

Note: The lower density rime ice or wet snow is entered as a negative number.

Loadings Table				
Main Menu Elev Temp Edit				
Deg F	In	Psf	% or Lb	
Temp	Ice	Wind	Tension	Code
0	.5	4	10000	1
0	.5	4		1
32	-1.5			
-20				
0				
30				
60				2
90				
120				
167				
212				

ALUMINUM COMPANY OF AMERICA SAG AND TENSION DATA

Sample Problem  
Heavy Loading with 1.5" Rime Ice with Common Point

Conductor DRAKE                      795.0 Kcmil                      26/ 7 Stranding ACSR

Area= .7264 Sq. In      Dia= 1.108 In      Wt= 1.094 Lb/F      RTS= 31500 Lb

Data from Chart No. 1-537

English Units

Span= 1000.0 Feet      NESC Heavy Load Zone

Creep is NOT a Factor

Design Points									
Temp	Ice	Wind	K	Weight	Final	Tension	Initial		
F	In	Psf	Lb/F	Lb/F	Sag	Lb	Sag	Tension	
					Ft		Ft	Lb	
0.	.50	4.00	.30	2.509	31.53	10000.	31.53	10000.	*+
32.	1.50R	.00	.00	4.253	37.82	14164.	37.82	14164.	
-20.	.00	.00	.00	1.094	25.96	5287.	24.72	5549.	
0.	.00	.00	.00	1.094	27.20	5047.	25.84	5311.	
30.	.00	.00	.00	1.094	29.02	4734.	27.48	4996.	
60.	.00	.00	.00	1.094	30.76	4468.	29.09	4721.	
90.	.00	.00	.00	1.094	32.44	4239.	30.67	4482.	
120.	.00	.00	.00	1.094	34.07	4039.	32.20	4271.	
167.	.00	.00	.00	1.094	35.81	3845.	34.51	3988.	
212.	.00	.00	.00	1.094	37.06	3717.	36.64	3759.	

\* Design Condition

R Rime Ice/Wet Snow

+ Common Point