

NPB/WPB: SAIL/JINDAL

IS 2062: 2011

Length: 12 mtr

CHEMICAL COMPOSITION							
Grade	Quality	Ladle Ananlysis, Wt % Max					Carbon Equivalent Max
		C	Mn	S	P	Si	
E 250	BR	0.22	1.50	0.045	0.045	0.40	0.41
E 350	BR	0.20	1.55	0.045	0.045	0.45	0.47

MECHANICAL PROPERTIES						
Grade	Quality	Tensile Strength min MPa	Yield Stress min. MPa			% Elongation A, at Gauge (min)
			<20 mm	20-40 mm	>40 mm	
E 250	BR	410	250	240	230	23
E 350	BR	490	350	330	320	22

Country of Origin:

India

Dispatch Locations:

Kolkata

Sizes Available:

NPB: 100 x 55 mm to 750 x 270 mm

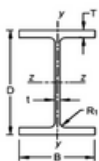
WPB: 100 x 100 mm to 450 x 300 mm

NPB Weight Chart

Size (in mm)	Weight per Meter in Kg	Dimensions				Weight per 12 Meter Pcs in Kg	Approx. Running Meter Length in 1 Metric Ton
		D	B	t	T		
100 x 55	8.100	100	55	4.1	5.7	97.200	123
200 x 100	22.360	200	100	5.6	8.5	268.320	45
200 x 100	25.090	202	102	6.2	9.5	301.080	40
250 x 125	30.110	250	125	6.0	9.0	361.320	33
270 x 135	30.730	267	135	5.5	8.7	368.760	33
270 x 135	36.070	270	135	6.6	10.2	432.840	28
270 x 135	42.260	274	136	7.5	12.2	507.120	24
300 x 150	36.530	297	150	6.1	9.2	438.360	27
300 x 150	42.240	300	150	7.1	10.7	506.880	24
300 x 150	49.320	304	152	8.0	12.7	591.840	20
350 x 170	50.220	357.6	170	6.6	11.5	602.640	20
350 x 170	57.100	360	170	8.0	12.7	685.200	18
350 x 170	66.050	364	172	9.2	14.7	792.600	15
400 x 180	57.380	397	180	7.0	12.0	688.560	17
400 x 180	66.310	400	180	8.6	13.5	795.720	15
400 x 180	75.670	404	182	9.7	15.5	908.040	13
450 x 190	67.160	447	190	7.6	13.1	805.920	15
450 x 190	77.580	450	190	9.4	14.6	930.960	13
450 x 190	92.370	456	192	11.0	17.6	1108.440	11

NPB Weight Chart

Size (in mm)	Weight per Meter in Kg	Dimensions				Weight per 12 Meter Pcs in Kg	Approx. Running Meter Length in 1 Metric Ton
		D	B	t	T		
450 x 190	104.000	460	194	12.0	19.6	1248.000	10
500 x 200	79.360	497	200	8.4	14.5	952.320	13
500 x 200	90.690	500	200	10.2	16.0	1088.280	11
500 x 200	107.320	506	202	12.0	19.0	1287.840	9
550 x 210	92.080	547	210	9.0	15.7	1104.960	11
550 x 210	105.520	550	210	11.1	17.2	1266.240	9
550 x 210	122.520	556	212	12.7	20.2	1470.240	8
600 x 220	107.570	597	220	9.8	17.5	1290.840	9
600 x 220	122.450	600	220	12.0	19.0	1469.400	8
600 x 220	154.470	610	224	15.0	24.0	1853.640	6
600 x 220	183.520	618	228	18.0	28.0	2202.240	5
750 x 270	173.000	762	267	14.4	21.6	2076.000	6
750 x 270	174.540	760	270	14.4	21.6	2094.480	6
750 x 270	185.000	766	267	14.9	23.6	2220.000	5
750 x 270	196.000	770	268	15.6	25.4	2352.000	5
750 x 270	202.490	770	270	15.6	26.6	2429.880	5



- » D : Depth
- » B : Flange Width
- » T : Flange thickness
- » t : Web thickness
- » R1 : Root radius



