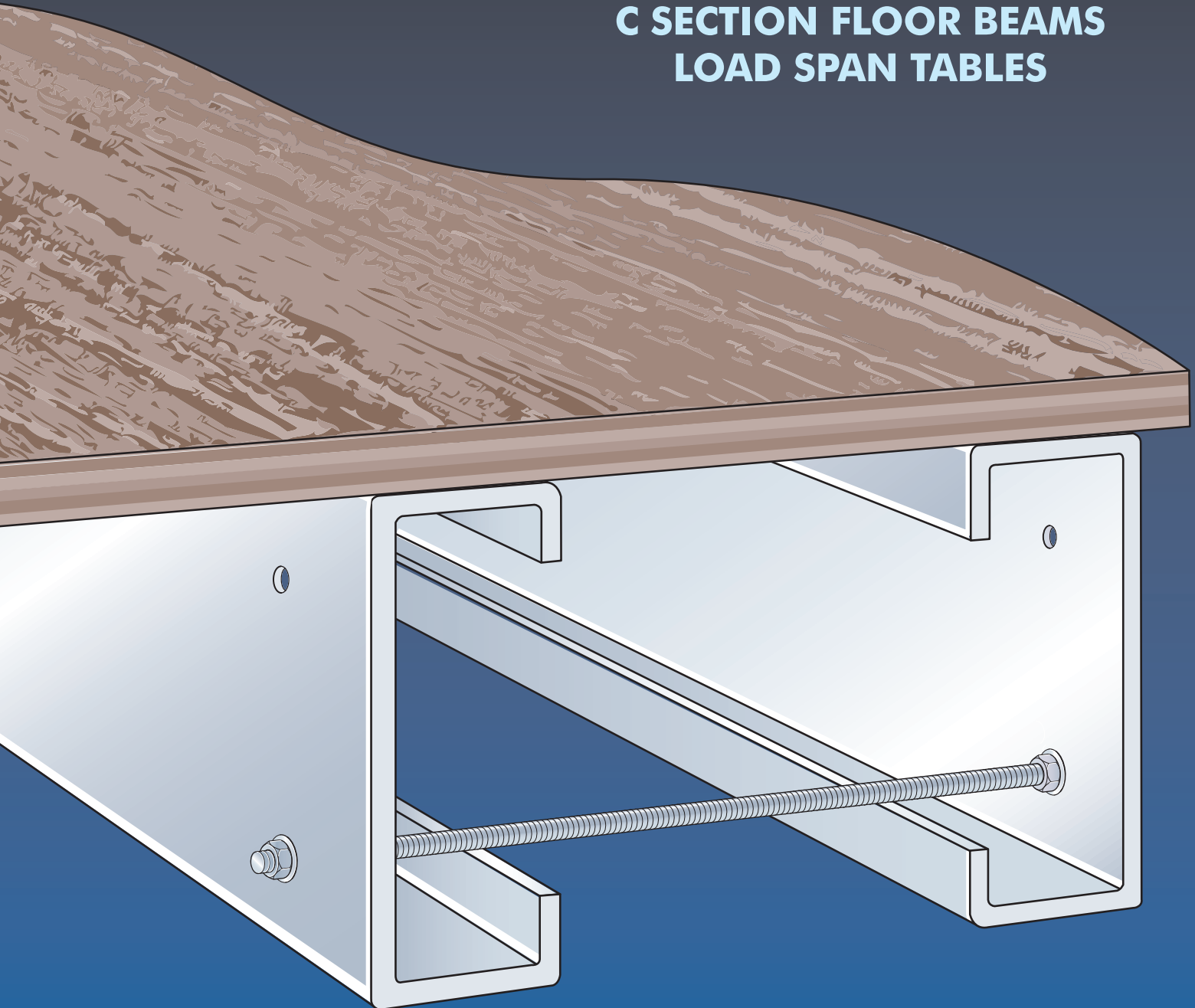




**TECHNICAL MANUAL
SUPPLEMENT**

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**C SECTION FLOOR BEAMS
LOAD SPAN TABLES**



RAISING YOUR EXPECTATIONS

C SECTION FLOOR BEAMS - LOAD SPAN TABLES

These load span tables are valid only when the beams are installed in accordance with Albion Technical Manual, C Section Floor Beams.

