

APPENDIX-C

TABLE FOR CENTRAL DEFLECTION IN BEAMS

APPENDIX-C Contains Tables (C-1 to C-8) are for Central Deflection under, load condition for test beams of series - S.

TABLE - C1

LOAD DEFLECTION - CENTRAL DEFLECTION READING

L/D = 1.0

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	0.63	0.55	0.75	3.00	0.63	0.66	0.64
6.00	0.73	0.74	1.00	6.00	0.73	0.96	0.95
9.00	0.86	0.88	1.16	9.00	0.86	1.00	1.02
12.00	0.93	1.00	1.26	12.00	0.93	1.09	1.15
15.00	1.08	1.10	1.36	15.00	1.08	1.22	1.26
18.00	1.16	1.18	1.50	18.00	1.16	1.30	1.35
21.00	1.20	1.26	1.58	21.00	1.20	1.40	1.45
24.00	1.78	1.35	1.70	24.00	1.78	1.44	1.55
27.00		1.42	1.82	27.00		1.54	1.65
30.00		1.48	2.09	30.00		1.60	1.80
33.00		1.59	2.28	33.00		1.70	1.95
36.00		1.65	2.58	36.00		1.82	2.12
39.00		1.88	2.88	39.00		1.95	2.30
42.00		2.08	3.15	42.00		2.08	2.50
45.00		2.30		45.00		2.30	2.88
48.00		2.45		48.00		2.50	3.30
				50.00		3.10	

TABLE - C2

LOAD DEFLECTION - CENTRAL DEFLECTION READING

L/D = 1.2

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	0.75	0.72	0.73	3.00	0.75	0.72	0.70
6.00	0.93	0.92	0.90	6.00	0.93	0.92	0.90
9.00	1.145	1.10	1.10	9.00	1.145	1.00	1.10
12.00	1.36	1.18	1.28	12.00	1.36	1.20	1.26
15.00	1.48	1.30	1.45	15.00	1.48	1.39	1.40
18.00	1.65	1.40	1.60	18.00	1.65	1.58	1.66
21.00	1.80	1.50	1.75	21.00	1.80	1.75	1.90
24.00	1.98	1.58	1.90	24.00	1.98	1.88	2.20
27.00		1.65	2.08	27.00		2.05	2.45
30.00		1.80	2.26	30.00		2.18	3.20
33.00		1.98	2.44	33.00		2.35	3.50
36.00		2.14	2.65	36.00		2.51	3.64
39.00		2.45	2.88	39.00		2.71	3.95
42.00			3.35	42.00		2.93	
45.00				45.00		3.25	

TABLE - C3**LOAD DEFLECTION - CENTRAL DEFLECTION READING****L/D = 1.5**

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	1.20	0.50	0.65	3.00	1.20	0.84	1.01
6.00	1.55	0.70	0.82	6.00	1.55	1.08	1.33
9.00	1.85	0.84	1.05	9.00	1.85	1.245	1.59
12.00	2.11	0.95	1.20	12.00	2.11	1.40	1.78
15.00	2.32	1.05	1.35	15.00	2.32	1.55	1.95
18.00	3.11	1.20	1.50	18.00	3.11	1.70	2.15
21.00	3.68	1.34	1.70	21.00	3.68	1.98	2.27
24.00		1.51	1.98	24.00		2.04	2.51
27.00		1.65	2.16	27.00		2.24	2.73
30.00			2.46	30.00		2.45	2.86
33.00				33.00		2.80	2.90
36.00				36.00		2.98	3.18
39.00				39.00			

TABLE - C4**LOAD DEFLECTION - CENTRAL DEFLECTION READING****L/D = 2.0**

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	0.23	0.18	0.30	1.00	0.23	0.18	0.29
2.00	0.45	0.54	0.78	2.00	0.45	0.35	0.69
3.00	0.57	0.65	0.95	3.00	0.57	0.55	0.85
4.00	0.66	0.74	1.13	4.00	0.66	0.765	0.95
5.00	0.73	0.80	1.35	5.00	0.73	0.895	1.10
6.00	0.78	0.86	1.45	6.00	0.78	1.03	1.16
7.00	0.87	0.91	1.59	7.00	0.87	1.125	1.26
8.00	0.93	0.97	1.78	8.00	0.93	1.22	1.31
9.00	0.99	1.03	1.88	9.00	0.99	1.28	1.45
10.00	1.10	1.10	2.06	10.00	1.10	1.34	1.50
11.00	1.20	1.15	2.20	11.00	1.20	1.41	1.62
12.00	1.29	1.20	2.54	12.00	1.29	1.48	1.68
13.00	1.42	1.30	2.76	13.00	1.42	1.55	1.78
14.00	1.56	1.40	3.00	14.00	1.56	1.63	1.85
15.00		1.48	3.33	15.00		1.71	1.98
16.00		1.56		16.00		1.80	2.06
17.00		1.60		17.00		1.90	2.15

TABLE - C4 (Contd...)

