



Southwire Company

Bird Creek - ADSS AFL, DNA-33072 2332 TO 1525 Ruling Span 288

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Area = $0.3948 \, \text{in}^2$, Diameter = $0.709 \, \text{in}$, Weight = $0.177 \, \text{lb/ft}$, RBS = $30400 \, \text{lb}$, MRCL = $19000 \, \text{lb}$ Notes =

Limits and Outputs in Average Tensions

Span = 288.00 ft
Creep governs the final sag

Special Load Zone

Lo	ading Li	mits							
	. Temp	Ice	Wind	K	Limit	Usa	age		
°F	°C	in	lb/ft²	lb/ft					
0.0	-17.8	0.50G	4.00	0.30	2500 lb*	In:	itial		
0.0	-17.8	0.00	0.00	0.00	33.3 %	In	itial		
0.0	-17.8	0.00	0.00	0.00	25.0 %		Final		
60.0	15.6	0.00	0.00	0.00		(Creep		
De	sign Poi	nte				·T	inal	Tn-	itial
	. Temp	Ice	Wind	K	Weight	Sag	Tension	Sag	Tension
°F	. Terub	in	lb/ft²	lb/ft	lb/ft	ft	lb	ft	lb
0.0	-17.8	0.50G	4.00	0.30	1.390	5.82	2481	5.77	2500*
32.0	0.0	0.50G	0.00	0.00	0.929	4.92	1958	4.83	1995
-20.0	-28.9	0.00	0.00	0.00	0.177	2.40	766	2.12	868
0.0	-17.8	0.00	0.00	0.00	0.177	2.34	783	2.07	887
30.0	-1.1	0.00	0.00	0.00	0.177	2.27	810	2.00	916
60.0	15.6	0.00	0.00	0.00	0.177	2.19	837	1.94	947
90.0	32.2	0.00	0.00	0.00	0.177	2.12	867	1.88	978
120.0	48.9	0.00	0.00	0.00	0.177	2.05	897	1.82	1010
167.0	75.0	0.00	0.00	0.00	0.177	1.94	946	1.73	1063
212.0	100.0	0.00	0.00	0.00	0.177	1.84	996	1.65	1114
	ign Cond								

G Glazed Ice Density of 57.0 lb/ft³





2332 to 1525 Decimal Sag

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Ruling Span:288.00 ft Special Load Zone Stringing Sag Table Using Initial Sag Max Tension = 2500 lb

Design: 2500 lb @ 0.0 °F, 0.50 in Ice, 4.00 lb/ft2 Wind,

Initial

H Tens	887	906	911	916	921	926	931	936	942	947	952	957
(lb)												
Cond. Temp °F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
Sag	£t	ft	ft	ft	£t	£t	£t	ft	ft	ft	£t	ft
Span										METER TOTAL BOOM MINES WITH		
274.00	1.87	1.83	1.82	1.81	1.80	1.79	1.78	1.77	1.76	1.75	1.75	1.74
301.00	2.26	2.21	2.20	2.19	2.18	2.16	2.15	2.14	2.13	2.12	2.11	2.09





2332 to 1525 3rd Return

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Ruling Span:288.00 ft Special Load Zone Stringing Sag Table Using Initial Sag

Max Tension = 2500 lb

Design: 2500 lb @ 0.0 °F, 0.50 in Ice, 4.00 lb/ft2 Wind,

Initial

H Tens	887	906	911	916	921	926	931	936	942	947	952	957
												70.0
Cond. Temp °F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
3rd Wave	Sec											
Span												
274.00	4.09	4.05	4.04	4.03	4.02	4.00	3.99	3.98	3.97	3.96	3.95	3.94
301.00	4.50	4.45	4.44	4.42	4.41	4.40	4.39	4.38	4.36	4.35	4.34	4.33





Southwire Company

Bird Creek - ADSS AFL, DNA-33072 1425 to 3110 Ruling Span 251

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Area = 0.3948 in^2 , Diameter = 0.709 in, Weight = 0.177 lb/ft, RBS = 30400 lb, MRCL = 19000 lb Notes =

