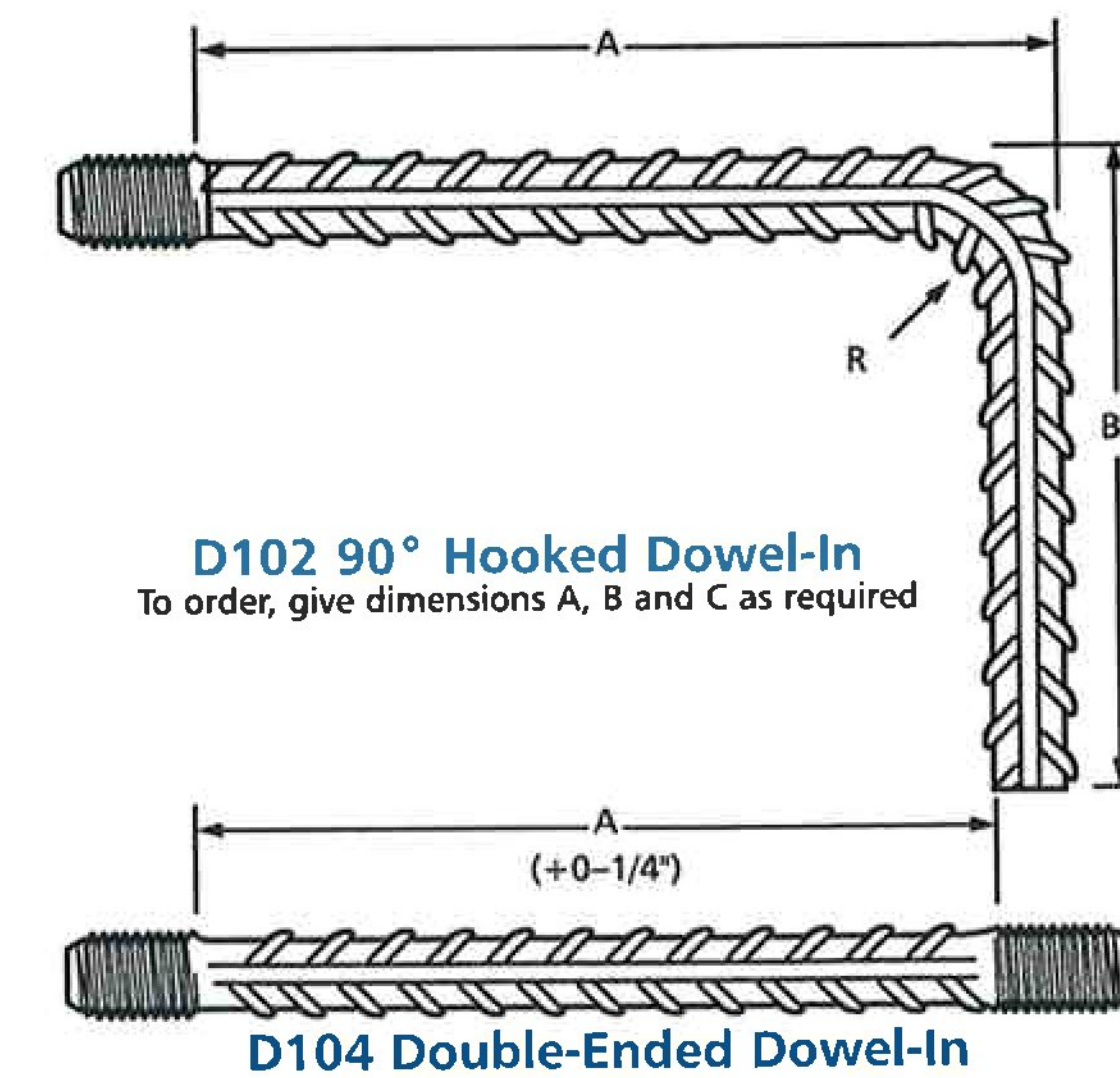
600, D102 90° Hooked Dowel-Ins, #5 rebar, A=14", B=8"

Specified or Required Dowel Bar						Recommended Dowel Bar Splicer and Dowel-In						
Bar Size			Grade 60 Rebar Loads (lbs.)			System Thread Size*	DB-SAE Bar Size	Dowel-In Bar Size	System Stress Area (min.)	Completed Splice (lbs.)		
US	Metric (mm)	CN (M)	$P_y$	$1.25 P_y$	$P_{ult}$					$P_y$	$1.25 P_y$	Minimum $P_{ult}$ Range = 95% $F_u$ Actual or 160% $F_y$ Specified**
#4	[13]	[10]	12,000	15,000	18,000	5/8" - 11	#4	#4	.20	12,000	15,000	19,200
#5	[16]	[15]	18,600	23,250	27,900	3/4" - 10	#5	#5	.31	18,600	23,250	29,760
#6	[19]	[20]	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]	[25]	47,400	59,250	71,100	1-1/8" - 8	#8	#8	.79	47,400	59,250	75,840
#9	[29]	[30]	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]	[35]	93,600	117,000	140,400	1-9/16" - 8	#11	#11	1.56	93,600	117,000	149,760

$P_y$  = 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%  $f_y$  specified.



Bar Size Designation			D101 Minimum Mfg. Length DI DOWEL INS	D102/D103 Minimum Mfg. Length	D104 Minimum Length Double End Dowel Ins.
US	Metric (mm)	CN (M)			
#4	[13]	[10]	9"	4"	8"
#5	[16]	[15]	9"	5"	8"
#6	[19]	[20]	9-1/4"	6"	8"
#7	[22]	—	9-1/4"	7"	8"
#8	[25]	[25]	15-1/2"	8"	14"
#9	[29]	[30]	15-1/2"	9"	14"
#10	[32]	—	15-3/4"	10"	14"
#11	[36]	[35]	16"	11"	14"

NOTE: To be manufactured as Single End \*Tolerance on Bending Plus Q/Minus 1" on each end. \*\* Plus thread each end.

Vermont Agency of Transportation  
**RECEIVED**

CK'D BY CLB OK'D BY CWC

February 16, 2018

RESUBMIT No Approved  
BY C. CARLSON DATE 02/16/18