

1st floor

floor dead weight, $4.8 \times 3 \times 1.2^a$	=	17.28			
wall	=	7.40			
		<hr/>	24.68	143.4	19.44
			24.68 kN/m		
60% of 6 floors imposed load, $6 \times 5.4 \times 0.6 =$		19.44 kN/m			

Ground floor

floor dead weight, $4.8 \times 3 \times 1.2^a$	=	17.28			
wall	=	7.40			
		<hr/>	24.68	168.08	22.68
			24.68 kN/m		
60% of 7 floors imposed load, $7 \times 5.4 \times 0.6 =$		22.68 kN/m			

^a The factor 1.2 comes from table 3.6, BS 8110: Part 1: 1985.

Table 12.2 Loading on wall B per metre run; inner leaf

<i>Calculation for floor level considered</i>		<i>Load/m run (kN/m)</i>		
		<i>Dead load at floor</i>	<i>Cumulative dead load to floor, G_k</i>	<i>Cumulative live load to floor, Q_k</i>
<i>6th floor</i>				
roof dead weight, $3.5 \times 3 \times 0.45^a$	=	4.725		
wall (roof to 6th floor), 2.42×2.85	=	6.897		
		11.62 kN/m	11.62	11.62
				2.025
<i>5th floor</i>				
floor dead weight, $4.8 \times 3 \times 0.45^a$	=	6.48		
wall 6th to 5th	=	6.897		
		13.38 kN/m	13.38	25.0
90% of imposed load, $2 \times 2.025 \times 0.9$	=	3.645 kN/m		3.645
<i>4th floor</i>				
dead weight same as 5th			13.38	38.38
80% of 3 floors imposed load, $3 \times 2.025 \times 0.8$	=	4.86 kN/m		4.86