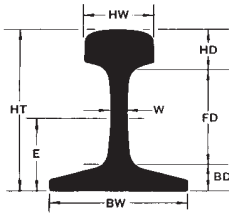


Rail Sections

Tee Rail Data Diagram



Dimensions for Tee Rail Data Table

HT - Height

BW - Width of Base

HW - Width of Head

W - Web
(at center point)

HD - Depth of Head

FD - Fishing

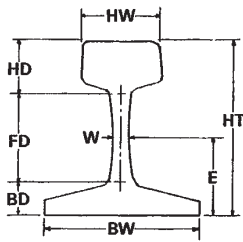
BD - Depth of Base

E - Bolt Hole Elevation

Nominal Weight Per Yard	Type of Rail	DIMENSIONS IN INCHES								SECTION DESIGNATION		
		HT	BW	HW	W	HD	FD	BD	E			
12 lb.	ASCE	2	2	1	3/16	9/16	1 1/32	1 1/2	5/16	—	—	—
16 lb.	ASCE	2 3/8	2 3/8	1 1/16	7/32	4 1/64	1 23/64	3/8	1 1/16	—	—	—
20 lb.	ASCE	2 5/8	2 5/8	1 1/32	1/4	2 3/32	1 15/32	7/16	1 1/64	—	—	—
25 lb.	ASCE	2 3/4	2 3/4	1 1/2	1 9/64	2 5/32	1 31/64	3 1/64	1 15/64	—	—	—
30 lb.	ASCE	3 1/8	3 1/8	1 1/16	2 1/64	7/8	1 23/32	1 7/32	1 25/64	—	—	—
35 lb.	ASCE	3 5/16	3 5/16	1 3/4	2 3/64	6 1/64	1 25/32	3 1/64	1 15/64	—	—	—
40 lb.	ASCE	3 1/2	3 1/2	1 7/8	2 5/64	1 1/64	1 55/64	5/8	1 9/16	—	—	—
45 lb.	ASCE	3 11/16	3 11/16	2	2 7/64	1 1/16	1 31/32	2 1/32	1 4 1/64	—	—	—
50 lb.	ASCE	3 3/8	3 3/8	2 1/8	7/16	1 1/8	2 1/16	1 1/16	1 23/32	—	—	—
55 lb.	ASCE	4 1/16	4 1/16	2 1/4	1 5/32	1 1/64	2 1/64	2 3/32	1 10 3/128	—	—	—
60 lb.	ASCE	4 1/4	4 1/4	2 3/8	3 1/64	1 7/32	2 1/64	4 9/64	1 11 5/128	6040	60 AS	603
	MISC.	4 1/4	4 1/16	2 5/16	1 1/2	1 7/16	2 1/6	1 1/16	1 3/4	6051	—	—
65 lb.	ASCE	4 1/16	4 1/16	2 13/32	1 1/2	1 9/32	2 3/8	2 5/32	1 31/32	6540	65 AS	653
70 lb.	ASCE	4 5/8	4 5/8	2 1/16	3 3/64	1 11/32	2 15/32	1 3/16	2 3/64	7040	70 AS	701
75 lb.	ASCE	4 13/16	4 13/16	2 15/32	1 7/32	1 2 7/64	2 3 5/64	2 7/32	2 15 1/128	7540	75 AS	753
	MO. PAC.	4 3/4	4 3/4	2 9/16	9/16	1 7/16	2 1 5/32	2 7/32	2 5/64	7550	75 MP	—
	S. PAC.	4 15/16	4 7/16	2 7/16	3 3/64	1 3/8	2 2 5/8	1 5/16	2 1/4	7524	75 SP	757
80 lb.	ASCE	5	5	2 1/2	3 5/64	1 1/2	2 5/8	7/8	2 3/16	8040	80 AS	800
	DUDLEY	5 5/8	5	2 1 3/32	1 7/32	1 1/2	2 3/4	7/8	2 1/4	8022	80 DY	—
85 lb.	ASCE	5 3/16	5 3/16	2 9/16	9/16	1 3 5/64	2 3/4	5 7/64	2 1 7/64	8540	85 AS	851
	CAN. PAC.	5 5/8	5	2 1/2	9/16	1 7/16	2 1 1/16	1	2 1 1/32	8524	85 CP	—
	CB&Q	5 3/16	5 3/16	2 2 1/32	9/16	1 3 5/64	2 3/4	5 7/64	2 1 7/64	8543	85 CB	852
	MO. PAC.	5 7/32	5 1/4	2 1 5/32	1 3/4	1 7 1/28	2 2 3/64	5 5/64	2 2 1/128	8550	—	—
	PS	5 5/8	4 5/8	2 1/2	1 7/32	1 2 1/32	2 1 5/32	1	2 1 5/64	8531	85 PS	—
	PRR	5	5	2 2 1/6	1 7/32	1 3/4	2 2 3/8	7/8	2 1 1/16	8533	85 PR	—
	SOO LINE	5 3/8	4 3/8	2 1/2	9/16	1 1 5/32	2 2 3/32	1	2 2 3/64	8520	—	—
90 lb.	ASCE	5 3/8	5 3/8	2 5/8	9/16	1 1 9/32	2 2 5/64	5 9/64	2 4 5/128	9040	90 AS	—
	ARA-A	5 5/8	5 5/8	2 9/16	9/16	1 1 5/32	3 5/32	1	2 3 7/64	9020	90 RA	902
	ARA-B	5 1 7/64	4 4 9/64	2 9/16	9/16	1 3 5/64	2 5/8	1 1/32	2 1 1/32	9030	90 RB	905
	AT&SF	5 5/8	5 5/16	2 9/16	9/16	1 1 5/32	3 3/32	1	2 3 7/64	9021	90 SF	903
	C&NW	5 1 7/32	5 5/32	2 1/2	1/2	1 1 7/32	2 2 1/32	1 1/32	2 2 3/64	9035	90 OM	—
	D&RG	5 1/2	5 1/6	2 9/16	9/16	1 5/8	2 7/8	1	2 5/8	—	—	906
	GRT. NO.	5 3/8	5	2 5/8	9/16	1 1 5/32	2 7/8	1 1/32	2 1 5/32	9024	—	—
