

DYWIDAG Strand Anchors Properties

DYWIDAG Strand Anchors utilize 0.6" dia. 7-wire, Low Relaxation 270ksi Strand conforming to ASTM A416 (bare strand) or ASTM A882 (epoxy coated strand).

Number of Strands	Nominal Cross Section Area (A_{ps})	Ultimate Strength ($F_{pu} \times A_{ps}$)	Prestressing Force			Nominal Weight (bare steel only)
			$0.80 F_{pu} \times A_{ps}$	$0.70 F_{pu} \times A_{ps}$	$0.60 F_{pu} \times A_{ps}$	
[ea]	[in ²] / [mm ²]	[kips] / [kN]	[kips] / [kN]	[kips] / [kN]	[kips] / [kN]	[lbs/ft] / [kg/m]
1	0.217 / 140	58.6 / 261	46.9 / 208	41.0 / 182	35.2 / 156	0.74 / 1.09
2	0.434 / 280	117.2 / 521	93.7 / 417	82.0 / 365	70.3 / 313	1.48 / 1.64
3	0.651 / 420	175.8 / 782	140.6 / 625	123.0 / 547	105.5 / 469	2.22 / 3.27
4	0.868 / 560	234.4 / 1,043	187.5 / 834	164.1 / 730	140.6 / 626	2.96 / 4.46
5	1.085 / 700	293.0 / 1,303	234.4 / 1,043	205.1 / 912	175.8 / 782	3.70 / 5.51
6	1.302 / 840	351.6 / 1,564	281.3 / 1,251	246.1 / 1,095	210.9 / 938	4.44 / 6.55
7	1.519 / 980	410.2 / 1,825	328.2 / 1,460	287.2 / 1,277	246.2 / 1,095	5.18 / 7.74
8	1.736 / 1,120	468.8 / 2,085	375.0 / 1,668	328.1 / 1,460	281.3 / 1,251	5.92 / 8.78
9	1.953 / 1,260	527.4 / 2,346	421.9 / 1,877	369.2 / 1,642	316.4 / 1,408	6.66 / 9.97
12	2.604 / 1,680	703.2 / 3,128	562.6 / 2,503	492.3 / 2,190	422.0 / 1,877	8.88 / 13.24
15	3.255 / 2,100	879.0 / 3,910	703.2 / 3,128	615.3 / 2,737	527.4 / 2,346	11.10 / 16.52
19	4.123 / 2,660	1,113.4 / 4,953	890.7 / 3,962	779.4 / 3,467	668.0 / 2,972	14.06 / 20.98
27	5.859 / 3,780	1,582.2 / 7,038	1,265.8 / 5,631	1,107.6 / 4,927	949.4 / 4,223	19.98 / 29.76
37	8.029 / 5,180	2,168.2 / 9,645	1,734.6 / 7,716	1,517.8 / 6,751	1,301.0 / 5,787	27.38 / 40.78
48	10.416 / 6,720	2,812.8 / 12,512	2,250.2 / 10,009	1,968.9 / 8,758	1,687.7 / 7,507	35.52 / 52.83
54	11.718 / 7,560	3,164.4 / 14,076	2,531.5 / 11,261	2,215.1 / 9,853	1,898.6 / 8,446	39.96 / 59.38
61	13.237 / 8,540	3,574.6 / 15,901	2,859.7 / 12,721	2,502.2 / 11,131	2,144.8 / 9,540	45.14 / 67.12

A_{ps} = Area Prestressing Steel
 F_{pu} = Minimum Ultimate Strength

Please consult your local sales office for systems exceeding 61 strands.

DYWIDAG Strand Anchor Dimensions – DCP Components & Wedge Plates

Max. No. of Strands*	HDPE Corrugated Sheathing Outside Diameter			Trumpet Pipe Outside Diameter		Wedge Plate Dimensions			
	Size Des.	[in]	[mm]	[in]	[mm]	Ø G [in]	Ø G [mm]	H [in]	H [mm]
3	2"	2.44	62	4.50	114	4.69	119	1.80	46
4	2.5"	2.92	74	4.50	114	4.69	119	1.80	46
6	2.5"	2.92	74	4.50	114	5.61	142	2.40	61
7	3"	3.60	91	4.50	114	5.61	142	2.40	61
9	3"	3.60	91	5.63	143	5.51	140	1.69	43
12	4"	4.60	117	5.63	143	6.30	160	1.69	43
15	4"	4.60	117	6.63	168	7.09	180	1.97	50
18	4"	4.60	117	8.63	219	7.87	200	2.17	55
24	5"	5.85	149	8.63	219	9.45	240	2.95	75
27	6"	6.80	173	8.63	219	9.45	240	2.95	75

* based on the use of a single 0.5" ID x 0.75" OD internal grout tube.

Please consult your local sales office for systems exceeding 27 strands.
 Bearing plates sizes are dependent on project specific conditions.
 DSI staff can assist with sizing of bearing plates.