Limits and Outputs in Average Tensions

Span = 251.00 ft
Creep governs the final sag

Special Load Zone

Lo	ading Li	mits							
Cond	. Temp	Ice	Wind	K	Limit	Usa	age		
°F	°C	in	lb/ft²	lb/ft					
0.0	-17.8	0.50G	4.00	0.30	2500 lb*	Inf	itial		
0.0	-17.8	0.00	0.00	0.00	33.3 %	Ini	ltial		
0.0	-17.8	0.00	0.00	0.00	25.0 %	I	Final		
60.0	15.6	0.00	0.00	0.00		(Creep		
De	sign Poi	nts				- 'ਜ	inal	Tni	tial
	. Temp	Ice	Wind	K	Weight	Sag	Tension	Sag	Tension
°F	°C	in	lb/ft²	lb/ft	lb/ft	ft	lb	ft	lb
0.0	-17.8	0.50G	4.00	0.30	1.390	4.48	2445	4.38	2500*
32.0	0.0	0.50G	0.00	0.00	0.929	3.69	1985	3.55	2063
-20.0	-28.9	0.00	0.00	0.00	0.177	1.41	987	1.19	1169
0.0	-17.8	0.00	0.00	0.00	0.177	1.38	1011	1.17	1194
30.0	-1.1	0.00	0.00	0.00	0.177	1.33	1049	1.13	1233
60.0	15.6	0.00	0:00	0.00	0.177	1.28	1087	1.10	1272
90.0	32.2	0.00	0.00	0.00	0.177	1.24	1126	1.06	1311
120.0	48.9	0.00	0.00	0.00	0.177	1.20	1166	1.03	1351
167.0	75.0	0.00	0.00	0.00	0.177	1.13	1230	0.99	1414
212.0	100.0	0.00	0.00	0.00	0.177	1.08	1292	0.95	1475
* Des	ign Cond	lition							

G Glazed Ice Density of 57.0 lb/ft3





1425 to 3110 Decimal Sag

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Ruling Span:251.00 ft Special Load Zone Stringing Sag Table Using Initial Sag
Max Tension = 2500 lb

Design: 2500 lb @ 0.0 °F, 0.50 in Ice, 4.00 lb/ft2 Wind,

Initial

H Tens (lb)	1194	1220	1226	1233	1239	1246	1252	1259	1265	1272	1278	1285
Cond. Temp °F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
Sag	ft	£t	ft	ft								
Span												****
206.00	0.79	0.77	0.77	0.76	0.76	0.75	0.75	0.75	0.74	0.74	0.73	0.73
213.00	0.84	0.82	0.82	0.81	0.81	0.81	0.80	0.80	0.79	0.79	0.79	0.78
217.00	0.87	0.85	0.85	0.85	0.84	0.84	0.83	0.83	0.82	0.82	0.82	0.81
328.00	1.99	1.95	1.94	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.86	1.85





1425 to 3110 3rd Return

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Ruling Span:251.00 ft Special Load Zone Stringing Sag Table Using Initial Sag
Max Tension = 2500 lb

Design:2500 lb @ 0.0 °F, 0.50 in Ice,4.00 lb/ft² Wind,

Initial

H Tens	1194	1220	1226	1233	1239	1246	1252	1259	1265	1272	1278	1285
Cond. Temp °F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
3rd Wave	Sec											
Span												
206.00	2.65	2.62	2.62	2.61	2.60	2.60	2.59	2.58	2.58	2.57	2.56	2.56
213.00	2.74	2.71	2.71	2.70	2.69	2.68	2.68	2.67	2.66	2.66	2.65	2.64
217.00	2.79	2.76	2.76	2.75	2.74	2.74	2.73	2.72	2.71	2.71	2.70	2.69
328.00	4.22	4.18	4.17	4.16	4.14	4.13	4.12	4.11	4.10	4.09	4.08	4.07