NOTES TO LOAD SPAN TABLES

- Sections are designed to BS5950 Part 5:1998 in conjunction with full scale testing of inset type cleats
- Ultimate loads are noted as a uniformly distributed load (kN) for each span
- Maximum unfactored loads in kN/m² are noted limited by the deflection criteria span/200,250 or 360 and for 400,500,600 and 1000mm centres of beams
- The self weight of the section has been deducted
- The design assumes that full lateral restraint is provided to the top flanges of beams. This is usually provided by 38mm thick particle board or similar with direct fixing (self tapping screws) to the top flanges
- Fixing bolts M12 or M16, grade 8.8, and with washer under both head and nut
- For double span beams the ultimate load noted in the tables applies to one span. Ultimate strength is reached with both spans similarly loaded. The maximum loads limited by deflection assume the worst case of one span loaded
- All applied loads are uniformly distributed. If any other loading pattern is to be considered, consult Albion Technical
- For the purpose of the table we offer a limited range for each span. However all of the sections listed in our Technical Manual are available and other sections may better suit a particular application.

Consult Albion or use Albion Engineer

SINGLE SPANNING BEAMS WITH CLEATS (INSET OR OVERSAIL)

Floor beam load span tables to BS5950 Part 5:1998

SPAN m	SECTION REF.	WEIGHT kg/m	ULT LOAD kN	LIMITING DEFLECTION kN/m ² (working loads)											
				L/200				L/250				L/360			
				BEAM CENTRES											
				400	500	600	1000	400	500	600	1000	400	500	600	1000
3	C14613	3.06	16.03	8.35	6.68	5.57	3.34	7.73	6.19	5.16	3.09	5.35	4.28	3.56	2.14
	C14614	3.28	18.17	9.47	7.57	6.31	3.79	8.30	6.64	5.54	3.32	5.74	4.59	3.83	2.30
	C14615	3.51	20.34	10.60	8.48	7.06	4.24	8.87	7.10	5.91	3.55	6.13	4.91	4.09	2.45
	C14616	3.73	22.54	11.74	9.39	7.83	4.70	9.44	7.55	6.29	3.77	6.52	5.22	4.35	2.61
	C14618	4.18	26.85	13.22	10.57	8.81	5.29	10.55	8.44	7.04	4.22	7.30	5.84	4.87	2.92
	C14620	4.62	30.99	14.60	11.68	9.74	5.84	11.66	9.33	7.77	4.66	8.06	6.45	5.37	3.22
	C17613	3.36	19.70	10.26	8.21	6.84	4.10	10.26	8.21	6.84	4.10	8.30	6.64	5.53	3.32
	C17614	3.61	22.38	11.65	9.32	7.77	4.66	11.65	9.32	7.77	4.66	8.91	7.13	5.94	3.56
	C17615	3.86	25.11	13.08	10.46	8.72	5.23	13.08	10.46	8.72	5.23	9.52	7.62	6.35	3.81
3.5	C14615	3.51	17.39	6.97	5.57	4.64	2.79	5.55	4.44	3.70	2.22	3.83	3.07	2.55	1.53