	INTRBGH	5	5	2 7/8	1 1/16	1 2 5/32	2 1 1/32	7/8	2 3/64	9050	90 RT	—
	U. PAC.	5 3/4	5 3/8	2 3/4	1 7/32	1 1/2	3 3/8	7/8	2 2 1/16	9023	—	901
	DUDLEY	5 1/2	5	2 2 1/32	9/16	1 1/2	3 1/32	3 1/32	2 3/8	—	90 DY	—
100 lb.	ASCE	5 3/4	5 3/4	2 3/4	9/16	1 4 5/64	3 5/64	3 1/32	2 6 5/128	10040	100 AS	—
	PS	5 1 1/16	5	2 4 3/64	9/16	1 1 3/16	2 2 5/32	1 3/32	2 3 1/64	10031	100 PS	—
	PRR	5 1/2	5 1/2	2 1 1/16	5/8	1 7/8	2 1 1/16	1 5/16	2 9/32	10033	100 PR	—
	ARA-A	6	5 1/2	2 3/4	9/16	1 9/16	3 3/8	1 1/16	2 3/4	10020	100 RA	1003
	ARA-B	5 4 1/64	5 5/64	2 2 1/32	9/16	1 4 5/64	2 5 5/64	1 5/64	2 6 5/128	10030	100 RB	1002
	AREA	6	5 3/8	2 1 1/16	9/16	1 2 1/32	3 9/32	1 1/16	2 4 5/64	10025	100 RE	10025
	C&NW	5 4 5/64	5 5/64	2 9/16	9/16	1 3 5/64	2 9 1/64	1 5/64	2 7 1/128	10035	100-DM	—
	GRT. NO.	5 3/4	5	2 3/4	9/16	1 5/8	3	1 1/8	2 5/8	10036	100 GN	—
	INTRBGH	5 3/4	5 3/4	2 7/8	9/16	1 4 5/64	3 5/64	3 1/32	2 6 5/128	10005	100 RT	—
	NY.NH&H	6	5 1/2	2 3/4	1 9/32	1 2 3/32	3 1 1/32	1 5/16	2 3 9/64	10034	100 NH	—
	READING	5 5/8	5 3/8	2 2 1/32	9/16	1 4 5/64	2 5 5/64	1 1/16	2 6 3/128	10032	100 RG	—
101 lb.	DL&W	5 7/16	5 3/8	2 3/4	5/8	1 2 3/32	2 1 1/16	1 1/32	2 3/8	10133	101 DL	—
105 lb.	DL&W	6	5 3/8	2 3/4	5/8	1 2 3/32	3 3/4	1 1/32	2 2 1/32	10533	105 DL	—
	DUDLEY	6	5 1/2	3	5/8	1 3/8	3 1 3/32	3 1/32	2 4 5/64	10524	105 DY	—
110 lb.	AREA	6 1/4	5 1/2	2 2 5/32	1 9/32	1 2 3/32	3 1 3/32	1 1/8	2 5 3/64	11025	110 RE	1100
	GR. NO.	6 1/2	5 1/2	2 3/4	1 9/32	1 5/8	3 3/4	1 3/8	3	11036	110 GN	—
	LE. VAL.	6	5 1/2	2 7/8	1 9/32	1 7/8	3 1/16	1 1/16	2 1 9/32	11033	110 LV	—
112 lb.	AREA	6 5/8	5 1/2	2 2 3/32	1 9/32	1 1 1/16	3 1 3/16	1 1/8	2 7/8	11228	112 RE	1121
	TR.	6 3/4	5 1/2	2 1/2	5/8	1 3/4	3 3/8	1 1/8	3 3/8	11229	—	1122
113 lb.	SO. PAC.	6 1 3/16	5 1/2	2 1 1/16	1 9/32	1 7/8	3 1 3/16	1 1/8	3 3/4	—	—	1130
115 lb.	AREA	6 5/8	5 1/2	2 2 3/32	5/8	1 1 1/16	3 1 3/16	1 1/8	2 7/8	11525	115 RE	1150
	DUDLEY	6 1/2	5 1/2	3	5/8	1 1 1/16	3 3/4	1 1/16	3 3/8	11522	115 DY	—
119 lb.	AREA	6 1 3/16	5 1/2	2 2 1/32	5/8	1 7/8	3 1 3/16	1 1/8	2 7/8	11937	119 RE	1190
127 lb.	DUDLEY	7	6 1/4	3	2 1/32	1 1 1/16	4 5/32	1 5/32	3 3/8	12723	127 DYM	—
130 lb.	PS	6 5/8	5 1/2	3	1 1/16	2	3 1 3/32	1 1/2	2 3/4	13031	130 PS	—
	AREA	6 3/4	6	2 5 1/16	2 1/32	1 2 7/32	3 1 1/16	1 1/32	3 1/16	13025	130 RE	1300
131 lb.	AREA	7 1/8	6	3	2 1/32	1 3/4	4 3/16	1 3/16	3 3/4	13128	131 RE	1311
132 lb.	AREA	7 1/8	6	3	2 1/32	1 3/4	4 3/16	1 3/16	3 3/32	13228	132 RE	1321
133 lb.	AREA	7 1/16	6	3	1 1/16	1 5/16	3 1 5/16	1 3/16	3	13331	—	1330
136 lb.	LE. VAL.	7	6 1/2	2 1 5/16	2 1/32	1 7/8	3 7/8	1 1/4	3 3/16	13633	136 LV	—
	AREA	7 5/16	6	2 1 5/16	1 1/16	1 1 5/16	4 3/16	1 3/16	3 3/32	13622	136 RE	13637
140 lb.	AREA	7 3/16	6	3	3/4	2 1/16	4 1/16	1 3/16	3	—	140 RE	—
	PS	7 5/16	6	3	3/4	2 1/16	4 1/16	1 3/16	3	14031	140 PS	—
152 lb.	PS	8	6 3/4	3	1 1/16	1 2 7/32	4 7/8	1 9/32	3 3/4	15222	152 PS	—
155 lb.	PS	8	6 3/4	3	3/4	2 1/16	4 2 1/32	1 9/32	3 3/8	15531	155 PS	—



