

# STEEL WIRE MESH

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# Wire Mesh

## a) Chemical Composition, Tensile and Bend Requirements

### i) Steel Bars for Concrete Reinforcement

Specification	Grade	Chemical Composition				Tensile And Bend Test Requirements			
		C%	S%	P%	CE%	Yield Strength N/mm <sup>2</sup> (min.)	Tensile Strength N/mm <sup>2</sup> (min.)	Min. Elongation (Gauge Length L)	Bend Test
		Max	Max	Max	Max				
MS 146:2000 (Hot Rolled Steel Bars) (Ref: BS 4449:97)	Grade 250 (Mild Steel Bars)	0.25	0.06	0.06	0.42	250	Actual Yield Stress x 1.05	22%	For all sizes 2d former Bend Angle (3d) = 180° Rebend (5d) = 1st bend 45° Rebend 23°
	Grade 460 (High Yield Steel Bars)	0.25	0.05	0.05	0.51	460		12%	

### ii) Cold Reduced Mild Steel Wire for Reinforcement of Concrete

Specification	Chemical Composition					Tensile And Bend Test Requirements		
	C.E. %	C%	P%	S%	Yield Strength N/mm <sup>2</sup> (min.)	Tensile Strength N/mm <sup>2</sup> (min.)	Alternatively Min. Elongation	Rebend Test
	Max	Max	Max	Max				
MS 144 : 87 (Ref: BS 4482 : 85)	0.42	0.25	0.06	0.06	485	Actual Yield Stress x 1.05	12%	Bend Angle 45° 5d former. Rebend 23°

## b) Dimension and Unit Mass

### i) Imperial Size Fabric

Ref. No.	B.S REF. 1221A	Wire Spacing		Wire Size		Sectional Area of Wires / unit width in <sup>2</sup> /ft (mm <sup>2</sup> /m)	lb / sq. yd (kg/m <sup>2</sup> )
		Main (in.)	Cross (in.)	Main S.W.G (mm)	Cross S.W.G (mm)		
61	121	6	6	1 (7.62)	1	0.1414 (299)	8.65 (4.70)
62	122	6	6	2 (7.01)	2	0.1197 (253)	7.32 (3.97)
63	123	6	6	3 (6.40)	3	0.0998 (211)	6.10 (3.31)
64	124	6	6	4 (5.89)	4	0.0845 (179)	5.17 (2.81)
65	125	6	6	5 (5.38)	5	0.0706 (149)	4.32 (2.35)
66	126	6	6	6 (4.89)	6	0.0579 (123)	3.54 (1.92)
610	130	6	6	10 (3.25)	10	0.0257 (54)	1.58 (0.86)

### ii) Dimension and Technical Specification with Packing

REF. NO.	BS 4483 OR MS 145 REF. NO.	Main Wires		Cross Wire		Steel Area		Mass Per Unit Area (kg / M <sup>2</sup> )	Mass Per Std Sheet 8m x 2.2m	Standard Packing (Sheet)
		Diameter (mm)	Spacing (mm)	Diameter (mm)	Spacing (mm)	Main (mm <sup>2</sup> /m)	Cross (mm <sup>2</sup> /m)			
<b>Square Mesh</b>										
A4	A63	4	200	4	200	63	63	0.99	13.07	100
A5	A98	5	200	5	200	98	98	1.54	20.33	50
A6	A142	6	200	6	200	142	142	2.22	29.30	50
A7	A193	7	200	7	200	193	193	3.02	39.86	40
A8	A252	8	200	8	200	252	252	3.95	52.14	30
A9	A318	9	200	9	200	318	318	4.99	65.87	20
A10	A393	10	200	10	200	393	393	6.16	81.31	20
A12	A565	12	200	12	200	565	565	8.88	117.20	15
<b>Rectangular Mesh</b>										
B5	B196	5	100	7	200	196	193	3.05	40.26	40
B6	B283	6	100	7	200	283	193	3.73	49.24	30
B7	B385	7	100	7	200	385	193	4.53	59.80	25
B8	B503	8	100	8	200	503	252	5.93	78.28	20
B9	B636	9	100	8	200	636	252	6.97	92.00	15
B10	B785	10	100	8	200	785	252	8.14	107.45	15
B12	B1131	12	100	8	200	1131	252	10.90	143.88	10
<b>Long Rectangular Mesh</b>										
C5	C 196	5	100	5	400	196	49	1.93	25.48	50
C6	C 283	6	100	5	400	283	49	2.61	34.45	40
C7	C 385	7	100	5	400	385	49	3.41	45.01	30
C8	C503	8	100	5	400	503	49	4.34	57.29	25
C9	C 636	9	100	6	400	636	71	5.55	73.26	20
C10	C 785	10	100	6	400	785	71	6.72	88.70	15
<b>Small Square Mesh</b>										
DA4	DA 126	4	100	4	100	126	126	1.97	26.00	50
DA5	DA 196	5	100	5	100	196	196	3.08	40.66	40
DA6	DA 283	6	100	6	100	283	283	4.44	58.61	25
DA7	DA 385	7	100	7	100	385	385	6.04	79.73	20
DA8	DA 503	8	100	8	100	503	503	7.90	104.28	15
DA9	DA 636	9	100	9	100	636	636	9.98	131.74	10
DA10	DA 785	10	100	10	100	785	785	12.32	162.62	10