	C14616	3.73	19.27	7.41	5.93	4.94	2.96	5.91	4.73	3.94	2.36	4.08	3.26	2.72	1.63
	C14618	4.18	22.96	8.29	6.63	5.52	3.31	6.61	5.29	4.41	2.64	4.56	3.65	3.04	1.82
	C17613	3.36	16.85	7.52	6.02	5.01	3.01	7.52	6.01	5.01	3.01	5.19	4.16	3.46	2.08
	C17614	3.61	19.13	8.54	6.83	5.69	3.42	8.07	6.46	5.38	3.23	5.58	4.46	3.72	2.23
	C17615	3.86	21.47	9.59	7.67	6.39	3.83	8.63	6.90	5.75	3.45	5.96	4.77	3.98	2.39
	C17616	4.11	23.81	10.63	8.50	7.09	4.25	9.18	7.34	6.12	3.67	6.34	5.07	4.23	2.54
	C20613	3.67	19.48	8.70	6.96	5.80	3.48	8.70	6.96	5.80	3.48	7.28	5.83	4.85	2.91
	C20614	3.94	22.22	9.92	7.94	6.61	3.97	9.92	7.94	6.61	3.97	7.82	6.26	5.22	3.13
	C20615	4.22	25.01	11.17	8.93	7.44	4.47	11.17	8.93	7.44	4.47	8.36	6.69	5.57	3.34
4	C17613	3.36	14.70	5.74	4.59	3.83	2.30	5.01	4.01	3.34	2.00	3.45	2.76	2.30	1.38
	C17614	3.61	16.70	6.52	5.22	4.35	2.61	5.38	4.30	3.59	2.15	3.71	2.97	2.47	1.48
	C17615	3.86	18.74	7.21	5.77	4.81	2.88	5.75	4.60	3.83	2.30	3.96	3.17	2.64	1.59
	C17616	4.11	20.78	7.67	6.14	5.11	3.07	6.12	4.89	4.08	2.45	4.22	3.37	2.81	1.69
	C20613	3.67	17.00	6.64	5.31	4.43	2.66	6.64	5.31	4.43	2.66	4.85	3.88	3.23	1.94
	C20614	3.94	19.39	7.58	6.06	5.05	3.03	7.54	6.04	5.03	3.02	5.21	4.17	3.47	2.08
	C20615	4.22	21.83	8.53	6.82	5.69	3.41	8.06	6.45	5.38	3.23	5.57	4.45	3.71	2.23
	C20616	4.49	24.29	9.49	7.59	6.33	3.80	8.58	6.86	5.72	3.43	5.93	4.74	3.95	2.37
	C22614	4.22	21.86	8.54	6.83	5.69	3.42	8.54	6.83	5.69	3.42	6.89	5.51	4.60	2.76
	C22615	4.51	24.67	9.64	7.71	6.43	3.86	9.64	7.71	6.43	3.86	7.37	5.90	4.91	2.95
	4.5	C17620	5.09	25.46	6.63	5.30	4.42	2.65	5.28	4.22	3.52	2.11	3.63	2.90	2.42
C20613		3.67	15.06	5.23	4.18	3.49	2.09	4.90	3.92	3.27	1.96	3.38	2.70	2.25	1.35
C20614		3.94	17.19	5.97	4.77	3.98	2.39	5.27	4.22	3.51	2.11	3.63	2.90	2.42	1.45
C20615		4.22	19.35	6.72	5.38	4.48	2.69	5.63	4.51	3.75	2.25	3.88	3.10	2.59	1.55
C20616		4.49	21.54	7.48	5.98	4.99	2.99	5.99	4.80	4.00	2.40	4.13	3.30	2.75	1.65
C20618		5.02	25.89	8.42	6.74	5.61	3.37	6.71	5.37	4.47	2.68	4.62	3.70	3.08	1.85
C22614		4.22	19.37	6.73	5.38	4.48	2.69	6.73	5.38	4.48	2.69	4.81	3.85	3.21	1.92
C22615		4.51	21.87	7.60	6.08	5.06	3.04	7.45	5.96	4.97	2.98	5.14	4.11	3.43	2.06
C22616		4.80	24.39	8.47	6.78	5.65	3.39	7.93	6.35	5.29	3.17	5.47	4.38	3.65	2.19
C22618		5.38	29.40	10.21	8.17	6.81	4.08	8.89	7.11	5.92	3.55	6.13	4.90	4.09	2.45

SINGLE SPANNING BEAMS WITH CLEATS (INSETS OR OVERSAIL)

