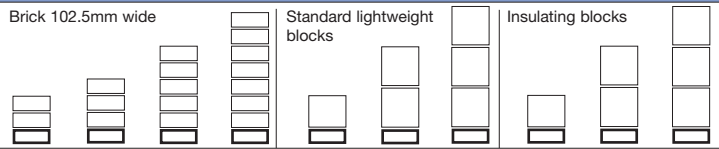


PRESTRESSED LINTELS - FAIR FACED

LOAD / SPAN TABLE



Notes

1) Shaded areas indicates padstones may be required, or bearing increased.

2) Bold type values indicate the limit of load capacity for typical building materials plastered one side so long as no other dead or imposed loads are carried within the interaction zone above the lintel.

3) The shear and padstone limits indicated assume a minimum bearing of 100 mm at each end of the lintel.

4) The total load capacities stated in the tables are in addition to the self weight of the lintel and of the courses of composite brickwork or blockwork stated which have already been allowed for.

5) The allowable moments listed in the table headings are subject to a reduction factor in respect of horizontal shear at the horizontal interface of 0.25, 0.375, 0.269, 0.319 L respectively (L in metres).

6) Composite brick or block courses must be constructed of mortar class (i) or better with special attention to the joint between the lintel top brushed face and composite courses.

7) Composite lintels must be propped at the centre for at least 7 days, longer in cold weather. Spans over 1.5m require two additional props at quarter points.

8) If a D.P.C. is introduced between the lintel and the masonry the lintel must be regarded as acting alone.

9) The table is for guidance only and in the case of doubt detailed calculations should be carried out to BS 5977 Pt.1 using the allowable moment and shear values supplied.

65 x 100mm

	Acting Alone	number of courses acting compositely										
		2	3	5	7	1	2	3	1	2	3	
Allowable moment	kNm	0.61	1.53	2.36	3.96	5.57	1.82	4.55	6.85	1.27	3.98	6.60
Allowable shear load	kN											
100mm bearing		16.46	18.61	19.69	21.84	23.99	19.61	21.01	23.31	19.61	21.01	23.31
Total load capacity kN	400mm	12.14										12.99
Clear span	550	8.80				11.06		8.84	13.35			12.91
	700	6.87			7.82	11.04		8.77	13.26		7.68	12.83
	850	5.62			7.80	11.02		8.70	13.16		7.62	12.75
	1000	4.74			7.78	11.00		8.63	13.07		7.56	12.67
	1150	4.08		4.56	7.76	10.98		8.56	12.97		7.50	12.60
	1300	3.57		4.54	7.74	10.96		8.49	12.88		7.44	12.52
	1450	3.16		4.52	7.72	10.94	3.20	8.42	12.78		7.38	12.44
	1600	2.82	2.83	4.49	7.69	10.91	3.15	8.35	12.69		7.32	12.36
	1750	2.54	2.81	4.47	7.67	10.89	3.11	8.28	12.59		7.26	12.28
	1900	2.30	2.79	4.45	7.65	10.87	3.06	8.21	12.50		7.20	12.20
	2200	1.91	2.75	4.41	7.61	10.83	2.97	8.07	12.31	1.95	7.09	12.04
	2500		2.71	4.37	7.57	10.79	2.88	7.93	12.12	1.87	6.97	11.89
	2800		2.67	4.33	7.53	10.75	2.79	7.79	11.93		6.85	11.73

