



A Caterpillar Company

DATA FOR CALCULATING RAIL TONNAGES

Rail Section	Theoretical Weight/Yard	Feet/Ton of Rail	Tons/Foot of Rail	Tons/Mile of Track
140RE	140.6	42.67	0.023436	247.48
136RE	136.2	44.05	0.022701	239.72
133RE	133.4	44.98	0.022232	234.77
132RE	132.1	45.42	0.022017	232.50
131RE	132.1	45.87	0.021801	230.22
130RE	130.8	46.30	0.021598	228.07
119RE	129.6	50.51	0.019798	209.07
115RE	118.8	52.31	0.019117	201.88
112RE	114.7	53.43	0.018716	197.64
110RE	112.3	54.35	0.018399	194.29
100RE	101.5	59.11	0.016918	178.65
100RA-A	100.4	59.76	0.016734	176.71
100RA-B	100.5	59.70	0.016750	176.88
90RA-A	90.0	66.67	0.014999	158.39
90RA-B	90.5	66.30	0.015083	159.28
90ASCE	90.1	66.59	0.015017	158.58
85ASCE	85.0	70.59	0.014166	149.59
80ASCE	80.2	74.51	0.013367	141.16
75ASCE	75.4	79.58	0.012566	132.70
70ASCE	70.4	85.23	0.011733	123.90
65ASCE	65.4	91.74	0.010900	115.10
60ASCE	60.4	99.34	0.010033	106.30

OTHER TRACK MATERIAL

Tie Spacing	19-1/2"	21"	22"	24"
No.Of Ties Per Mile	3249	3017	2880	2640
No.Of Tie Plates	6498	6034	5760	5280
No.Of Anchors per Mile (Boxed Anchored every other tie)	6498	6034	5760	5280
No.Of Spikes per Mile				
2 per plate	10560	12068	11520	10560
3 per plate	15840	18102	17340	15840
4 per plate	21120	24136	23040	21120
5 per plate	26400	30170	28800	26400

AVERAGE WEIGHT OF OAK CROSS TIES

AND SWITCH	TIES
8'-6" Cross Ties	
Grade 1 & 2	160LB
Grade 3	167LB
Grade 4	196LB
Grade 5	221LB
9'-0" Cross Ties	
Grade 1 & 2	169LB
Grade 3	177LB
Grade 4	207LB
Grade 5	234LB
7"x 9" Switch Ties	
9'-0"	234LB
9'-6"	247LB
10'-0"	260LB
10'-6"	273LB
11'-0"	286LB
11'-6"	299LB
12'-0"	312LB
12'-6"	325LB
13'-0"	338LB
13'-6"	351LB
14'-0"	364LB
14'-6"	377LB
15'-0"	390LB
15'-6"	403LB
16'-0"	416LB
21'-0"	546LB
22'-0"	572LB