Floor beam load span tables to BS5950 Part 5:1998

SPAN m	SECTION REF.	WEIGHT kg/m	ULT LOAD kN	LIMITING DEFLECTION kN/m ² (working loads)											
				L/200				L/250				L/360			
				BEAM CENTRES											
				400	500	600	1000	400	500	600	1000	400	500	600	1000
5	C20616	4.49	19.32	5.45	4.36	3.63	2.18	4.34	3.47	2.89	1.74	2.98	2.38	1.99	1.19
	C20618	5.02	23.23	6.11	4.88	4.07	2.44	4.86	3.89	3.24	1.94	3.34	2.67	2.22	1.33
	C22614	4.22	17.38	5.43	4.35	3.62	2.17	5.06	4.04	3.37	2.02	3.48	2.78	2.32	1.39
	C22615	4.51	19.63	6.13	4.91	4.09	2.45	5.40	4.32	3.60	2.16	3.72	2.98	2.48	1.49
	C22616	4.80	21.89	6.84	5.47	4.56	2.74	5.75	4.60	3.83	2.30	3.96	3.17	2.64	1.58
	C22618	5.38	26.39	8.09	6.47	5.39	3.23	6.44	5.15	4.29	2.58	4.43	3.55	2.96	1.77
	C24615	4.69	20.93	6.54	5.23	4.36	2.62	6.31	5.05	4.21	2.52	4.35	3.48	2.90	1.74
	C24616	4.99	23.38	7.30	5.84	4.87	2.92	6.72	5.37	4.48	2.69	4.63	3.70	3.08	1.85
	C26616	5.30	25.73	8.04	6.43	5.36	3.22	8.04	6.43	5.36	3.22	5.88	4.71	3.92	2.35
	C30718	6.72	36.79	11.50	9.20	7.66	4.60	11.50	9.20	7.66	4.60	9.61	7.69	6.41	3.84
5.5	C24615	4.69	18.96	5.39	4.31	3.59	2.16	4.71	3.77	3.14	1.88	3.24	2.59	2.16	1.29
	C24616	4.99	21.19	6.02	4.81	4.01	2.41	5.02	4.01	3.34	2.01	3.45	2.76	2.30	1.38
	C24618	5.59	25.60	7.06	5.65	4.70	2.82	5.62	4.49	3.75	2.25	3.86	3.09	2.57	1.54
	C24625	7.65	40.19	9.66	7.73	6.44	3.86	7.69	6.15	5.13	3.08	5.28	4.23	3.52	2.11
	C24630	9.09	49.93	11.46	9.17	7.64	4.59	9.13	7.30	6.08	3.65	6.27	5.02	4.18	2.51
	C26616	5.30	23.33	6.63	5.30	4.42	2.65	6.37	5.10	4.25	2.55	4.39	3.51	2.92	1.75
	C26618	5.94	28.32	8.05	6.44	5.36	3.22	7.14	5.71	4.76	2.86	4.92	3.93	3.28	1.97
	C26625	8.14	44.96	12.28	9.82	8.18	4.91	9.78	7.82	6.52	3.91	6.73	5.39	4.49	2.69
	C26630	9.68	56.17	14.58	11.67	9.72	5.83	11.62	9.29	7.75	4.65	8.00	6.40	5.33	3.20
	C30718	6.72	33.36	9.48	7.58	6.32	3.79	9.48	7.58	6.32	3.79	7.18	5.74	4.79	2.87
6	C26616	5.30	21.31	5.55	4.44	3.70	2.22	4.88	3.90	3.25	1.95	3.35	2.68	2.23	1.34
	C26618	5.94	25.88	6.74	5.39	4.49	2.70	5.47	4.37	3.65	2.19	3.75	3.00	2.50	1.50
	C26620	6.58	30.37	7.60	6.08	5.07	3.04	6.05	4.84	4.03	2.42	4.15	3.32	2.77	1.66
	C26630	9.68	51.36	11.18	8.94	7.45	4.47	8.89	7.12	5.93	3.56	6.10	4.88	4.07	2.44
	C30718	6.72	30.49	7.94	6.35	5.29	3.18	7.94	6.35	5.29	3.18	5.49	4.39	3.66	2.20
	C30720	7.44	36.33	9.46	7.57	6.31	3.78	8.84	7.07	5.89	3.53	6.08	4.87	4.05	2.43
	C30725	9.22	50.50	13.15	10.52	8.77	5.26	10.95	8.76	7.30	4.38	7.53	6.03	5.02	3.01
	C30730	10.97	63.99	16.34	13.07	10.89	6.54	13.02	10.42	8.68	5.21	8.96	7.17	5.97	3.58
	C34118	8.35	33.81	8.80	7.04	5.87	3.52	8.80	7.04	5.87	3.52	8.80	7.04	5.87	3.52
	C34120	9.25	45.90	11.95	9.56	7.97	4.78	11.95	9.56	7.97	4.78	10.46	8.37	6.98	4.19