LOAD DEFLECTION - CENTRAL DEFLECTION READING

L/D = 2.0

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
18.00		1.65		18.00		2.00	2.20
19.00		1.75		19.00		2.10	2.35
20.00		1.85		20.00		2.20	2.41
21.00		2.00		21.00		2.31	2.61
22.00		2.15		22.00		2.42	2.70
23.00		2.35		23.00		2.55	3.07
24.00		2.51		24.00		2.65	3.27
25.00				25.00		3.00	3.36
26.00				26.00		3.36	3.60

TABLE - C5

LOAD DEFLECTION - CENTRAL DEFLECTION READING

L/D = 3.0

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00	0.45	0.50	0.55	1.00	0.45	0.54	0.40
2.00	0.95	0.75	0.76	2.00	0.95	0.70	0.74
3.00	1.38	0.95	0.95	3.00	1.38	0.90	1.05
4.00	1.84	1.13	1.16	4.00	1.84	1.09	1.31
5.00	2.28	1.35	1.26	5.00	2.28	1.22	1.54
6.00	2.68	1.45	1.52	6.00	2.68	1.38	1.74
7.00	3.18	1.59	1.62	7.00	3.18	1.55	1.89
8.00		1.77	1.85	8.00		1.72	2.05
9.00		1.88	1.95	9.00		1.86	2.20
10.00		2.05	2.18	10.00		2.06	2.40
11.00		2.20	2.28	11.00		2.21	2.50
12.00		2.40	2.55	12.00		2.37	2.75
13.00		2.54	2.66	13.00		2.51	2.92
14.00		2.76	3.05	14.00		2.69	3.10
15.00		1.56	3.28	15.00		2.80	3.50
16.00		3.00		16.00		3.05	3.60
17.00				17.00		3.18	

TABLE - C6

LOAD DEFLECTION - CENTRAL DEFLECTION READING

L/D = 4.0

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.50	0.52	0.32	0.48	0.50	0.52	0.31	0.39
1.00	0.85	0.65	0.82	1.00	0.85	0.62	1.02
1.50	1.32	0.87	1.08	1.50	1.32	0.90	1.30
2.00	1.64	1.05	1.35	2.00	1.64	1.16	1.47
2.50	2.28	1.21	1.56	2.50	2.28	1.39	1.59
3.00	2.60	1.37	1.78	3.00	2.60	1.62	1.82
3.50	3.20	1.54	1.99	3.50	3.20	1.78	1.98
4.00	3.70	1.71	2.20	4.00	3.70	1.94	2.18
5.00		2.00	2.76	5.00		2.57	2.65
6.00		2.50	3.30	6.00		3.43	3.20
7.00		2.95		7.00		4.16	3.60
8.00		3.45		8.00		4.60	3.90
9.00				9.00			4.15

TABLE - C7

LOAD DEFLECTION - CENTRAL DEFLECTION READING

L/D = 5.0

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
0.50	0.68	0.34	0.46	0.50	0.68	0.38	0.48
1.00	1.20	0.80	0.98	1.00	1.20	0.96	0.98
1.50	1.90	1.17	1.30	1.50	1.90	1.25	1.30
2.00	2.80	1.47	1.60	2.00	2.80	1.555	1.62
2.50		1.60	1.97	2.50		1.75	1.80
3.00		2.00	2.27	3.00		2.20	2.28
3.50		2.41	2.62	3.50		2.65	2.75
4.00		3.04	2.97	4.00		3.20	3.24
4.50		4.00				3.36	3.45
						4.05	4.15
						4.30	4.40

TABLE - C8

LOAD DEFLECTION - CENTRAL DEFLECTION READING

L/D = 6.0

Load (t)	Deflection (mm)			Load (t)	Deflection (mm)		
	Plain	1% FF	1% HF		Plain	1.5% FF	1.5% HF
0.0	0.00	0.00	0.00	0.0	0.00	0.00	0.00
0.3	0.25	0.12	0.30	0.3	0.25	0.14	0.21
0.6	0.50	0.45	0.72	0.6	0.50	0.68	0.84
0.9	0.80	0.68	1.06	0.9	0.80	1.01	1.12
1.2	1.30	0.83	1.41	1.2	1.30	1.36	1.50
1.5	1.80	1.53	1.75	1.5	1.80	1.70	1.96
1.8	2.23	1.81	2.10	1.8	2.23	2.20	2.20
2.0	3.03	2.11	2.35	2.0	3.03	2.35	2.45
2.5		2.50	3.00	2.5		3.32	2.85
3.0				3.0			3.34