## 2. Wind loads:

**2.1**   American code (ASCE7-5/ ASCE7-10/ ASCE7-16) or European Code and any updated and amendments made to them or any other code after obtaining approval from the relevant authority.

**2.2**   reference to be made to the table bellow for the calculation of design wind speed (strength Design) and operational (Service Design) in addition to the load factor.

**Design wind speed ( Strength Design)**

| Mean Recurrence interval (years) | Wind speed (m/s, 3-sec gust. 10m, open terrain) | |
| --- | --- | --- |
| | Strength | Load factor |
| $50^{II}$ | 38 | 1.6* |
| $1000^{III.IV}$ | 40 | 1.6* |
| $300^{I}$ | 44 | 1** |
| $700^{II}$ | 47 | 1** |
| 1000 | 49 | 1** |
| $501700^{IIII}$ | 51 | 1** |
| $3000^{IV}$ | 53 | 1** |

\* to be used with Wind Load Factor of 1.6 for ASCE7-05 strength design approach*(specified wind x load factor)*
\*\* be used with Wind Load Factor of 1.0 for ASCE7-10/ ASCE7-16 strength design approach *(ultimate limit state ULS wind load)*
*(I, II, III, IV are ASCE 7 Building Risk Categories)*

**(Service Design)**

| Mean Recurrence interval (years) | Wind speed ( m/s, 3-sec gust. 10m, open terrain) | |
| --- | --- | --- |
| | Strength | Load factor |
| 1 | 22 | 1** |
| 10 | 30 | 1** |
| 25 | 34 | 1** |
| 50 | 36 | 1** |

\*\* be used with Wind Load Factor of 1.0 for ASCE7-10/ ASCE7-16 service design approach *(serviceability limit state SLS wind load)*
Wind speed for temporary structure is calculated as (32m/sec)
*32m/sec (gust wind for 50 years return period building category II)*