Rail Sections



HT - Height

BW - Width of Base

HW - Width of Head

W - Web
(at center point)

HD - Depth of Head

FD - Fishing

BD - Depth of Base

E - Bolt Hole Elevation

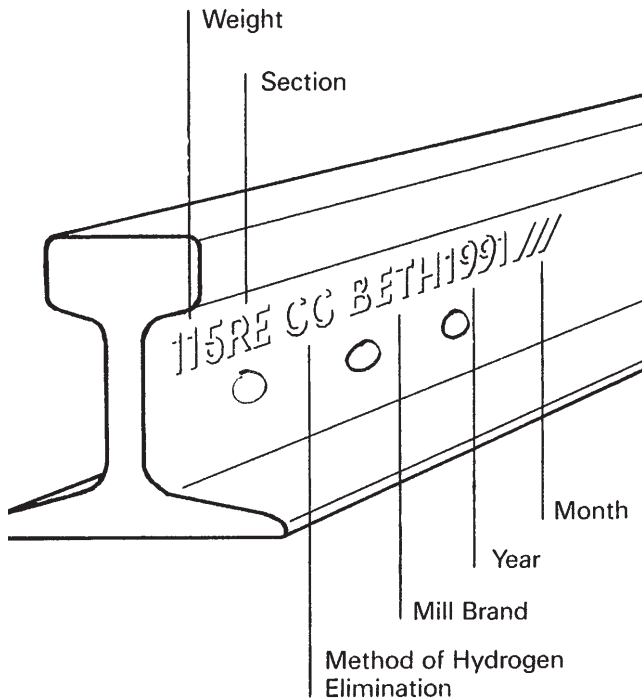
Rail Weight and Section	Height	Base Width	Head Width	Web	Head Depth	Fishing	Base Depth	Bolt Hole Elevation	Section Designation
175-CRANE	6	6	4¼	1½	1¾	3⁄64	1⁄64	2 ²¹ / ₃₂	17551
171-CRANE	6	6	4.3	1¼	2	2¾	1¼	2 ⁵ / ₈	171CR
140-AREA	7 ⁷ / ₁₆	6	3	¾	2 ¹ / ₁₆	4 ¹ / ₁₆	1 ³ / ₁₆	3	14025
136-AREA	7 ⁷ / ₁₆	6	2 ¹⁵ / ₁₆	1 ¹ / ₁₆	1 ¹⁵ / ₁₆	4 ³ / ₁₆	1 ³ / ₁₆	3 ³ / ₃₂	13622
135-CRANE	5¾	5 ³ / ₁₆	3 ¹ / ₁₆	1¼	1 ⁷ / ₈	2 ¹³ / ₁₆	1 ¹ / ₁₆	2 ¹⁵ / ₃₂	13551
133-AREA	7 ¹ / ₁₆	6	3	1 ¹ / ₁₆	1 ¹⁵ / ₁₆	3 ¹⁵ / ₁₆	1 ³ / ₁₆	3	13331
132-AREA	7 ¹ / ₈	6	3	2 ¹ / ₃₂	1¾	4 ³ / ₁₆	1 ³ / ₁₆	3 ³ / ₃₂	13225
131-AREA	7 ¹ / ₈	6	3	2 ¹ / ₃₂	1¾	4 ³ / ₁₆	1 ³ / ₁₆	3 ¹ / ₄	13128
119-AREA	6 ¹³ / ₁₆	5½	2 ² / ₃₂	¾	1 ⁷ / ₈	3 ¹³ / ₁₆	1 ⁷ / ₈	2 ⁷ / ₈	11925
115-AREA	6 ⁵ / ₈	5½	2 ²³ / ₃₂	5⁄8	1 ¹¹ / ₁₆	3 ¹³ / ₁₆	1 ⁷ / ₈	2 ⁷ / ₈	11525
112-AREA	6 ⁵ / ₈	5½	2 ²³ / ₃₂	1 ⁹ / ₃₂	1 ¹¹ / ₁₆	3 ¹³ / ₁₆	1 ⁷ / ₈	2 ⁷ / ₈	11225
110-AREA	6¼	5½	2 ²⁵ / ₃₂	1 ⁹ / ₃₂	1 ²³ / ₃₂	3 ¹³ / ₃₂	1 ⁷ / ₈	2 ⁵³ / ₆₄	11025
105-CRANE	5 ³ / ₁₆	5 ³ / ₁₆	3	1 ⁵ / ₁₆	1 ²⁵ / ₃₂	2 ¹³ / ₃₂	1	2 ¹³ / ₆₄	10551
105-DUDLEY	6	5½	2¾	¾	1 ⁵ / ₈	3 ¹³ / ₃₂	3 ¹ / ₃₂	2 ⁴³ / ₆₄	10524
104-CRANE	5	5	2½	1	1½	2 ¹ / ₁₆	1 ¹ / ₁₆	2 ⁷ / ₁₆	104CR
100-ARA-A	6	5½	2¾	9⁄16	1 ⁹ / ₁₆	3 ³ / ₈	1 ¹ / ₁₆	2 ³ / ₄	10020
100-ARA-B	5 ⁴¹ / ₆₄	5 ⁹ / ₆₄	2 ² / ₃₂	9⁄16	1 ⁴⁵ / ₆₄	2 ⁵⁵ / ₆₄	1 ⁵ / ₆₄	2 ⁸⁵ / ₁₂₈	10030
100-AREA	6	5 ³ / ₈	2 ¹ / ₁₆	9⁄16	1 ²¹ / ₃₂	3 ³ / ₃₂	1 ¹ / ₁₆	2 ⁴⁵ / ₆₄	10025
90-ASCE	5 ³ / ₈	5 ³ / ₈	2 ⁵ / ₈	9⁄16	1 ¹⁹ / ₃₂	2 ⁵⁵ / ₆₄	5 ⁹ / ₆₄	2 ⁴⁵ / ₁₂₈	9040
90-ARA-A	5 ³ / ₈	5 ¹ / ₈	2 ⁹ / ₁₆	9⁄16	1 ¹⁵ / ₃₂	3 ⁵ / ₃₂	1	2 ³⁷ / ₆₄	9020
90-ARA-B	5 ¹⁷ / ₆₄	4 ⁴⁹ / ₆₄	2 ⁹ / ₁₆	9⁄16	1 ³⁹ / ₆₄	2 ⁵ / ₈	1 ¹ / ₃₂	2 ¹¹ / ₃₂	9030
85-ASCE	5 ³ / ₁₆	5 ³ / ₁₆	2 ⁹ / ₁₆	9⁄16	1 ³⁵ / ₆₄	2 ³ / ₄	5 ⁷ / ₆₄	2 ¹⁷ / ₆₄	8540
80-ASCE	5	5	2½	3 ⁵ / ₆₄	1½	2 ⁵ / ₈	7⁄8	2 ³ / ₁₆	8040
70-ASCE	4 ³ / ₈	4 ³ / ₈	2 ¹ / ₁₆	3 ³ / ₆₄	1 ¹¹ / ₃₂	2 ¹⁵ / ₃₂	1 ³ / ₁₆	2 ³ / ₆₄	7040
60-ASCE	4¼	4¼	2 ³ / ₈	3 ¹ / ₆₄	1 ⁷ / ₃₂	2 ¹⁷ / ₆₄	4 ⁹ / ₆₄	1 ¹¹⁵ / ₁₂₈	6040
40-ASCE	3½	3½	1 ⁷ / ₈	2 ⁵ / ₆₄	1 ¹ / ₆₄	1 ⁵⁵ / ₆₄	5⁄8	1 ⁷¹ / ₁₂₈	4040
30-ASCE	3 ¹ / ₈	3 ¹ / ₈	1 ¹ / ₁₆	2 ¹ / ₆₄	7⁄8	1 ²³ / ₃₂	1 ⁷ / ₃₂	1 ²⁵ / ₆₄	3040
25-ASCE	2¾	2¾	1½	1 ⁹ / ₆₄	2 ⁵ / ₃₂	1 ³¹ / ₆₄	3 ¹ / ₆₄	1 ²⁹ / ₁₂₈	2540
20-ASCE	2 ⁵ / ₈	2 ⁵ / ₈	1 ¹ / ₃₂	¼	2 ³ / ₃₂	1 ¹⁵ / ₃₂	7⁄16	1 ¹¹ / ₆₄	2040
16-ASCE	2 ³ / ₈	2 ³ / ₈	1 ¹ / ₆₄	7⁄32	4 ¹ / ₆₄	1 ²³ / ₆₄	3⁄8	1 ¹ / ₁₆	1640
12-ASCE	2	2	1	3⁄16	9⁄16	1 ³ / ₃₂	1 ¹ / ₃₂	5 ¹ / ₆₄	1240

All dimensions are in inches.



