

## DYWIDAG Threadbar Reinforcing Systems



THREADBAR® Splice

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Components of the DYWIDAG THREADBAR® reinforcing system are manufactured in the United States and Canada exclusively by DYWIDAG-Systems International.

Dywidag Threadbar reinforcing steel is available in grades 60 and 75 for sizes #6 through #8, grade 75 for #9 through #18, and grade 80 for 63 mm bar. Grade 60 and 75 Threadbars conform to the requirements of ASTM A615, except in markings. Threadbars may be shipped to the job in 40 foot or 60 foot mill lengths or fabricated to specifications.

Dywidag Threadbar reinforcing steel has a continuous rolled-in pattern of thread-like deformations along its entire length. More durable than machined threads, the deformations allow nuts and couplers to thread onto a Threadbar at any point along its length.

Dywidag couplers and hex nuts develop the full ultimate load of the Threadbar. Slippage of the coupler under stress is controlled by torquing opposing Threadbars together or by using lock nuts. The magnitude of the torque required varies with the allowable slip and Threadbar size.

The Dywidag Threadbar reinforcing system offers a simple, reliable and economical splice. A Dywidag splice requires less crane time and less labor time for assembly than is required for welded or swaged splices.

Unlike some splices, the Dywidag splice may be installed in adverse weather conditions and does not create a fire hazard. As opposing Threadbars need only to be chalk marked before assembly to assure proper engagement, supervision and quality control requirements are minimized.

### Coupler

When opposing Threadbars are torqued together, the Dywidag coupler may be used without nuts. Using couplers described in the included table, the splice will develop the full ultimate load of the bar in tension and compression.

### Coupler with Hex Nuts

When opposing Threadbars are not torqued together, hex nuts may be used on each end of the coupler, and tightened against the coupler. Using hex nuts described in the included table, the splice will develop the full ultimate load of the bar in tension and compression.

### Coupler with Lock Nuts

Lock nuts may also be used with the Dywidag coupler when opposing Threadbars are not torqued together. Using lock nuts described in the included table, the splice will develop the full ultimate load of the bar in tension and approximately 50% of the ultimate load of the bar in compression.

Nuts and Couplers which develop 125% of the yield stress of the bar are available on special order.

Properly sawed or sheared, Dywidag Threadbars do not require end preparation except where the coupler is utilized without nuts as a compression splice. Transition couplers for splicing two Threadbars of different sizes are also available on special order.

### Coated Bars

Threadbars may be epoxy coated in accordance with ASTM A775 or galvanized in accordance to ASTM A123. Threaded accessories for coated bars thread over the coating. Contact DSI for hardware dimensions.

Engage bar in coupler to a depth equal to  $\frac{1}{2}$  the coupler length.

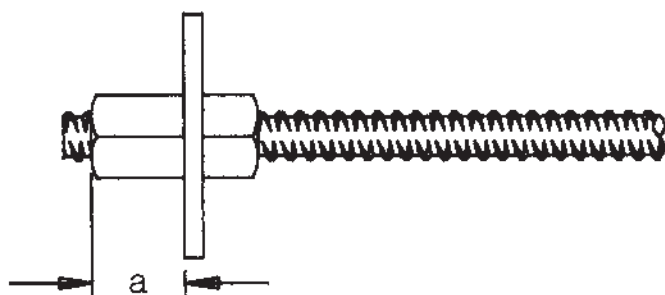
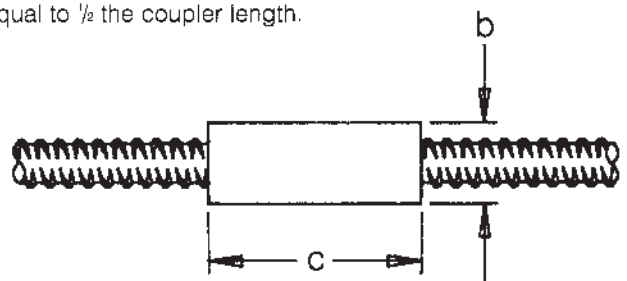


Plate Anchorage



Coupler

# DYWIDAG THREADBAR® Products

## Reinforcing Steel Properties

ASTM A615(Grade 60 & 75) CAN/CSA(G3018-M1982)

THREADBAR® Designation	Yield Stress		Cross Sectional Area		Yield Strength		Nominal Weight		Maximum THREADBAR® Diameter			
	in-lb	mm	ksi	MPa	in <sup>2</sup>	mm <sup>2</sup>	kips	kN	lbs/ft	kg/m	in	mm
Grade 60	#6	19	60	414	0.44	284	26.4	118	1.50	2.24	0.86	21.8
	#7	22	60	414	0.60	387	36.0	160	2.04	3.04	0.99	25.1
	#8	25	60	414	0.79	510	47.4	211	2.67	3.98	1.12	28.4
Grade 75	#6	19	75	517	0.44	284	33.0	147	1.50	2.24	0.86	21.8
	#7	22	75	517	0.60	387	45.0	200	2.04	3.04	0.99	25.1
	#8	25	75	517	0.79	510	59.3	264	2.67	3.98	1.12	28.4
	#9	29	75	517	1.00	645	75.0	334	3.40	5.06	1.26	32.0
	#10	32	75	517	1.27	819	95.3	424	4.30	6.41	1.43	36.3
	#11	36	75	517	1.56	1006	117.0	520	5.31	7.91	1.61	40.9
	#14	43	75	517	2.25	1452	168.8	751	7.65	11.39	1.86	47.2
	#18	57	75	517	4.00	2581	300.0	1335	13.60	20.24	2.50	63.5
	63 mm <sub>n</sub>		80	552	4.91	3168	392.8	1747	16.70	24.65	2.72	69.1

