



PROJECT - MARINA SUITES, NH-24, GHAZIABAD												
Electrical load Calculation												
S.no	Description			No. of unit		Load per Unit			Total Load			
	Tower A			No. of Tower		=	1					
1	2 BHK + 2 TOI. (TYPE 1)			24	units	@	3.01	KW	=	72	KW	
	(60.2 sq M @ 50 W/sqM =		3.01 KW)									
2	2 BHK + 2 TOI. (TYPE 2)			143	units	@	3.25	KW	=	465	KW	
	(65.1 sq M @ 50 W/sqM =		3.25 KW)									
3	3 BHK + 3 TOI. (TYPE 2)			46	units	@	5.04	KW	=	232	KW	
	(100.9 sq M @ 50 W/sqM =		5.04 KW)									
4	3 BHK + Store + 2 TOI. (TYPE 1)			24	units	@	4.57	KW	=	110	KW	
	(91.4 sq M @ 50 W/sqM =		4.57 KW)									
	Tower B			No. of Tower		=	1					
5	2 BHK + 2 TOI. (TYPE 1)			215	units	@	2.98	KW	=	641	KW	
	(59.6 sq M @ 50 W/sqM =		2.98 KW)									
6	2 BHK + Study + 2 TOI. (TYPE 1)			24	units	@	3.88	KW	=	93	KW	
	(77.7 sq M @ 50 W/sqM =		3.88 KW)									
	Tower C			No. of Tower		=	1					
7	2 BHK + 2 TOI. (TYPE 2)			119	units	@	3.24	KW	=	386	KW	
	(64.8 sq M @ 50 W/sqM =		3.24 KW)									
8	2 BHK + Study + 2 TOI. (TYPE 2)			24	units	@	4.05	KW	=	97	KW	
	(81.1 sq M @ 50 W/sqM =		4.05 KW)									
9	2 BHK + Study + 2 TOI. (TYPE 3)			48	units	@	4.33	KW	=	208	KW	
	(86.5 sq M @ 50 W/sqM =		4.33 KW)									
	<u>COMMON SERVICES - TOWERS</u>											
	Tower A			No. of Tower		=	1					
10	Elevators		3	nos	@	15	KW	=	45	KW		
11	Common Lights		1	towers	@	5	KW	=	5	KW		
	Tower B			No. of Tower		=	1					
12	Elevators		3	nos	@	15	KW	=	45	KW		
13	Common Lights		1	towers	@	5	KW	=	5	KW		
	Tower C			No. of Tower		=	1					
14	Elevators		3	nos	@	15	KW	=	45	KW		
15	Common Lights		1	towers	@	5	KW	=	5	KW		
	<u>COMMON SERVICES - General</u>											
16	Tube wells / Water Supply Pumps							=	25	KW		
17	STP							=	25	KW		
18	External / Gate / Landscape lighting		1	Set	@	10	KW	=	10	KW		
19	Basement lights (2B)							=	10	KW		
20	Basement Ventillation							=	100	KW		

PROJECT - MARINA SUITES, NH-24, GHAZIABAD										
Electrical load Calculation										
S.no	Description	No. of unit		Load per Unit				Total Load		
21	Community / Club							=	25	KW
22	Commercial							=	25	KW
23	Fire pumps (only jockey pumps have been considered)	1	set	@	15	KW		=	15	KW
				Total Load =					2688	KW
By taking Overall Diversity factor						70	%	=>	1882	KW
By taking Power factor						0.90		=>	2090	KVA
Total Electrical Load = 2090 KVA										
Recommended Transformers = 2 nos. 1250 KVA each.										

PROJECT - MARINA SUITES, NH-24, GHAZIABAD

Essential Electrical load Calculation

S.no	Description	No. of unit			Load per Unit		Total Load			
	Sub Head (A)									
	Tower A		No. of Tower			=	1			
1	2 BHK + 2 TOI. (TYPE 1)		24	units	@	1.00	KVA		=	24 KVA
2	2 BHK + 2 TOI. (TYPE 2)		143	units	@	1.00	KVA		=	143 KVA
3	3 BHK + 3 TOI. (TYPE 2)		46	units	@	1.00	KVA		=	46 KVA
4	3 BHK + Store + 2 TOI. (TYPE 1)		24	units	@	1.00	KVA		=	24 KVA
	Tower B		No. of Tower			=	1			
5	2 BHK + 2 TOI. (TYPE 1)		215	units	@	1.00	KVA		=	215 KVA
6	2 BHK + Study + 2 TOI. (TYPE 1)		24	units	@	1.00	KVA		=	24 KVA
	Tower C		No. of Tower			=	1			
7	2 BHK + 2 TOI. (TYPE 2)		119	units	@	1.00	KVA		=	119 KVA
8	2 BHK + Study + 2 TOI. (TYPE 2)		24	units	@	1.00	KVA		=	24 KVA
9	2 BHK + Study + 2 TOI. (TYPE 3)		48	units	@	1.00	KVA		=	48 KVA
					Total Load			=	667	KVA
By taking overall Diversity factor							100 %	=>	667	KVA
Essential Load (A) = 670 KVA										
	Sub Head (B)									
	COMMON SERVICES - TOWERS									
	Tower A		No. of Tower			=	1			
10	Elevators		3	nos	@	15	KW		=	45 KW
11	Common Lights		1	towers	@	5	KW		=	5 KW
	Tower B		No. of Tower			=	1			
12	Elevators		3	nos	@	15	KW		=	45 KW
13	Common Lights		1	towers	@	5	KW		=	5 KW
	Tower C		No. of Tower			=	1			
14	Elevators		3	nos	@	15	KW		=	45 KW
15	Common Lights		1	towers	@	5	KW		=	5 KW

Total Load Calc_Marina Suites

	<u>COMMON SERVICES - General</u>										
16	Tube wells / Water Supply Pumps								=	25	KW
17	STP								=	25	KW
18	External / Gate / Landscape lighting		1	Set	@	10	KW		=	10	KW
19	Basement lights (2B)								=	10	KW
20	Basement Ventillation								=	100	KW
21	Community / Club								=	25	KW
22	Commercial								=	25	KW
23	Fire pumps (only jockey pumps have been considered)		1	set	@	15	KW		=	15	KW
							Total Load		=	385	KW
By taking Overall Diversity factor							70	%	=>	270	KW
By taking Power factor							0.80		=>	340	KVA
Essential Load (B) =						340		KVA			
Total Essential Load (A + B) =						1010		KVA			
Recommended DG Sets = "2 nos 320 KVA & 1 no. 600 KVA"											