DOUBLE SPANNING BEAMS WITH CLEATS (OVERSAIL)

Load span tables - floor beams designed to BS5950 Part 5:1998

SPAN m	SECTION REF.	WEIGHT kg/m	ULT LOAD kN	LIMITING DEFLECTION kN/m ² (working loads)											
				L/200				L/250				L/360			
				BEAM CENTRES											
				400	500	600	1000	400	500	600	1000	400	500	600	1000
3	C14613	3.06	13.36	6.96	5.56	4.64	2.78	6.96	5.56	4.64	2.78	6.96	5.56	4.64	2.78
	C14614	3.28	15.57	8.11	6.49	5.41	3.24	8.11	6.49	5.41	3.24	8.11	6.49	5.41	3.24
	C14615	3.51	17.85	9.30	7.44	6.20	3.72	9.30	7.44	6.20	3.72	8.80	7.04	5.87	3.52
	C17613	3.36	14.02	7.30	5.84	4.87	2.92	7.30	5.84	4.87	2.92	7.30	5.84	4.87	2.92
	C17614	3.61	16.66	8.67	6.94	5.78	3.47	8.67	6.94	5.78	3.47	8.67	6.94	5.78	3.47
	C17615	3.86	19.44	10.12	8.10	6.75	4.05	10.12	8.10	6.75	4.05	10.12	8.10	6.75	4.05
	C20613	3.67	13.84	7.21	5.77	4.81	2.88	7.21	5.77	4.81	2.88	7.21	5.77	4.81	2.88
	C20614	3.94	16.70	8.70	6.96	5.80	3.48	8.70	6.96	5.80	3.48	8.70	6.96	5.80	3.48
	C20615	4.22	19.77	10.30	8.24	6.86	4.12	10.30	8.24	6.86	4.12	10.30	8.24	6.86	4.12
	C20616	4.49	23.02	11.99	9.59	7.99	4.80	11.99	9.59	7.99	4.80	11.99	9.59	7.99	4.80
3.5	C14613	3.06	11.92	5.32	4.26	3.55	2.13	5.32	4.26	3.55	2.13	4.80	3.84	3.20	1.92
	C14614	3.28	13.82	6.17	4.94	4.11	2.47	6.17	4.94	4.11	2.47	5.16	4.13	3.44	2.06
	C14615	3.51	15.76	7.04	5.63	4.69	2.81	7.04	5.63	4.69	2.81	5.51	4.41	3.67	2.20
	C14616	3.73	17.74	7.92	6.34	5.28	3.17	7.92	6.34	5.28	3.17	5.86	4.69	3.91	2.34
	C17613	3.36	12.86	5.74	4.59	3.83	2.30	5.74	4.59	3.83	2.30	5.74	4.59	3.83	2.30
	C17614	3.61	15.18	6.78	5.42	4.52	2.71	6.78	5.42	4.52	2.71	6.78	5.42	4.52	2.71
	C17615	3.86	17.59	7.85	6.28	5.24	3.14	7.85	6.28	5.24	3.14	7.85	6.28	5.24	3.14
	C17616	4.11	20.07	8.96	7.17	5.97	3.58	8.96	7.17	5.97	3.58	8.96	7.17	5.97	3.58
