

Appendix G1B

Stringing Sag Example

Sample Problem
 NESC Medium Loading with Alcoa Limits
 Conductor RAIL 954.0 Kcmil 45/ 7 Stranding ACSR

Stringing Sag Table Using Final Sag Ruling Span: 1000.0 Feet

Conductor RAIL 954.0 Kcmil 45/ 7 Stranding ACSR

NESC Medium Load Zone Max Tension = 10426 Lb

Design: 25.0 % Ult. @ 15. Deg F, .00 In Ice, .00 Psf Wind, Final

H Tens (LBS)	6839.	6464.	6131.	5834.	5569.	5332.	5118.	4924.	4749.
Temp F>	0.	15.	30.	45.	60.	75.	90.	105.	120.
Sag Feet	19.66	20.80	21.93	23.05	24.15	25.22	26.28	27.32	28.33
Span	1000.0	1020.0	1040.0	1060.0					

Note: Stringing Sags in Feet & Inches.

Stringing Sag Table Using Final Sag Ruling Span: 1000.0 Feet

Conductor RAIL 954.0 Kcmil 45/ 7 Stranding ACSR

NESC Medium Load Zone Max Tension = 10426 Lb

Design: 25.0 % Ult. @ 15. Deg F, .00 In Ice, .00 Psf Wind, Final

H Tens (LBS)	6839.	6464.	6131.	5834.	5569.	5332.	5118.	4924.	4749.
Temp F>	0.	15.	30.	45.	60.	75.	90.	105.	120.
Sag Inches	193	205	217	229	241	254	267	280	292
Span	1000.0	1020.0	1040.0	1060.0					

Note: Stringing Sags in Inches.

Stringing Sag Table Using Initial Sag Ruling Span: 1000.0 Feet

Conductor RAIL 954.0 Kcmil 45/ 7 Stranding ACSR

NESC Medium Load Zone Max Tension = 10426 Lb

Design: 25.0 % Ult. @ 15. Deg F, .00 In Ice, .00 Psf Wind, Final

H Tens (LBS)	8340.	7877.	7446.	7048.	6683.	6350.	6048.	5773.	5524.
Temp F>	0.	15.	30.	45.	60.	75.	90.	105.	120.
3rd Wave Sec	12.01	12.35	12.71	13.06	13.41	13.76	14.10	14.43	14.76
Span	1000.0	1020.0	1040.0	1060.0					

Note: String Sags in 3rd Return Wave

Stringing Sag Table Using Final Sag Ruling Span: 1000.0 Feet

Conductor RAIL 954.0 Kcmil 45/ 7 Stranding ACSR

NESC Medium Load Zone Max Tension = 10426 Lb

Design: 25.0 % Ult. @ 15. Deg F, .00 In Ice, .00 Psf Wind, Final

H Tens (LBS)	9408.
Temp F>	15.
Wt Lb/F>	1.814
Sag Feet	24.11
Span	1000.0
	1020.0
	1040.0
	1060.0

String Sags are Final W/Load