



NEW #2 ACSR Between 2332 and 1525 Ruling Span 288'

Conductor: #2 AWG 7/1 ACSR "Sparate"

Area = $0.0654 \, \text{in}^2$, Diameter = $0.325 \, \text{in}$, Weight = $0.107 \, \text{lb/ft}$, RBS = $3640 \, \text{lb}$ Notes =

Stress-strain data from Chart No. 1-670

Chart Notes: Type 25 ACSR (7/1). Contact your conductor manufacturer to verify stress-strain coefficients.

Limits and Outputs in Average Tensions

 ${\tt Span = 288.00 \ ft} \\ {\tt Load \ Zone} \\ {\tt Loading \ conditions \ govern \ the \ final \ sag} \\$

Lo	ading Li	.mits				
Cond	. Temp	Ice	Wind	K	Limit	Usage
°F	° C	in	lb/ft ²	lb/ft		
0.0	-17.8	0.50G	4.00	0.30	45.0 %*	Initial
0.0	-17.8	0.00	0.00	0.00	33.3 %	Initial
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	nts				F	inal	In	itial
Cond	l. 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	1.061	6.73	1638	6.73	1638*
32.0	0.0	0.50G	0.00	0.00	0.620	5.88	1095	5.39	1194
-20.0	-28.9	0.00	0.00	0.00	0.107	1.65	671	1.19	932
0.0	-17.8	0.00	0.00	0.00	0.107	2.03	546	1.36	818
30.0	-1.1	0.00	0.00	0.00	0.107	2.78	399	1.72	644
60.0	15.6	0.00	0.00	0.00	0.107	3.65	304	2.30	482
90.0	32.2	0.00	0.00	0.00	0.107	4.29	259	3.10	358
120.0	48.9	0.00	0.00	0.00	0.107	4.74	234	3.99	278
167.0	75.0	0.00	0.00	0.00	0.107	5.43	205	5.15	215
212.0	100.0	0.00	0.00	0.00	0.107	6.06	183	5.80	192

^{*} Design Condition

G Glazed Ice Density of 57.0 lb/ft^3





2332 to 1525 Decimal Sag

Conductor: #2 AWG 7/1 ACSR "Sparate"

Ruling Span:288.00 ft Stringing Sag Table Using Initial Sag Special Load Zone Max Tension = 1638 lb

Design: 45.0 % Ult. @ $0.0 \degree$ F, 0.50 in Ice, 4.00 lb/ft^2 Wind, Initial

H Tens (lb)	818	702	673	644	615	587	560	533	507	482	458	435
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											
Span												
274.00	1.23	1.43	1.49	1.56	1.63	1.71	1.79	1.88	1.98	2.08	2.19	2.31
301.00	1.48	1.73	1.80	1.88	1.97	2.06	2.17	2.27	2.39	2.51	2.65	2.78





2332 to 1525 3rd Return

Conductor: #2 AWG 7/1 ACSR "Sparate"

Ruling Span:288.00 ft Stringing Sag Table Using Initial Sag Special Load Zone Max Tension = 1638 lb

Design: 45.0 % Ult. @ $0.0 \degree$ F, 0.50 in Ice, 4.00 lb/ft^2 Wind, Initial

H Tens (lb)	818	702	673	644	615	587	560	533	507	482	458	435
Cond. Temp °F> 3rd Wave	0.0 Sec	20.0 Sec	25.0 Sec	30.0 Sec	35.0 Sec	40.0 Sec	45.0 Sec	50.0 Sec	55.0 Sec	60.0 Sec	65.0 Sec	70.0 Sec
Span												
274.00	3.31	3.58	3.65	3.73	3.82	3.91	4.01	4.11	4.21	4.32	4.43	4.54
301.00	3.64	3.93	4.01	4.10	4.20	4.30	4.40	4.51	4.62	4.74	4.87	4.99





Bird Creek -New 1/0 ACSR - Primary Between Poles 0928 to 2218 Ruling Span 252'

Conductor: #1/0 AWG 6/1 ACSR "Raven"

Area = 0.0967 in^2 , Diameter = 0.398 in, Weight = 0.145 lb/ft, RBS = 4370 lb Notes =

Stress-strain data from Chart No. 1-938

Chart Notes: Type 17 ACSR (6/1), #1 AWG and larger. Contact your conductor manufacturer to verify stress-strain coefficients.