	C20613	3.67	12.98	5.79	4.63	3.86	2.32	5.79	4.63	3.86	2.32	5.79	4.63	3.86	2.32
	C20614	3.94	15.55	6.94	5.55	4.63	2.78	6.94	5.55	4.63	2.78	6.94	5.55	4.63	2.78
4	C20616	4.49	19.47	7.60	6.08	5.07	3.04	7.60	6.08	5.07	3.04	7.60	6.08	5.07	3.04
	C22614	4.22	14.46	5.65	4.52	3.77	2.26	5.65	4.52	3.77	2.26	5.65	4.52	3.77	2.26
	C22615	4.51	17.11	6.68	5.35	4.46	2.67	6.68	5.35	4.46	2.67	6.68	5.35	4.46	2.67
	C22616	4.80	19.91	7.78	6.22	5.19	3.11	7.78	6.22	5.19	3.11	7.78	6.22	5.19	3.11
	C22618	5.38	25.83	10.09	8.07	6.73	4.04	10.09	8.07	6.73	4.04	10.09	8.07	6.73	4.04
	C24615	4.69	16.99	6.63	5.31	4.42	2.65	6.63	5.31	4.42	2.65	6.63	5.31	4.42	2.65
	C24616	4.99	19.89	7.77	6.22	5.18	3.11	7.77	6.22	5.18	3.11	7.77	6.22	5.18	3.11
	C24618	5.59	26.11	10.20	8.16	6.80	4.08	10.20	8.16	6.80	4.08	10.20	8.16	6.80	4.08
	C26616	5.30	19.50	7.62	6.09	5.08	3.05	7.62	6.09	5.08	3.05	7.62	6.09	5.08	3.05
	C26618	5.94	26.07	10.18	8.15	6.79	4.07	10.18	8.15	6.79	4.07	10.18	8.15	6.79	4.07
4.5	C20620	5.56	27.25	9.46	7.57	6.31	3.79	9.46	7.57	6.31	3.79	7.36	5.89	4.91	2.94
	C22614	4.22	13.65	4.74	3.79	3.16	1.90	4.74	3.79	3.16	1.90	4.74	3.79	3.16	1.90
	C22615	4.51	16.08	5.58	4.47	3.72	2.23	5.58	4.47	3.72	2.23	5.58	4.47	3.72	2.23
	C22616	4.80	18.62	6.47	5.17	4.31	2.59	6.47	5.17	4.31	2.59	6.47	5.17	4.31	2.59
	C22618	5.38	23.93	8.31	6.65	5.54	3.32	8.31	6.65	5.54	3.32	8.31	6.65	5.54	3.32
	C24615	4.69	16.08	5.58	4.47	3.72	2.23	5.58	4.47	3.72	2.23	5.58	4.47	3.72	2.23
	C24616	4.99	18.74	6.51	5.21	4.34	2.60	6.51	5.21	4.34	2.60	6.51	5.21	4.34	2.60
	C24618	5.59	24.37	8.46	6.77	5.64	3.39	8.46	6.77	5.64	3.39	8.46	6.77	5.64	3.39
	C26616	5.30	18.58	6.45	5.16	4.30	2.58	6.45	5.16	4.30	2.58	6.45	5.16	4.30	2.58
	C26618	5.94	24.62	8.55	6.84	5.70	3.42	8.55	6.84	5.70	3.42	8.55	6.84	5.70	3.42

