



## Structural Engineering requirements

The Town of Port Hedland is situated in a cyclonic area which can be subjected to very high wind events.

All elements of the building including footings, slab, wall framing, roof framing, floor framing, connections etc must be provided.

The structural engineers certified details must also state the below design criteria as a minimum. Please note the below criteria may be subject to change in accordance with Building Code of Australia, Australian Standards etc dependent upon the type of works, location etc.

### **General Criteria:**

Region D

Terrain Category 2

Building Importance Level – 2

Site Classification – Must be as per the provided site classification report.

### **Wind Speeds:**

Ultimate Limit – 88 metres per second

Serviceability Limit – 55 metres per second

### **Earthquake:**

The minimum required co-efficient pursuant to BCA Vol 1 Part B and AS1170.4 must be stated.

### **Glazed Assemblies:**

The structural engineer is to state the minimum ultimate, serviceability and water penetration pa ratings in accordance with AS2047 if applicable. Please refer to BCA Vol 1 Part B to confirm if the glazed assembly is required to comply with AS2047.

### **Cyclone Screens / Internal Coefficients:**

The structural engineer is to state if the building has been designed for internal coefficients and if so is to state the minimum coefficients in accordance with AS1170.2 Part 5.3. If the building has not been designed for internal coefficients, the engineer is to state that the building envelope including dominant openings are protected in accordance with AS1170.2 Part 5.3.

### **Low High Low (Roof Assemblies):**

The structural engineer is to state that all metal roof assemblies, their connections and immediate supporting members have been designed so as to be capable of remaining in position notwithstanding any permanent distortion, fracture or damage that might occur in the sheet or fastenings in accordance with BCA Vol 1 Specification B1.2