Unitrac Railroad Materials Inc.

Rail Identification



By referring to the rail section page and matching dimensions, the type and weight of most rails can be easily identified. Web markings are another easy method of rail identification, as shown below.

EXAMPLE:

In the figure shown the markings indicate the following:

WEIGHT - The rail is 115 lbs. per yard

SECTION - RE indicated 25 rail

METHOD OF HYDROGEN ELIMINATION -

CC indicates Control Cooled rail

MILL BRAND - Rail was rolled by Bethlehem Steel

YEAR - Rolled in 1991

MONTH - Three vertical slashes indicate the third month.

Rail is rolled to standard specifications established by the following engineering organizations.

AREA - American Railway Engineering Association

ARA - American Railway Association

Class A - (RA) higher rail for high speeds

Class B - (RB) lower rail for heavy loads at low speeds

ASCE - American Society of Civil Engineers

SUFFIX	ENGINEERING ASSOCIATION	EXAMPLES
20 =	ARA-A	9020, 10020 = 90RA, 100RA
25 =	AREA	10025, 11525 = 100RE, 115RE
30 =	ARA-B	9030, 10030 = 90RB, 100RB
40 =	ASCE	6040, 8540 = 60AS, 85AS

HOW TO ORDER:

1. Specify rail weight and section
2. Specify rail drilling
3. Number of pieces required,
Net tons required or Track feet required.
4. New or Relay



Rail Grading for Relay Rail

Rail Weight	Maximum Rail Wear - Inches		General Rail Use & Rail Condition
	Top	Gage	
Class I			
140	1/4	1/2	Main Line use - Very minor engine burns and corrugation.
132-131	3/16	1/2	
122	5/32	7/16	
115	1/8	3/8	
112	1/8	1/4	
100	1/8	1/8	
90	1/8	1/8	
Class II			
140	3/8	3/4	Branch Lines - Small engine burns and corrugation.
132-131	5/16	3/4	
122	5/16	3/4	
115	5/16	3/4	
112	5/16	1/2	
100	3/16	1/4	
90	1/4	3/16	
Class III			
140	5/8	7/8	Light Branch Lines - Medium engine burns and corrugation, may be pitted and show some oxidation.
132-131	7/16	7/8	
122	1/2	7/8	
115	3/8	3/4	
112	3/8	3/4	
100	1/4	1/4	
90	5/16	5/16	
Class IV			
140	3/4	1	Yards - Any burns not mashed or fractured.
132-131	9/16	1	
122	11/16	1	
115	1/2	7/8	
112	1/2	7/8	
100	7/16	7/8	
90	3/8	3/8	

Taken from the A.R.E.A. manual for railway engineering. 4-2-60



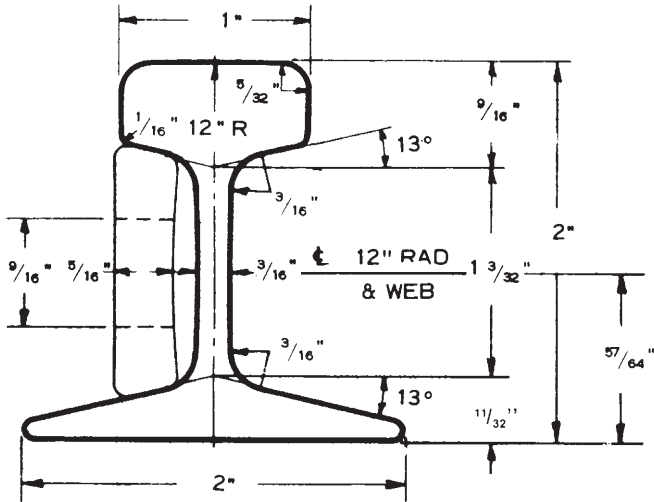
12-lb. A.S.C.E. Rail

RAIL

12 lbs. per yard
 21.12 net tons per mile of track
 250 feet of track per ton
 Stock length 20'0"

SPLICE BARS

16 1/8" length 2.9 lbs. per pair



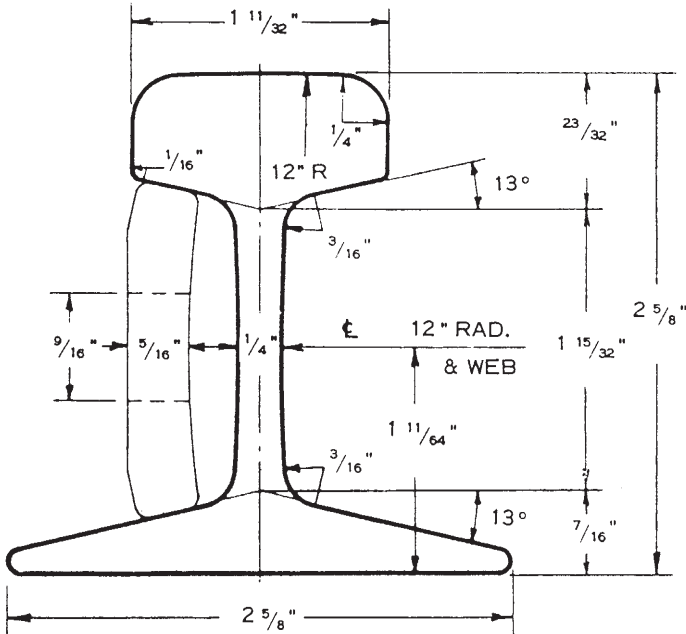
20-lb. A.S.C.E. Rail

RAIL

20 lbs. per yard
 35.2 net tons per mile of track
 150 feet of track per net ton
 Stock lengths 20'0" and 30'0"