Limits and Outputs in Average Tensions

 ${\tt Span = 252.00 \ ft} \\ {\tt Load \ Zone} \\ {\tt Loading \ conditions \ govern \ the \ final \ sag} \\$

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	50.0 %	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	23.0 %*		Final		
60.0	15.6	0.00	0.00	0.00		(Creep		
De	sign Poi	nts				F	inal	Ini	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	1.144	4.67	1948	4.67	1948
32.0	0.0	0.50G	0.00	0.00	0.703	4.12	1357	3.71	1506
-20.0	-28.9	0.00	0.00	0.00	0.145	0.95	1217	0.78	1469
0.0	-17.8	0.00	0.00	0.00	0.145	1.15	1005*	0.87	1331
30.0	-1.1	0.00	0.00	0.00	0.145	1.61	717	1.03	1114
60.0	15.6	0.00	0.00	0.00	0.145	2.31	498	1.29	892
90.0	32.2	0.00	0.00	0.00	0.145	3.02	381	1.70	677
120.0	48.9	0.00	0.00	0.00	0.145	3.37	342	2.32	496
167.0	75.0	0.00	0.00	0.00	0.145	3.93	293	3.54	325
212.0	100.0	0.00	0.00	0.00	0.145	4.49	257	4.29	268
* Des	ign Cond	ition							

G Glazed Ice Density of 57.0 lb/ft3





Primary 0928 to 2218
Decimal Sag

Conductor: #1/0 AWG 6/1 ACSR "Raven"

Ruling Span:252.00 ft Stringing Sag Table Using Initial Sag Special Load Zone Max Tension = 1948 lb

Design: 23.0 % Ult. @ 0.0 °F, 0.00 in Ice, 0.00 lb/ft² Wind, Final

H Tens	1331	1187	1151	1114	1077	1040	1003	966	929	892	855	818
Cond. Temp °F>	0.0 ft	20.0 ft	25.0 ft	30.0 ft	35.0 ft	40.0 ft	45.0 ft	50.0 ft	55.0 ft	60.0 ft	65.0 ft	70.0 ft
Span												
135.00	0.25	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.36	0.37	0.39	0.40
202.00	0.56	0.62	0.64	0.66	0.69	0.71	0.74	0.77	0.80	0.83	0.87	0.90
213.00	0.62	0.69	0.71	0.74	0.76	0.79	0.82	0.85	0.89	0.92	0.96	1.01
328.00	1.47	1.64	1.69	1.75	1.81	1.87	1.94	2.02	2.10	2.19	2.28	2.38





Neutral 0928 to 2218 3rd Return

Conductor: #1/0 AWG 6/1 ACSR "Raven"

Ruling Span:252.00 ft Stringing Sag Table Using Initial Sag Special Load Zone Max Tension = 1948 lb

Design: 23.0 % Ult. @ 0.0 °F, 0.00 in Ice, 0.00 lb/ft² Wind, Final

H Tens	1331	1187	1151	1114	1077	1040	1003	966	929	892	855	818
Cond. Temp °F> 3rd Wave	0.0 Sec	20.0 Sec	25.0 Sec	30.0 Sec	35.0 Sec	40.0 Sec	45.0 Sec	50.0 Sec	55.0 Sec	60.0 Sec	65.0 Sec	70.0 Sec
Span												
135.00	1.49	1.58	1.60	1.63	1.66	1.69	1.72	1.75	1.78	1.82	1.86	1.90
202.00	2.23	2.36	2.40	2.44	2.48	2.52	2.57	2.62	2.67	2.72	2.78	2.84
213.00 328.00	2.35 3.62	2.49 3.83	2.53 3.89	2.57 3.96	2.61 4.02	2.66 4.09	2.71 4.17	2.76 4.25	2.81 4.33	2.87 4.42	2.93 4.52	3.00 4.62