WPB Weight Chart

Size (in mm)	Weight per Meter in Kg	Dimensions				Weight per 12 Meter Pcs in Kg	Approx. Running Meter Length in 1 Metric Ton
		D	B	t	T		
100 x 100	12.24	91	100	4.2	5.5	146.88	82
100 x 100	16.67	96	100	5.0	8.0	200.04	60
100 x 100	20.44	100	100	6.0	10.0	245.28	49
100 x 100	41.79	120	106	12.0	20.0	501.48	24
120 x 120	14.56	109	120	4.2	5.5	174.72	69
120 x 120	19.89	114	120	5.0	8.0	238.68	50
120 x 120	26.69	120	120	6.5	11.0	320.28	37
120 x 120	52.13	140	126	12.5	21.0	625.56	19
140 x 140	18.07	128	140	4.3	6.0	216.84	55
140 x 140	24.66	133	140	5.5	8.5	295.92	41
140 x 140	33.72	140	140	7.0	12.0	404.64	30
140 x 140	63.24	160	146	13.0	22.0	758.88	16
150 x 150	23.50	152	152	5.8	6.8	282.00	43
150 x 150	30.11	158	153	6.5	9.4	361.32	33
150 x 150	36.97	162	154	8.0	11.5	443.64	27
160 x 160	22.75	148	160	4.5	7.0	273.00	44
160 x 160	30.44	152	160	6.0	9.0	365.28	33
160 x 160	42.59	160	160	8.0	13.0	511.08	23
160 x 160	76.19	180	166	14.0	23.0	914.28	13

WPB Weight Chart

Size (in mm)	Weight per Meter in Kg	Dimensions				Weight per 12 Meter Pcs in Kg	Approx. Running Meter Length in 1 Metric Ton
		D	B	t	T		
200 x 200	34.65	186	200	5.5	8.0	415.80	29
200 x 200	37.34	200	200	6.1	8.9	448.08	27
200 x 200	42.26	190	200	6.5	10.0	507.12	24
200 x 200	50.92	194	202	8.0	12.0	611.04	20
200 x 200	61.30	200	200	9.0	15.0	735.60	16
240 x 240	47.40	224	240	6.5	9.0	568.80	21
240 x 240	60.32	230	240	7.5	12.0	723.84	17
240 x 240	83.20	240	240	10.0	17.0	998.40	12
240 x 240	156.68	270	248	18.0	32.0	1880.16	6
300 x 300	69.80	283	300	7.5	10.5	837.60	14
300 x 300	88.34	290	300	8.5	14.0	1060.08	11
300 x 300	100.85	294	300	10.0	16.0	1210.20	10
300 x 300	117.03	300	300	11.0	19.0	1404.36	9
300 x 300	237.92	340	310	21.0	39.0	2855.04	4
340 x 300	78.90	320	300	8.5	11.5	946.80	13
340 x 300	104.78	330	300	9.5	16.5	1257.36	10
340 x 300	134.16	340	300	12.0	21.5	1609.92	7
340 x 300	290.64	377	309	21.0	40.0	3487.68	3
450 x 300	99.75	425	300	10.0	13.5	1197.00	10

WPB Weight Chart

Size (in mm)	Weight per Meter in Kg	Dimensions				Weight per 12 Meter Pcs in Kg	Approx. Running Meter Length in 1 Metric Ton
		D	B	t	T		
450 x 300	139.76	440	300	11.5	21.0	1677.12	7
450 x 300	171.12	450	300	14.0	26.0	2053.44	6
450 x 300	263.33	478	307	21.0	40.0	3159.96	4

Larger Sizes Available:

- 600 x 300
- 800 x 300
- 700 x 300
- 900 x 300

Used as Electric Pole:

- 160 x 160 x 30.44 Kg/m

Used as Steel Sleepers for Railway Bridges:

- 200 x 200 x 37.34 Kg/m
- 240 x 240 x 60.34 Kg/m

TOLERANCE

As per IS 12778:1989 & DIN 1025: 1994

Sectional Tolerance

Thickness	Tolerance
Upto 3 mm	$\pm 5\%$
> 3 mm	$\pm 4\%$

As per IS 12778:1989 & DIN 1025: 1994

Dimensional Tolerance

Depth	Tolerance	Width of Flange
Upto 200 mm	± 2.5 mm	± 2 mm
>200 to 400 mm	± 3 mm	± 2 mm
> 400 mm	± 4 mm	± 4 mm



Applications:

Used in a range of industrial applications, including:

- **Construction Support Beams for commercial & residential construction**
- Industrial Building Refineries, Steel & Power Plants
- **Warehouses**
- Trailer and Truck bed framing
- **Support beams and columns in bridges**
- Support frames and columns for trolley ways, lifts, hoists & Machine bases
- **Mezzanines and platforms Freight cars**
- Freight cars
- **Scaffoldings**