SPLICE BARS

16 1/8" length 4.2 lbs per pair



30-lb. A.S.C.E. Rail

RAIL

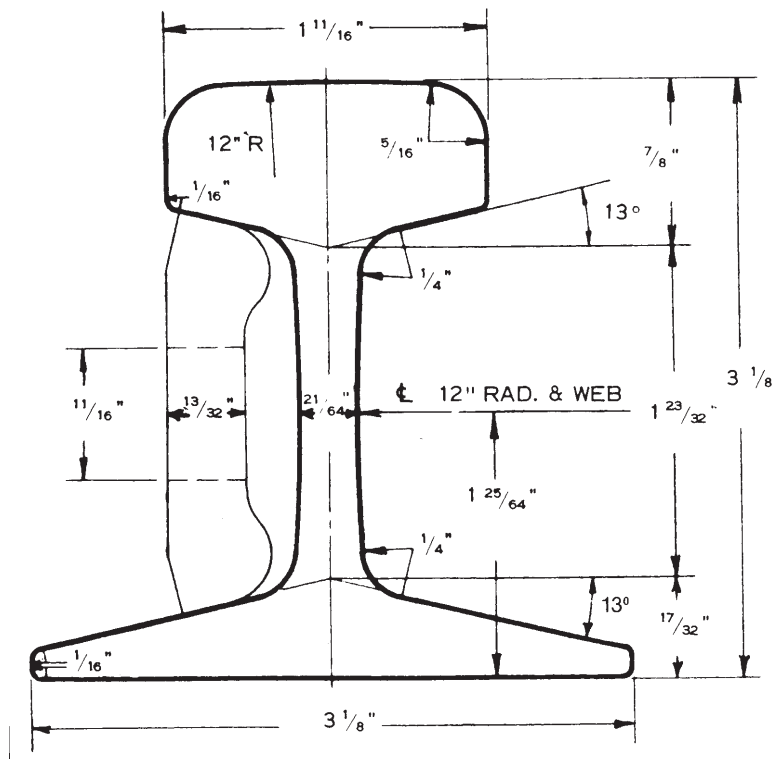
30 lbs. per yard
52.8 net tons per mile of track
100 feet of track per net ton
Stock lengths 20'0" and 30'0"

ANGLE BARS

10.9 lbs. per pair

SPLICE BARS

7.0 lbs. per pair
16 1/8" length



Unitrac rail and materials inc.

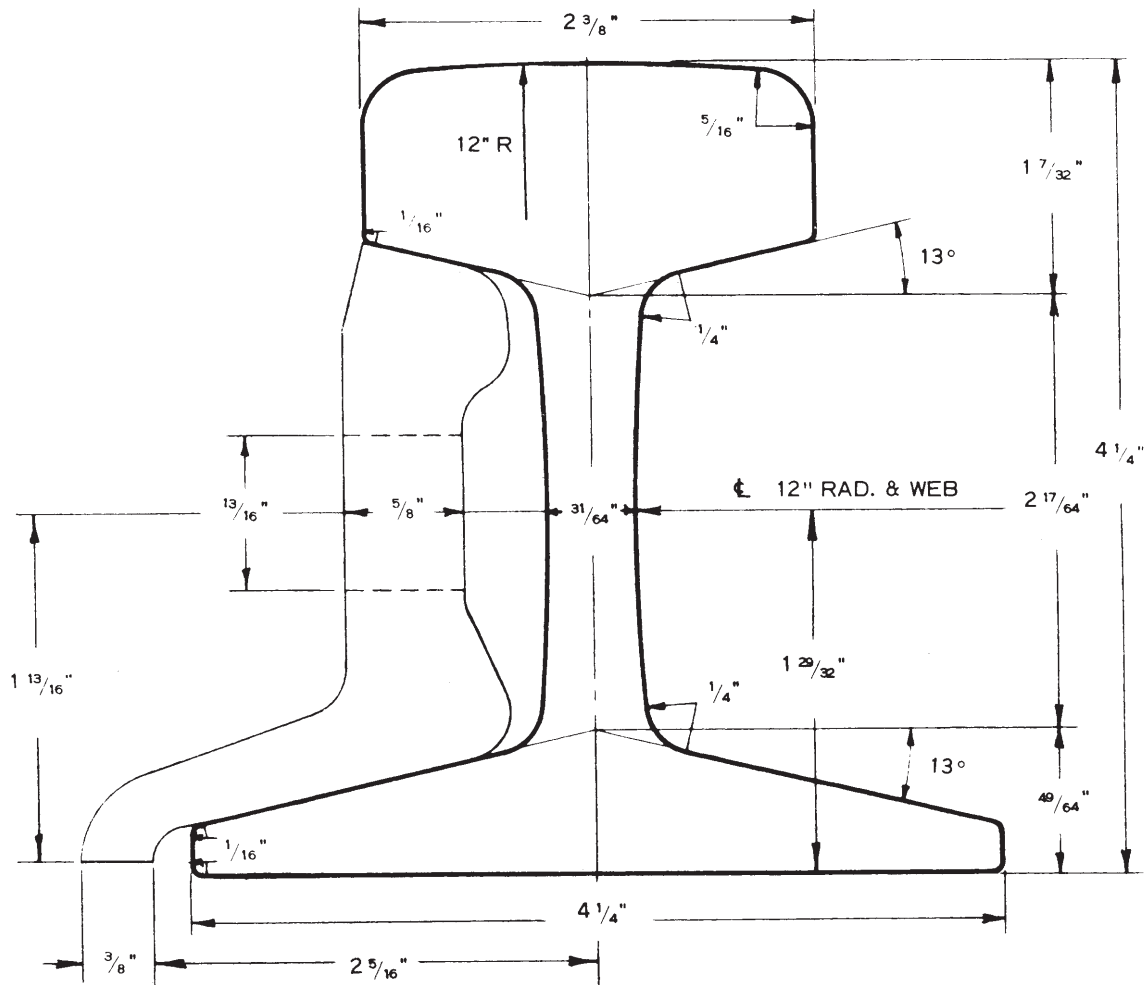
60-lb. A.S.C.E. Rail

RAIL

60 lbs. per yard
105.6 net tons per mile of track
50 feet of track per net ton
Stock length 30'0"

ANGLE BARS

20" length 27.2 lbs. per pair
24" length 32.5 lbs. per pair



Unitrac Railroad Materials Inc.