Bird Creek -New #2 ACSR-Neutral Between Poles 0928 to 2218 Ruling Span 252'

Conductor: #2 AWG 7/1 ACSR "Sparate"

Area = 0.0654 in^2 , Diameter = 0.325 in, Weight = 0.107 lb/ft, RBS = 3640 lb Notes =

Stress-strain data from Chart No. 1-670

Chart Notes: Type 25 ACSR (7/1). Contact your conductor manufacturer to verify stress-strain coefficients.

Limits and Outputs in Average Tensions

 $\begin{array}{lll} {\rm Span} = 252.00 \ {\rm ft} & {\rm Special \ Load \ Zone} \\ {\rm Loading \ conditions \ govern \ the \ final \ sag} \end{array}$

Lo	ading Li	mits.							
	l. Temp	Ice	Wind	K	Limit	Usa	age		
°F	°C	in	lb/ft²	lb/ft					
0.0	-17.8	0.50G	4.00	0.30	1540 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	nts				F	inal	Ini	itial
	l. 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	1.061	5.48	1540	5.48	1540*
32.0	0.0	0.50G	0.00	0.00	0.620	4.78	1031	4.40	1120
-20.0	-28.9	0.00	0.00	0.00	0.107	1.20	711	0.91	929
0.0	-17.8	0.00	0.00	0.00	0.107	1.48	575	1.05	812
30.0	-1.1	0.00	0.00	0.00	0.107	2.09	407	1.34	633
60.0	15.6	0.00	0.00	0.00	0.107	2.86	297	1.84	463
90.0	32.2	0.00	0.00	0.00	0.107	3.52	241	2.56	332
120.0	48.9	0.00	0.00	0.00	0.107	3.93	216	3.37	252
167.0	75.0	0.00	0.00	0.00	0.107	4.56	187	4.35	195
212.0	100.0	0.00	0.00	0.00	0.107	5.14	166	4.94	172
* Des	ign Cond	lition							

G Glazed Ice Density of 57.0 lb/ft^3





Neutral 0928 to 2218 Decimal Sag

Conductor: #2 AWG 7/1 ACSR "Sparate"

Ruling Span:252.00 ft Special Load Zone Stringing Sag Table Using Initial Sag Max Tension = 1540 lb

Design:1540 lb @ 0.0 °F, 0.50 in Ice,4.00 lb/ft2 Wind,

Initial

H Tens (lb)	812	693	663	633	603	574	545	517	489	463	437	414
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											
Span												
135.00	0.30	0.35	0.37	0.39	0.40	0.42	0.45	0.47	0.50	0.53	0.56	0.59
202.00	0.67	0.79	0.82	0.86	0.91	0.95	1.00	1.06	1.12	1.18	1.25	1.32
213.00	0.75	0.88	0.92	0.96	1.01	1.06	1.11	1.17	1.24	1.31	1.39	1.47
328.00	1.77	2.08	2.17	2.27	2.39	2.51	2.64	2.79	2.94	3.11	3.29	3.48





Neutral 0928 to 2218
3rd Return

Conductor: #2 AWG 7/1 ACSR "Sparate"

Ruling Span:252.00 ft Special Load Zone Stringing Sag Table Using Initial Sag Max Tension = 1540 lb

Design:1540 lb @ 0.0 °F, 0.50 in Ice,4.00 lb/ft2 Wind,

Initial

H Tens (lb)	812	693	663 	633 	603	574 	545	517 	489	463	437	414
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	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec
Span												
135.00	1.64	1.77	1.81	1.86	1.90	1.95	2.00	2.05	2.11	2.17	2.23	2.30
202.00	2.45	2.65	2.71	2.78	2.85	2.92	2.99	3.07	3.16	3.25	3.34	3.44
213.00	2.58	2.80	2.86	2.93	3.00	3.08	3.16	3.24	3.33	3.42	3.52	3.62
328.00	3.98	4.31	4.41	4.51	4.62	4.74	4.86	4.99	5.13	5.27	5.42	5.58