Southwire Company

Bird Creek - ADSS AFL, DNA-33072 3904 to 4401 Ruling Span 160

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/*F

Area = 0.3948 in^2 , Diameter = 0.709 in, Weight = 0.177 lb/ft, RBS = 30400 lb, MRCL = 19000 lb Notes =

Limits and Outputs in Average Tensions

Span = 160.00 ft
Creep governs the final sag

Special Load Zone

Lo	ading Li	mits							
	. Temp	Ice	Wind	K	Limit	Usa	age		
°F	°C	in	lb/ft²	lb/ft					
0.0	-17.8	0.50G	4.00	0.30	2500 lb*	In:	itial		
0.0	-17.8	0.00	0.00	0.00	33.3 %	In:	itial		
0.0	-17.8	0.00	0.00	0.00	25.0 %]	Final		
60.0	15.6	0.00	0.00	0.00		(Creep		
	sign Poi:	nts				F:	inal	In:	itial
	. Temp	Ice	Wind	K	Weight	Sag	Tension	Sag	Tension
° F	°C	in	lb/ft²´	lb/ft	lb/ft	ft	lb	ft	lb
0.0	-17.8	0.50G	4.00	0.30	1.390	1.93	2305	1.78	2500*
32.0	0.0	0.50G	0.00	0.00	0.929	1.45	2044	1.30	2283
-20.0	-28.9	0.00	0.00	0.00	0.177	0.36	1575	0.30	1916
0.0	-17.8	0.00	0.00	0.00	0.177	0.35	1606	0.29	1945
30.0	-1.1	0.00	0.00	0.00	0.177	0.34	1652	0.28	1989
60.0	15.6	0.00	0.00	0.00	0.177	0.33	1699	0.28	2033
90.0	32.2	0.00	0.00	0.00	0.177	0.32	1746	0.27	2077
120.0	48.9	0.00	0.00	0.00	0.177	0.32	1793	0.27	2121
167.0	75.0	0.00	0.00	0.00	0.177	0.30	1867	0.26	2190
212.0	100.0	0.00	0.00	0.00	0.177	0.29	1937	0.25	2256
* Des	ign Cond	ition							

G Glazed Ice Density of 57.0 lb/ft3





3904 to 4401 Decimal Sag

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Ruling Span:160.00 ft Special Load Zone Stringing Sag Table Using Initial Sag
Max Tension = 2500 lb

Design: 2500 lb @ 0.0 °F, 0.50 in Ice, 4.00 lb/ft2 Wind,

Initial

H Tens	1945	1974	1981	1989	1996	2003	2011	2018	2025	2033	2040	2047
(lb)			*** *** *** ***									
Cond. Temp °F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
Sag	£t.	ft	ft	£t	£t	ft	ft	£t	ft	ft	£t	£t
Span												
155.00	0.27	0.27	0.27	0.27	0.27	0.27	0.26	0.26	0.26	0.26	0.26	0.26
165.00	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.29





3904 to 4401 3rd Return

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Ruling Span:160.00 ft Special Load Zone Stringing Sag Table Using Initial Sag

Max Tension = 2500 lb

Design:2500 lb @ 0.0 °F, 0.50 in Ice,4.00 lb/ft² Wind,

Initial

H Tens	1945	1974	1981	1989	1996	2003	2011	2018	2025	2033	2040	2047
(lb)												
Cond. Temp °F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
3rd Wave	Sec											
Span												
155.00	1.56	1.55	1.55	1.55	1.54	1.54	1.54	1.53	1.53	1.53	1.53	1.52
165.00	1.66	1.65	1.65	1.65	1.64	1.64	1.64	1.63	1.63	1.63	1.63	1.62





Southwire Company

Bird Creek - ADSS AFL, DNA-33072 4401 to 5111 Ruling Span 244

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Area = 0.3948 in^2 , Diameter = 0.709 in, Weight = 0.177 lb/ft, RBS = 30400 lb, MRCL = 19000 lb Notes =