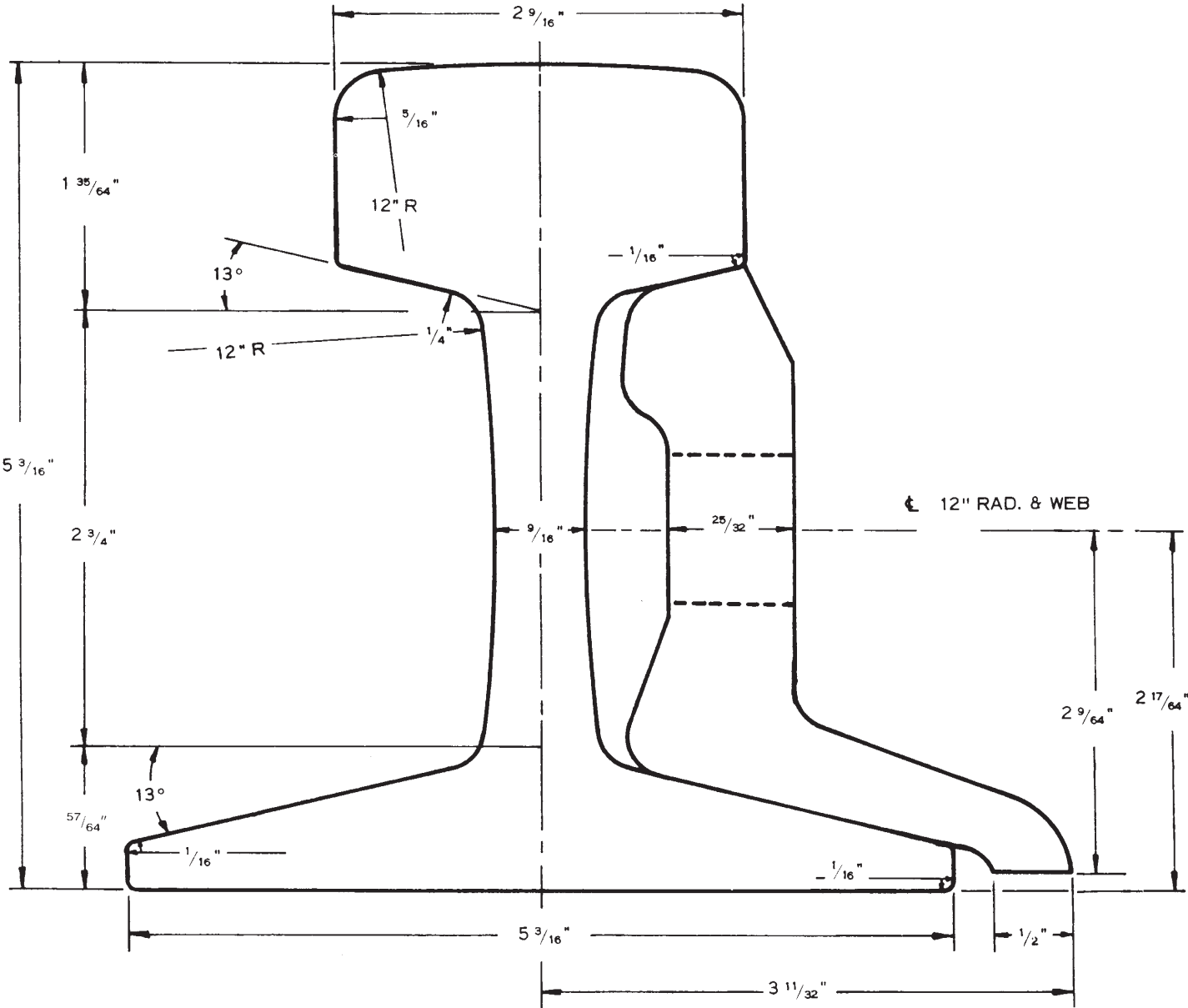
85-lb. A.S.C.E. Rail

RAIL

85 lbs. per yard
 149.6 net tons per mile of track
 35.3 feet of track per net ton
 Stock length 39'0"

ANGLE BARS

24" length 49.6 lbs. per pair
 (Toeless and Headfree bars also available)



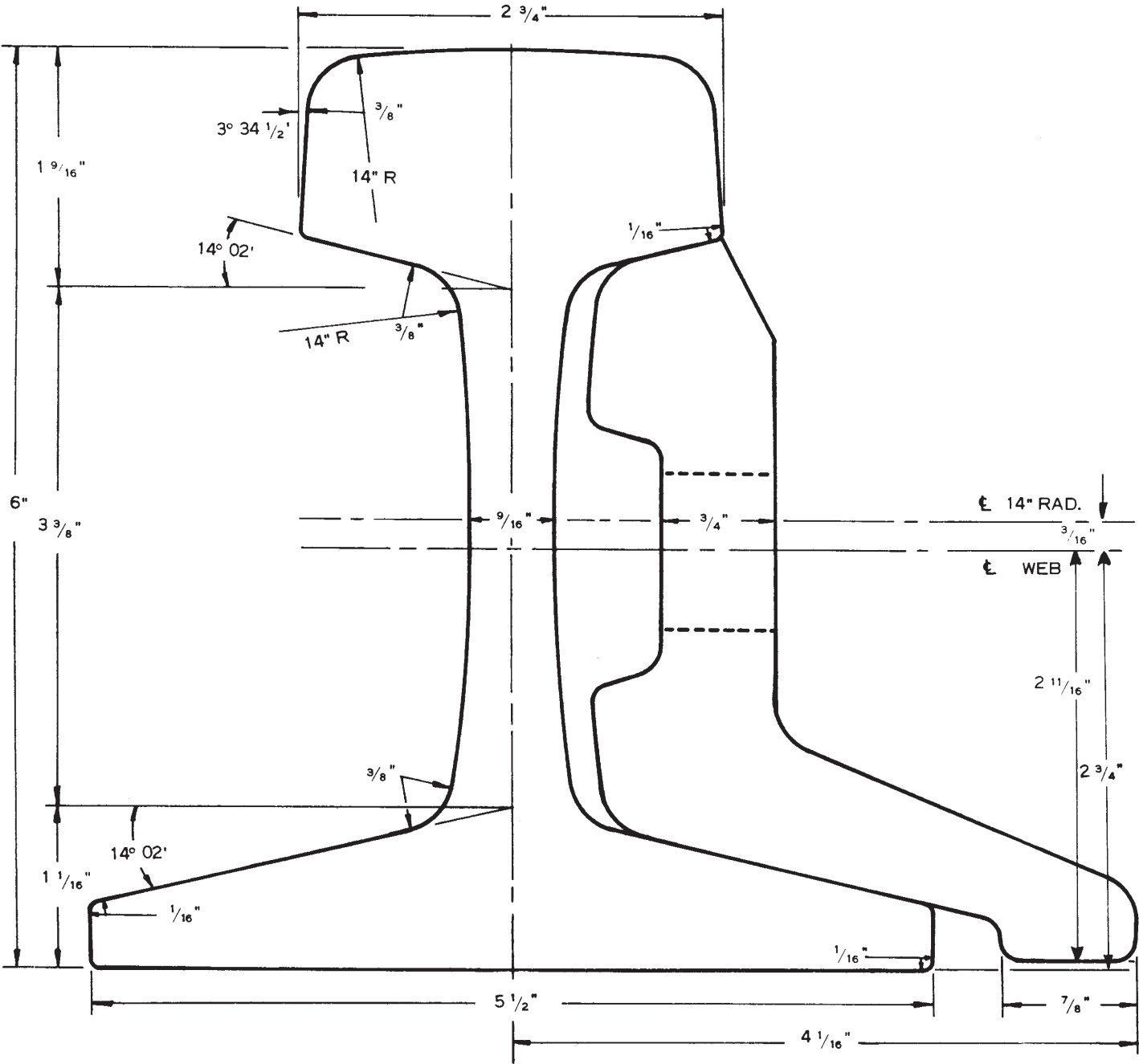
100-lb. A.R.A.- A. Rail

RAIL

100 lbs. per yard
 176 net tons per mile of track
 Stock length 39'0"