## Reinforcing Steel Nut & Coupler Data\*

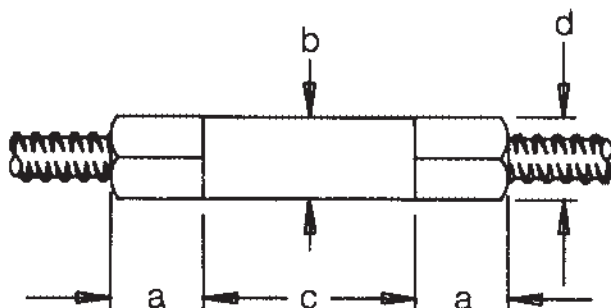
THREADBAR® Designation	Coupler						Nut					
	Length		Diameter		Hex Nut Length		Width,		Lock Nut Length			
	in-lb	mm	c (in)	(mm)	b (in)	(mm)	a (in)	(mm)	d (in)	(mm)	e (in)	(mm)
Grade 60	#6	19	2.86	72.5	1.22	30.9	1.30	32.9	1.16	29.5	0.65	16.5
	#7	22	3.40	86.4	1.41	35.7	1.55	39.4	1.34	34.0	0.75	19.1
	#8	25	3.69	93.8	1.59	40.4	1.66	42.2	1.52	38.5	0.85	21.6
Grade 75	#6	19	3.12	79.2	1.22	30.9	1.43	36.2	1.16	29.5	0.65	16.5
	#7	22	3.73	94.6	1.41	35.7	1.71	43.4	1.34	34.0	0.75	19.1
	#8	25	4.03	102.4	1.59	40.4	1.84	46.6	1.52	38.5	0.85	21.6
	#9	29	5.02	127.5	1.79	45.5	2.30	58.4	1.71	43.3	0.95	24.1
	#10	32	5.70	144.8	2.02	51.2	2.56	65.0	1.92	48.8	1.13	28.6
	#11	36	6.37	161.8	2.25	57.0	2.88	73.0	2.14	54.4	1.25	31.8
	#14	43	7.82	198.6	2.55	64.8	3.55	90.2	2.52	64.0	1.45	36.8
	#18	57	9.35	237.5	3.50	88.9	4.23	107.4	3.34	84.8	2.00	50.8
	63 mm <sub>n</sub>		9.68	245.7	3.86	98.0	4.50	114.3	3.67	93.2	1.43	36.2

All couplers and hex nuts develop 100% of the nominal ultimate strength of the bar

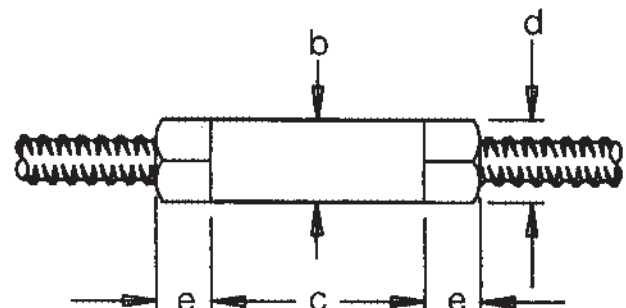
1 63 mm bars and hardware available as grade 80 only

2 Measured across flats

DSI reserves the right to change the design or details of its products without notice. Specific information for job details and drawings should be obtained from your DSI Sales Engineer.

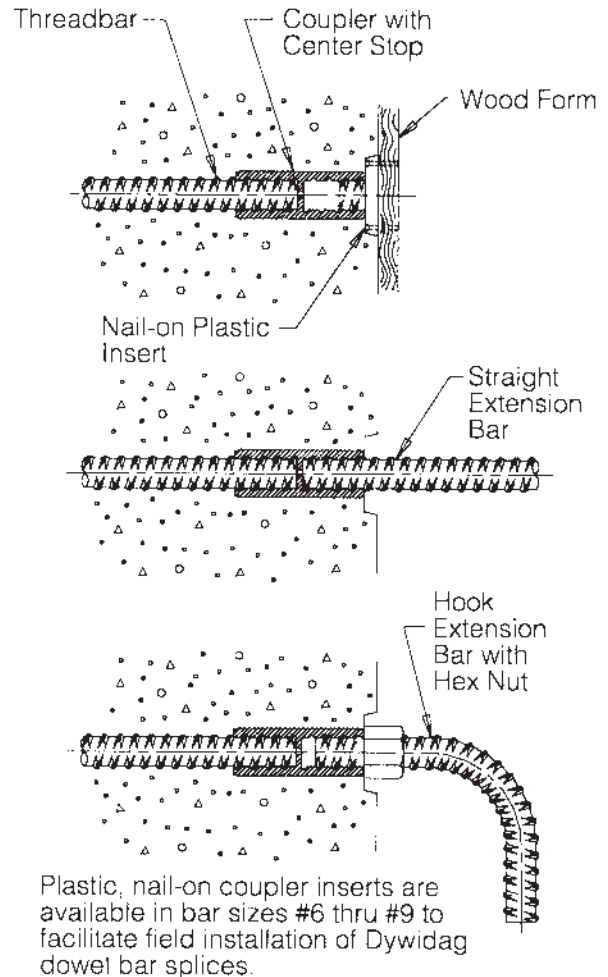


Coupler with Hex Nuts



Coupler with Lock Nuts

## Form Saver Splice Inserts



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