Limits and Outputs in Average Tensions

Span = 244.00 ft
Creep governs the final sag

Special Load Zone

Lo	ading Lir	mits							
	. Temp	Ice	Wind	K	Limit	Usa	age		
°E	°C	in	lb/ft²	lb/ft					
0.0	-17.8	0.50G	4.00	0.30	2500 lb*	In:	itial		
0.0	-17.8	0.00	0.00	0.00	33.3 %	In:	itial		
0.0	-17.8	0.00	0.00	0.00	25.0 %	1	Final		
60.0	15.6	0.00	0.00	0.00		(Creep		
Do	sign Poi:	n+a				E-	inal	Tni	tial
	_		Min a	K	Moight		Tension		Tension
	. Temp	Ice	Wind		Weight	Sag		Sag	
٠ ፲	°C	in	lb/ft²	lb/ft	lb/ft	ft	lb	ft	lb
0.0	-17.8	0.50G	4.00	0.30	1.390	4.25	2437	4.14	2500*
32.0	0.0	0.50G	0.00	0.00	0.929	3.48	1990	3.33	2078
-20.0	-28.9	0.00	0.00	0.00	0.177	1.27	1033	1.07	1231
0.0	-17.8	0.00	0.00	0.00	0.177	1.24	1059	1.05	1257
30.0	-1.1	0.00	0.00	0.00	0.177	1.20	1098	1.02	1297
60.0	15.6	0.00	0.00	0.00	0.177	1.16	1138	0.99	1337
90.0	32.2	0.00	0.00	0.00	0.177	1.12	1178	0.96	1377
120.0	48.9	0.00	0.00	0.00	0.177	1.08	1219	0.93	1417
167.0	75.0	0.00	0.00	0.00	0.177	1.03	1285	0.89	1481
212.0	100.0	0.00	0.00	0.00	0.177	0.98	1349	0.85	1543
* Des	ign Cond	ition							

G Glazed Ice Density of 57.0 lb/ft3





4401 to 5111 Decimal Sag

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/*F

Ruling Span:244.00 ft

Stringing Sag Table Using Initial Sag

Special Load Zone Max Tension = 2500 lb

Design: 2500 lb @ 0.0 °F, 0.50 in Ice, 4.00 lb/ft2 Wind,

Initial

H Tens	1257	1283	1290	1297	1303	1310	1317	1323	1330	1336	1343	1350
(lb)	-											
Cond. Temp 'F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
Sag	ft	£t	ft	ft	ft	£t	ft	ft	ft	ft	ft	£t
Span		*** *** *** ***								and done been been post		
110.00	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20
132.00	0.31	0.30	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.29
163.00	0.47	0.46	0.46	0.45	0.45	0.45	0.45	0.44	0.44	0.44	0.44	0.44
231.00	0.94	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87





4401 to 5111 3rd Return

Conductor: ADSS Cable, Moduli = 4381/3651/4725 kpsi, Thermal Coef of Expansion = -8.58e-007/°F

Ruling Span:244.00 ft

Stringing Sag Table Using Initial Sag

Special Load Zone

Max Tension = 2500 lb

Design: 2500 lb @ 0.0 °F, 0.50 in Ice, 4.00 lb/ft2 Wind,

Initial

H Tens (lb)	1257	1283	1290	1297	1303	1310	1317	1323	1330	1336	1343	1350
Cond. Temp °F>	0.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0
3rd Wave	Sec											
Span												
110.00	1.38	1.37	1.36	1.36	1.36	1.35	1.35	1.35	1.34	1.34	1.34	1.33
132.00	1.66	1.64	1.63	1.63	1.63	1.62	1.62	1.61	1.61	1.61	1.60	1.60
163.00	2.05	2.02	2.02	2.01	2.01	2.00	2.00	1.99	1.99	1.98	1.98	1.97
231.00	2.90	2.87	2.86	2.85	2.85	2.84	2.83	2.83	2.82	2.81	2.80	2.80