ANGLE BARS

24" length 76.2 lbs. per pair



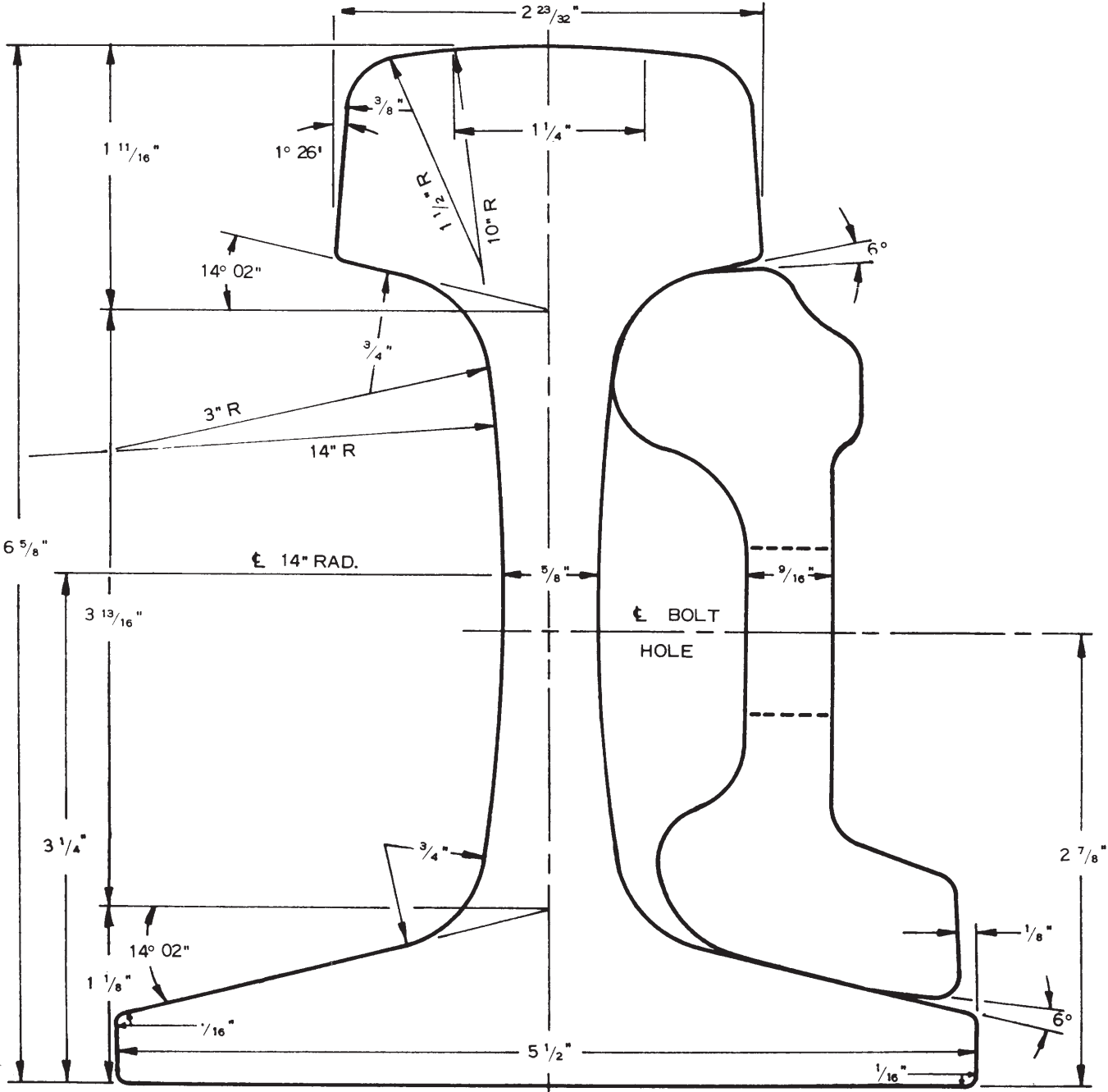
115-lb. A.R.E.A. Rail

RAIL

115 lbs. per yard
 202.4 net tons per mile of track
 Stock length 39'0"

