Total Weight of the Building	**W_{total}**	**=**	**844781.7125 kN**

For finding Horizontal Seismic Coefficient, A_h:

Zone Factor	Z	=	0.36	*Table 3, Page 10*
Importance Factor	I	=	1	*Table 8, Page 19,*
Response Reduction Factor	R	=	5	*Table 9, Page 20*
Time Period	T	=	2.469 s	*Clause 7.6.2(a), Page*
Acceleration Coefficient	S_a/g	=	0.405	*Clause 6.4.2, Page*

Horizontal Seismic Coefficient	**Ah**	**=**	**(Z/2)*(I/R)*(Sa/g)**
		=	**0.015**

Base Shear	**V_b**

, IS 1893 (Part 1) : 2016

, IS 1893 (Part 1) : 2016

, IS 1893 (Part 1) : 2016

e 21, IS 1893 (Part 1) : 2016

9, IS 1893 (Part 1) : 2016

=	$A_h * W_{total}$	
=	**12318.176**	**kN**

Storey Number	Actual Height from Ground, H (in m)	Lumped Weight, W (in kN)
1	4	44620.21875
2	7.5	43519.8375
3	11	43519.8375
4	14.5	42127.275
5	18	42127.275
6	21.5	40686.425
7	25	39428.6125
8	28.5	39428.6125
9	32	39428.6125
10	35.5	38305.55
11	39	28171.4
12	42.5	28171.4
13	46	27406.65
14	49.5	27406.65
15	53	27406.65
16	56.5	25829.95
17	60	25829.95
18	63.5	25829.95
19	67	25275.2
20	70.5	25275.2
21	74	17743.1125
22	77.5	17484.55
23	81	17484.55
24	84.5	17484.55
25	88	17337.55
26	91.5	16803.45
27	95	16803.45
28	98.5	16644.6375
29	102	16644.6375

30	105.5	10555.96875

$W_iH_i^2$	Lateral Forces (in kN)
713923.5	**3.774**
2447990.859	**12.941**
5265900.338	**27.839**
8857259.569	**46.824**
13649237.1	**72.158**
18807299.96	**99.426**
24642882.81	**130.276**
32025890.5	**169.307**
40374899.2	**213.445**
48274569.39	**255.207**
42848699.4	**226.522**
50884591.25	**269.005**
57992471.4	**306.581**
67153144.16	**355.009**
76985279.85	**406.988**
82455657.89	**435.907**
92987820	**491.586**
104152815.9	**550.611**
113460372.8	**599.816**
125624062.8	**664.120**
97161284.05	**513.649**
105016578.4	**555.177**
114716132.6	**606.454**
124844058.1	**659.996**
134261987.2	**709.785**
140682684.3	**743.728**
151651136.3	**801.714**
161490434.2	**853.730**
173170808.6	**915.479**

117490571.2 **621.122**