NEW #2 ACSR Between 4401 and 4706 Ruling Span 201'

Conductor: #2 AWG 7/1 ACSR "Sparate"

Area = $0.0654 \, \text{in}^2$, Diameter = $0.325 \, \text{in}$, Weight = $0.107 \, \text{lb/ft}$, RBS = $3640 \, \text{lb}$ Notes =

Stress-strain data from Chart No. 1-670

Chart Notes: Type 25 ACSR (7/1). Contact your conductor manufacturer to verify stress-strain coefficients.

Limits and Outputs in Average Tensions

 ${\tt Span = 201.00 \ ft} \\ {\tt Load \ Zone} \\ {\tt Loading \ conditions \ govern \ the \ final \ sag} \\$

Lo	ading Li	mits							
	. Temp	Ice	Wind	K	Limit	Us	age		
°F	° C	in	lb/ft²	lb/ft					
0.0	-17.8	0.50G	4.00	0.30	45.0 %	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	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	1.061	3.47	1547	3.47	1547
32.0	0.0	0.50G	0.00	0.00	0.620	2.89	1086	2.62	1195
-20.0	-28.9	0.00	0.00	0.00	0.107	0.51	1067	0.45	1211
0.0	-17.8	0.00	0.00	0.00	0.107	0.59	910*	0.49	1104
30.0	-1.1	0.00	0.00	0.00	0.107	0.79	682	0.58	931
60.0	15.6	0.00	0.00	0.00	0.107	1.14	475	0.73	744
90.0	32.2	0.00	0.00	0.00	0.107	1.70	319	0.99	549
120.0	48.9	0.00	0.00	0.00	0.107	2.08	260	1.45	372
167.0	75.0	0.00	0.00	0.00	0.107	2.61	207	2.43	223
212.0	100.0	0.00	0.00	0.00	0.107	3.13	173	2.95	183
* Des	ign Cond	ition							

G Glazed Ice Density of 57.0 lb/ft^3





4401 to 4706 Decimal Sag

Conductor: #2 AWG 7/1 ACSR "Sparate"

Ruling Span:201.00 ft Stringing Sag Table Using Initial Sag Special Load Zone Max Tension = 1547 lb

Design: 25.0 % Ult. @ 0.0 °F, 0.00 in Ice, 0.00 lb/ft2 Wind, Final

H Tens (lb)	1104	991	961	931	901	870	839	808	776	744	711	679
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											
Span												
133.00	0.21	0.24	0.25	0.25	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.35
231.00	0.65	0.72	0.74	0.77	0.79	0.82	0.85	0.88	0.92	0.96	1.00	1.05





4401 to 4706 3rd Return

Conductor: #2 AWG 7/1 ACSR "Sparate"

Ruling Span:201.00 ft Stringing Sag Table Using Initial Sag Special Load Zone Max Tension = 1547 lb

Design: 25.0 % Ult. @ 0.0 °F, 0.00 in Ice, 0.00 lb/ft2 Wind, Final

H Tens	1104	991	961	931	901	870	839	808	776	744	711	679
Cond. Temp °F> 3rd Wave	0.0 Sec	20.0 Sec	25.0 Sec	30.0 Sec	35.0 Sec	40.0 Sec	45.0 Sec	50.0 Sec	55.0 Sec	60.0 Sec	65.0 Sec	70.0 Sec
Span												
133.00	1.38	1.46	1.48	1.51	1.53	1.56	1.59	1.62	1.65	1.69	1.72	1.77
231.00	2.40	2.54	2.58	2.62	2.66	2.71	2.76	2.81	2.87	2.93	3.00	3.07