JOINT BARS

24" length 62.54 lbs. per pair
 36" length 93.84 lbs. per pair



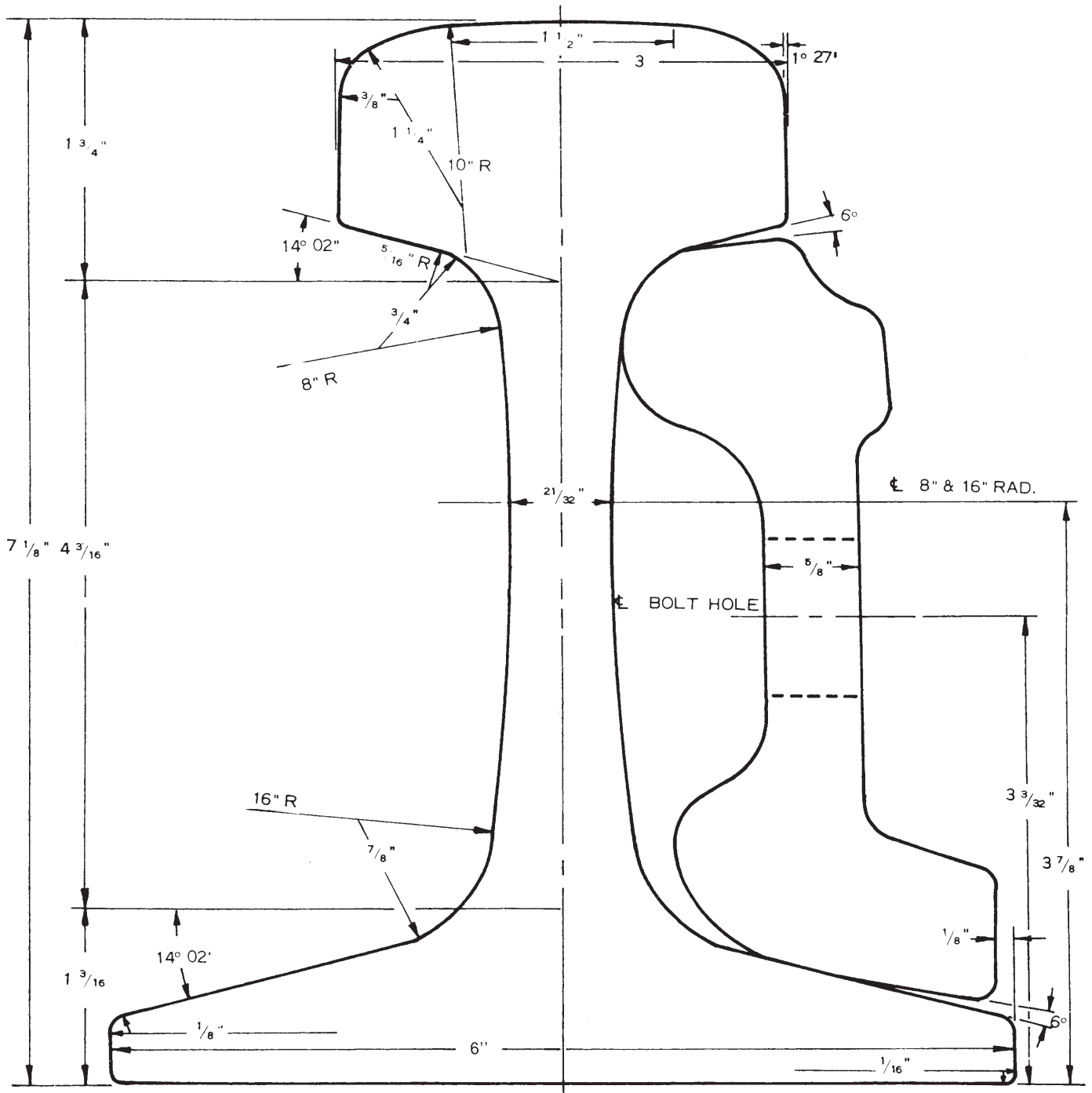
132-lb. A.R.E.A. Rail

RAIL

132 lbs. per yard
 232.3 net tons per mile of track
 Stock length 39'0"

JOINT BARS

24" length 75.37 lbs. per pair
 36" length 113.06 lbs. per pair



Unitrac Railroad Materials Inc.

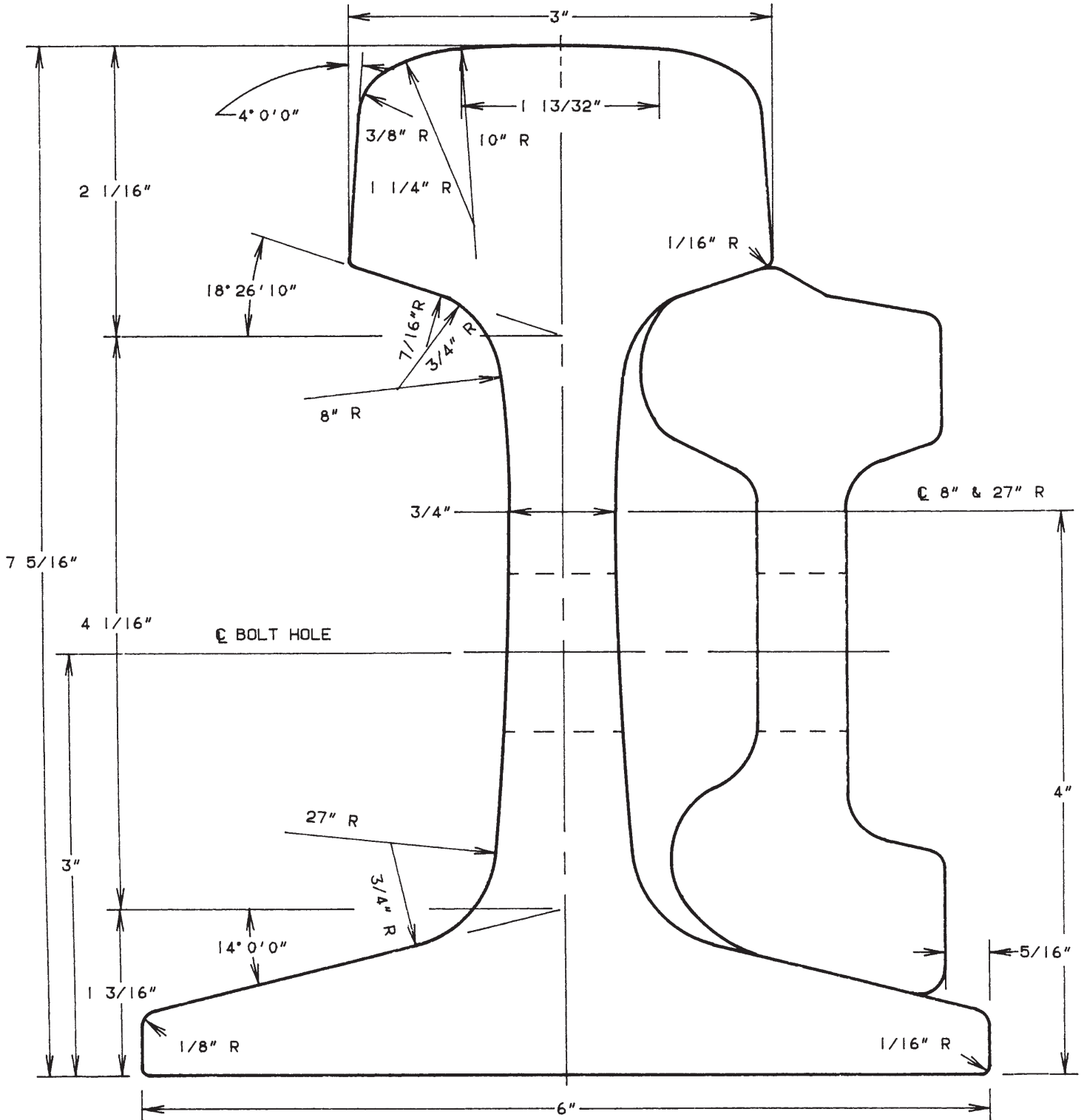
140-lb. A.R.E.A. Rail

RAIL - SECTION 140

140 lbs. per yard
 247.72 net tons per mile of track
 Stock length 39'0"

JOINT BARS

24" length 81.6 lbs. per pair
 36" length 122.4 lbs. per pair



Unitrac Railroad Materials Inc.