

**ANNEXURE - V**  
**REINFORCEMENT CHARACTERISTICS**

Note:- 1 cum of steel weights 7.843 M.T. or 1cft of steel weights 490 lbs.

(A) Square and Round Bars

Diameter or width m	Weight per metre		<u>Sectional area</u>		<u>Perimeter</u>	
	Square kg	Round kg	Square c m <sup>2</sup>	Round c m <sup>2</sup>	Square c m	Round c m
5	0.20	0.15	0.25	0.20	2.0	1.57
5.5	0.24	0.19	0.30	0.24	2.2	1.73
6	0.28	0.22	0.36	0.28	2.4	1.88
7	0.38	0.30	0.49	0.38	2.8	2.20
8	0.50	0.39	0.64	0.50	3.2	2.51
9	0.64	0.50	0.81	0.64	3.6	2.83
10	0.78	0.62	1.00	0.79	4.0	3.04
11	0.95	0.75	1.21	0.95	4.4	3.46
12	1.13	0.89	1.44	1.13	4.8	3.77
14	1.54	1.21	1.96	1.54	5.6	4.00
16	2.01	1.58	2.56	2.01	6.4	5.03
18	2.54	2.00	3.24	2.54	7.2	5.65
20	3.14	2.47	4.00	3.14	8.0	6.28
22	3.90	2.98	4.84	3.80	8.8	6.91
25	4.91	3.85	6.25	4.91	10.0	7.86
28	6.15	4.83	7.84	6.16	11.2	8.80
32	8.04	6.31	10.24	8.04	12.8	10.05
36	10.17	7.99	12.96	10.18	14.4	11.31
40	12.56	9.86	16.00	12.57	16.0	13.57

45	15.90	12.49	20.25	15.90	18.0	14.14
50	19.62	15.41	25.00	19.64	20.0	15.71
56	24.62	19.34	31.36	24.63	22.4	17.59
63	31.16	24.47	39.69	31.71	25.2	17.78
71	39.08	39.08	50.41	39.49	28.0	22.31
80	50.24	39.36	64.00	50.24	32.0	27.31

(B) Ribbed - Tor Steel

Size	mm	Area	cm <sup>2</sup>	Weight (kg/ m)	Perimeter	cm	Length	Per M.T. (metre)
6		0.283		0.222	1.89		4510	
8		0.503		0.395	2.51		2532	
10		0.785		0.617	3.14		1621	
12		1.131		0.888	3.77		1125	
14		1.539		1.208	4.40		829	
16		2.011		1.578	5.03		633	
18		2.545		2.000	5.65		500	
20		3.142		2.466	6.28		405	
22		3.801		2.980	6.91		336	
25		4.909		3.854	7.85		260	
28		6.157		4.830	8.80		207	
32		8.042		6.313	10.05		159	
36		10.178		7.990	11.31		125	
40		12.566		9.864	12.57		101	
50		19.635		15.410	15.71		65	

## ( C ) Flats

### STANDARD NOMINAL DIMENTIONS AND WEIGHT OF FLATS IN KG PER METRE

#### THICKNESS

t in mm	5	5.5	6	7	8	9	10	11	12	14	16	18	20	22	25
Width b in mm															
12	0.5	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.3	1.5	1.7	1.9	2.1	2.4
											5				
16	0.6	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.8	2.0	2.3	2.5	2.8	3.1
20	0.8	0.9	0.9	1.1	1.3	1.4	1.6	1.7	1.9	2.2	2.5	2.8	3.1	3.5	3.9
25	1.0	1.1	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.7	3.1	3.5	3.9	4.3	4.9
32	1.3	1.4	1.5	1.8	2.0	2.3	2.5	2.8	3.0	3.5	4.0	4.5	5.0	5.5	6.3
40	1.6	1.7	1.9	2.2	2.5	2.8	3.1	3.5	3.8	4.4	5.0	5.7	6.3	6.9	7.8
50	2.0	2.2	2.4	2.7	3.1	3.5	3.5	4.3	4.7	5.5	6.3	7.1	7.8	8.6	9.8
63	2.5	2.7	3.0	3.5	4.0	4.5	4.9	5.4	5.9	6.9	7.9	8.9	9.9	10.9	12.4
80	3.1	3.5	3.8	4.4	5.0	5.7	6.3	6.9	7.5	8.8	10.0	11.3	12.6	13.8	15.7
100	3.9	4.3	4.7	5.5	6.3	7.1	7.8	8.6	9.4	11.0	12.6	14.0	15.7	17.5	19.6
125	4.9	5.4	5.9	6.9	7.8	8.8	9.8	10.8	11.8	13.7	15.7	17.7	19.6	21.6	24.5
160	6.3	6.9	7.5	8.8	10.0	11.3	12.6	13.8	15.1	17.6	20.1	22.6	25.1	27.6	31.4
200	7.8	8.6	9.4	11.0	12.6	14.4	15.7	17.3	18.8	22.0	25.1	28.3	31.4	34.5	39.2
250	9.8	10.8	11.8	13.7	15.7	17.7	19.7	21.6	23.6	27.5	31.4	35.3	39.2	43.2	49.1

Note:- Flats above 150 mm width are available only with rounded edges, square edge flats are available in lengths from 6.50 m to 13.50 m rising by 250 mm. Rounded edge flats are available in lengths from 6.50 m to 9.0 m rising by 250 mm and with a maximum of 15 percent shorts down to 3 metres.