

Figure 8 FTTP Sag and Tension Guide

Series 573Q

Initial Sag and Tension¹

Span ft	0°F		20°F		40°F		60°F		80°F		100°F	
	Tension lbs	Sag in	Tension lbs	Sag in	Tension lbs	Sag in	Tension lbs	Sag in	Tension lbs	Sag in	Tension lbs	Sag in
25	40	0.8	21	1.5	14	2.3	11	3.0	9	3.7	7	4.5
50	55	2.3	36	3.6	27	4.8	21	6.0	18	7.2	15	8.4
75	68	4.2	49	5.8	39	7.4	32	9.0	27	10.6	24	12.2
100	81	6.3	62	8.2	51	10.1	43	12.0	37	13.9	32	15.8
125	94	8.5	75	10.7	62	12.8	53	15.0	46	17.2	41	19.3
150	106	10.8	87	13.2	74	15.6	64	18.0	56	20.4	50	22.8
175	118	13.2	99	15.8	85	18.4	74	21.0	66	23.6	60	26.2
200	130	15.7	111	18.4	96	21.2	85	24.0	76	26.8	69	29.6
225	142	18.2	122	21.1	107	24.1	96	27.0	86	29.9	79	32.9
250	154	20.7	134	23.8	118	26.9	106	30.0	96	33.1	88	36.2
275	165	23.3	145	26.6	130	29.8	117	33.0	106	36.2	98	39.4
300	177	26.0	157	29.3	141	32.7	128	36.0	117	39.3	108	42.7
325	188	28.6	168	32.1	152	35.5	138	39.0	127	42.5	117	45.9
350	200	31.3	179	34.9	163	38.4	149	42.0	137	45.6	127	49.1
375	211	34.0	190	37.7	174	41.3	159	45.0	147	48.7	137	52.3
400	222	36.7	202	40.5	184	44.2	170	48.0	158	51.8	147	55.5
425	220	41.9	205	44.9	192	48.0	181	51.0	170	54.0	161	57.1

NESC Ice and Wind Loading Districts¹

Span ft	Heavy Plus ²				Heavy				Medium				Light			
	Vert. Sag in	Horiz. Sag in	Total Sag in	Tension lbs	Vert. Sag in	Horiz. Sag in	Total Sag in	Tension lbs	Vert. Sag in	Horiz. Sag in	Total Sag in	Tension lbs	Vert. Sag in	Horiz. Sag in	Total Sag in	Tension lbs
25	6.2	2.8	6.8	259	3.7	2.9	4.7	144	2.3	3.0	3.8	89	0.5	3.6	3.7	67
50	15.7	7.2	17.3	408	9.4	7.6	12.1	223	5.9	7.6	9.6	141	1.2	8.9	9.0	110
75	-	-	-	-	16.3	13.0	20.9	291	10.1	12.9	16.4	185	2.0	15.1	15.2	147
100	-	-	-	-	23.9	19.2	30.7	352	14.7	18.9	24.0	224	2.8	21.9	22.0	180
125	-	-	-	-	32.2	25.8	41.3	408	19.7	25.4	32.2	261	3.8	29.1	29.4	211
150	-	-	-	-	41.1	32.9	52.7	461	25.1	32.3	40.9	296	4.8	36.9	37.2	240
175	-	-	-	-	-	-	-	-	30.7	39.5	50.0	329	5.8	45.0	45.4	268
200	-	-	-	-	-	-	-	-	36.5	47.1	59.6	361	6.9	53.4	53.9	295
225	-	-	-	-	-	-	-	-	42.6	54.9	69.5	392	8.1	62.2	62.7	321
250	-	-	-	-	-	-	-	-	48.9	63.0	79.8	422	9.2	71.2	71.8	346
275	-	-	-	-	-	-	-	-	55.4	71.3	90.3	450	10.4	80.4	81.1	370
300	-	-	-	-	-	-	-	-	62.0	79.9	101.2	479	11.6	89.9	90.7	394
325	-	-	-	-	-	-	-	-	68.9	88.7	112.3	506	12.9	99.7	100.5	417
350	-	-	-	-	-	-	-	-	-	-	-	-	14.2	109.6	110.5	440
375	-	-	-	-	-	-	-	-	-	-	-	-	15.5	119.7	120.7	463
400	-	-	-	-	-	-	-	-	-	-	-	-	16.8	130.0	131.1	485
425	-	-	-	-	-	-	-	-	-	-	-	-	18.2	140.5	141.6	506

Loading District Specifics

	Heavy Plus ²	Heavy	Medium	Light
Horizontal Wind Pressure (lb/ft ²)	4	4	4	9
Radial Ice Thickness (in)	1	½	¼	0
Temperature (F)	0	0	15	30

¹Reflects 1% Sag at 60° F Installation. Messenger is 2.1 mm (0.083") diameter solid, steel wire.

²Not an NESC District