65 x 150mm

Allowable moment	kNm	1.17	1.53	2.36	3.96	5.57	2.35	4.75	7.05	1.90	4.58	6.88
Allowable shear load	kN											
100mm bearing		22.26	24.14	25.49	27.64	29.79	26.99	31.71	36.44	26.99	31.71	36.44
Total load capacity kN	400mm	22.26										
Clear span	550	16.90				16.90			20.63			20.20
	700	13.22				16.56		13.76	20.48		13.32	20.09
	850	10.83			11.70	16.53		13.65	20.34		13.23	19.97
	1000	9.15			11.67	16.50		13.54	20.20		13.14	19.85
	1150	7.89			11.63	16.46		13.44	20.05		13.05	19.73
	1300	6.92			11.60	16.43		13.33	19.91		12.96	19.61
	1450	6.14		6.77	11.57	16.40	6.38	13.22	19.77		12.87	19.49
	1600	5.51		6.74	11.54	16.37	6.31	13.12	19.62		12.78	19.37
	1750	4.97		6.70	11.50	16.33	6.24	13.01	19.48	4.99	12.69	19.25
	1900	4.52		6.67	11.47	16.30	6.17	12.91	19.34	4.93	12.60	19.14
	2200	3.78	4.12	6.61	11.41	16.24	6.04	12.69	19.05	4.80	12.42	18.90
	2500	3.22	4.05	6.54	11.34	16.17	5.90	12.48	18.77	4.68	12.24	18.66
	2800		3.77	6.14	10.71	15.31	5.42	11.59	17.47	4.79		17.44

65 x 215mm

Allowable moment	kNm	1.42	3.16	4.76	7.96	11.17	3.90	9.20	13.79	2.72	8.55	13.31
Allowable shear load	kN											
100mm bearing		24.42	28.94	31.19	35.71	40.22	31.19	37.97	44.74	31.19	37.97	44.74
Total load capacity kN	400mm	24.42							29.52			
Clear span	550	20.48				23.87			29.31			28.02
	700	16.01			16.91	23.82		19.09	29.11		17.80	27.85
	850	13.50			16.87	23.77		18.93	28.90		17.67	27.68
	1000	11.05			16.82	23.23		18.78	28.69		17.54	27.51
	1150	9.52		9.89	16.77	23.68		18.63	28.49		17.41	27.34
	1300	8.34		9.84	16.73	23.63		18.48	28.28		17.28	27.16
	1450	7.38		9.79	16.68	23.59	7.43	18.32	28.08		17.15	26.99
	1600	6.60		9.75	16.63	23.54	7.33	18.17	27.87		17.02	26.82
	1750	5.95	6.26	9.70	16.59	23.50	7.23	18.02	27.67		16.89	26.65
	1900	5.39	6.21	9.65	16.54	23.45	7.13	17.87	27.46		16.76	26.48
	2200	4.47	6.12	9.56	16.45	23.36	6.93	17.56	27.05	4.56	16.50	26.14
	2500	3.76	6.02	9.47	16.35	23.26	6.73	17.26	26.64	4.39	16.25	25.80
	2800		5.93	9.37	16.26	23.17	6.54	16.95	26.23		15.99	25.46

65 x 255mm

Allowable moment	kNm	1.86	3.06	4.72	7.93	11.13	3.63	9.11	13.70	2.53	7.96	13.19
Allowable shear load	kN											
100mm bearing		23.16	27.46	29.62	33.92	38.22	29.46	35.76	42.06	29.46	35.76	42.09
Total load capacity kN	400mm	23.16							34.42			33.21
Clear span	550	23.16				28.20			34.22			33.04
	700	21.00				28.15		22.53	34.01			32.86
	850	17.19			19.92	28.09		22.38	33.81		19.56	32.69
	1000	14.51			19.87	28.04		22.22	33.61		19.43	32.52
	1150	12.52			19.81	27.98		22.07	33.40		19.30	32.35
	1300	10.97		11.57	19.76	27.92		21.92	33.20		19.17	32.18
	1450	9.73		11.51	19.70	27.87		21.76	33.00		19.04	32.01
	1600	8.71		11.46	19.65	27.81		21.61	32.80		18.90	31.84
	1750	7.86		11.40	19.59	27.76	8.04	21.45	32.59		18.77	31.67
	1900	7.13		11.34	19.54	27.70	7.94	21.30	32.39		18.64	31.50
	2200	5.95	7.00	11.23	19.43	27.59	7.73	20.99	31.98		18.77	31.16
	2500	5.02	6.89	11.12	19.31	27.48	7.52	20.68	31.58		18.11	30.81
	2800		6.78	11.01	19.20	27.37	7.31	20.38	31.17	4.71	17.84	30.47