DOUBLE SPANNING BEAMS WITH CLEATS (OVERSAIL)

Load span tables - floor beams designed to BS5950 Part 5:1998

SPAN m	SECTION REF.	WEIGHT kg/m	ULT LOAD kN	LIMITING DEFLECTION kN/m ² (working loads)											
				L/200				L/250				L/360			
				BEAM CENTRES											
				400	500	600	1000	400	500	600	1000	400	500	600	1000
5	C22615	4.51	15.11	4.72	3.78	3.15	1.89	4.72	3.78	3.15	1.89	4.72	3.78	3.15	1.89
	C22616	4.80	17.43	5.45	4.36	3.63	2.18	5.45	4.36	3.63	2.18	5.45	4.36	3.63	2.18
	C22618	5.38	22.22	6.94	5.56	4.63	2.78	6.94	5.56	4.63	2.78	6.39	5.11	4.26	2.56
	C24615	4.69	15.22	4.76	3.80	3.17	1.90	4.76	3.80	3.17	1.90	4.76	3.80	3.17	1.90
	C24616	4.99	17.66	5.52	4.42	3.68	2.21	5.52	4.42	3.68	2.21	5.52	4.42	3.68	2.21
	C24618	5.59	22.78	7.12	5.69	4.75	2.85	7.12	5.69	4.75	2.85	7.12	5.69	4.75	2.85
	C26616	5.30	17.69	5.53	4.42	3.69	2.21	5.53	4.42	3.69	2.21	5.53	4.42	3.69	2.21
	C26618	5.94	23.25	7.26	5.81	4.84	2.91	7.26	5.81	4.84	2.91	7.26	5.81	4.84	2.91
	C30718	6.72	23.55	7.36	5.89	4.91	2.94	7.36	5.89	4.91	2.94	7.36	5.89	4.91	2.94
C30720	7.44	30.38	9.49	7.59	6.33	3.80	9.49	7.59	6.33	3.80	9.49	7.59	6.33	3.80	
5.5	C24616	4.99	16.65	4.73	3.78	3.15	1.89	4.73	3.78	3.15	1.89	4.73	3.78	3.15	1.89
	C24618	5.59	21.33	6.06	4.85	4.04	2.42	6.06	4.85	4.04	2.42	5.57	4.46	3.72	2.23
	C26616	5.30	16.84	4.78	3.83	3.19	1.91	4.78	3.83	3.19	1.91	4.78	3.83	3.19	1.91
	C26618	5.94	21.96	6.24	4.99	4.16	2.50	6.24	4.99	4.16	2.50	6.24	4.99	4.16	2.50
	C26625	8.14	40.60	11.53	9.23	7.69	4.61	11.53	9.23	7.69	4.61	9.70	7.76	6.47	3.88
	C30718	6.72	22.55	6.40	5.12	4.27	2.56	6.40	5.12	4.27	2.56	6.40	5.12	4.27	2.56
	C30720	7.44	28.90	8.21	6.57	5.47	3.28	8.21	6.57	5.47	3.28	8.21	6.57	5.47	3.28
	C30725	9.22	45.94	13.05	10.44	8.70	5.22	13.05	10.44	8.70	5.22	13.05	10.44	8.70	5.22
	C34118	8.35	22.24	6.32	5.05	4.21	2.53	6.32	5.05	4.21	2.53	6.32	5.05	4.21	2.53
	C34120	9.25	29.48	8.38	6.70	5.58	3.35	8.38	6.70	5.58	3.35	8.38	6.70	5.58	3.35
6	C26620	6.58	25.65	6.68	5.34	4.45	2.67	6.68	5.34	4.45	2.67	6.00	4.80	4.00	2.40
	C26625	8.14	37.72	9.82	7.86	6.55	3.93	9.82	7.86	6.55	3.93	7.43	5.94	4.95	2.97
	C30718	6.72	21.58	5.62	4.50	3.75	2.25	5.62	4.50	3.75	2.25	5.62	4.50	3.75	2.25
	C30720	7.44	27.49	7.16	5.73	4.77	2.86	7.16	5.73	4.77	2.86	7.16	5.73	4.77	2.86
	C30725	9.22	43.12	11.23	8.98	7.49	4.49	11.23	8.98	7.49	4.49	10.86	8.69	7.24	4.34
	C34118	8.35	21.58	5.62	4.50	3.75	2.25	5.62	4.50	3.75	2.25	5.62	4.50	3.75	2.25
	C34120	9.25	28.50	7.42	5.94	4.95	2.97	7.42	5.94	4.95	2.97	7.42	5.94	4.95	2.97
	C34125	11.48	49.21	12.82	10.25	8.54	5.13	12.82	10.25	8.54	5.13	12.82	10.25	8.54	5.13
	C40120	10.11	26.83	6.99	5.59	4.66	2.79	6.99	5.59	4.66	2.79	6.99	5.59	4.66	2.79
	C40125	12.56	48.44	12.61	10.09	8.41	5.05	12.61	10.09	8.41	5.05	12.61	10.09	8.41	5.05

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