# MAXIMUM DEMAND CALCULATIONS

* The demand factors are considered for different types of loads based on the functionality.
* Assuming, power factor (PF) = 0.9
* Total Connected Load =2945 KW
* Max Demand in **KVA =** 𝑲𝑾∗𝑫𝒆𝒎𝒂𝒏𝒅 𝒇𝒂𝒄𝒕𝒐𝒓

𝒑𝒐𝒘𝒆𝒓 𝒇𝒂𝒄𝒕𝒐𝒓

* Maximum Demand in KVA = 2600.56KVA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.NO** | **CONNECTED LOAD** | **KW** | **MAX. DEMAND FACTOR** | **MAX. DEMAND OF**  **EACH SYSTEM IN KVA** |
| 1 | HVAC Loads | 2500 | 0.85 | 2361.11 |
| 2 | Water Treatment Loads | 175 | 0.4 | 77.78 |
| 3 | Lighting Loads | 10 | 1 | 11.11 |
| 4 | Socket loads (16A)-100 no’s  (1KW per socket) | 100 | 0.25 | 27.78 |
| 5 | BMS/ELV System Panel loads  BMS Panel No's. -2  CCTV Panel No's-2  Fire Fighting-2  Security System-2 | 10 | 1 | 11.11 |
| 6 | Server loads /Networking/ Computer loads | 50 | 1 | 55.56 |
| 7 | Lift loads (considering 6 lifts each of 15 KW) | 90 | 0.45 | 45 |
| 8 | Other loads | 10 | 1 | 11.11 |
| 9 | **Total Connected Load in KW** | **2945 KW** | **-** | **2600.56 KVA** |