

Table 12.1 Loading on wall A per metre run

<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, $3.5 \times 3 \times 1.2^a$	= 12.6		
weight of wall, 2.6×2.85	= 7.4		
	20.0	20.0	5.4
imposed load, $1.5 \times 3 \times 1.2^a$	= 5.4 kN/m		
	20.0 kN/m		
<i>5th floor</i>			
floor dead weight, $4.8 \times 3 \times 1.2^a$	= 17.28		
wall	= 7.40		
	24.68	44.68	9.72
90% of imposed load, $2 \times 5.4 \times 0.9$	= 9.72 kN/m		
	24.68 kN/m		
<i>4th floor</i>			
floor dead weight, $4.8 \times 3 \times 1.2^a$	= 17.28		
wall	= 7.40		
	24.68	69.36	12.96
	24.68 kN/m		
80% of 3 floors imposed load $3 \times 5.4 \times 0.8$	= 12.96 kN/m		

Table 12.1 (Contd)

Calculation for floor level considered	Load/m run (kN/m)		
	Dead load at floor	Cumulative dead load to floor, G_k	Cumulative live load to floor Q_k
<i>3rd floor</i>			
floor dead weight, $4.8 \times 3 \times 1.2^a$	=	17.28	
wall	=	7.40	
		24.68 kN/m	
70% of 4 floors imposed load, $4 \times 5.4 \times 0.7$	=	15.12 kN/m	
<i>2nd floor</i>			
floor dead weight, $4.8 \times 3 \times 1.2^a$	=	17.28	
wall	=	7.40	
		24.68 kN/m	
60% of 5 floors imposed load, $5 \times 5.4 \times 0.6$	=	16.2 kN/m	