

Farseeing Knit Composite Limited (Extension)

Faridpur, Telihati, Sreepur, Gazipur

(24.264583, 90.401804)

10 January 2024



1. Building Information:

Building-1 (Production Building): Currently a partially five (G+4) storied RC building with a partial basement and the building is proposed for a full five storied.

Building-2 (Generator & Sub-station): Single-storied RC structure.

Building-3 (Utility Boiler): Single-storied RC structure.

2. Observations:

Observation-1: Inconsistencies in design report. (Building-1 (Production Building))



Parameters	Values	References/Remarks
Seismic Zone	3	BNBC-2006, Figure 6.2.10
Zone Factor, Z	0.25	BNBC-2006, Figure 6.2.10
Response Modification Factor, R	12	As per detailing. BNBC-2006 Table 6.2.24
Importance Factor	1	BNBC-2006
Ct	0.02	BNBC-2006, Section-2.5.6.2
Soil Profile	S2	BNBC-2006, Table 6.2.25

Description: Response modification factor $R=12$ has been considered in the design report. However no detailed calculation has been provided to support the consideration for the connection details. Also, due to ongoing construction the necessary amount of material testing has not been completed. The building engineer is required to check the framing system, confirm the material strength by necessary testing and revise the design report accordingly. Submit the design documents to the RSC for review.

Observation-2: Undesignated storage on ground level suspended floor and 1st floor. (Building-1 (Production Building))



Description: Undesignated storage found on the suspended ground floor (above UGWR) and 1st floor. The building engineer is required to update the load plan considering 6 kPa for storage areas and check the design accordingly.

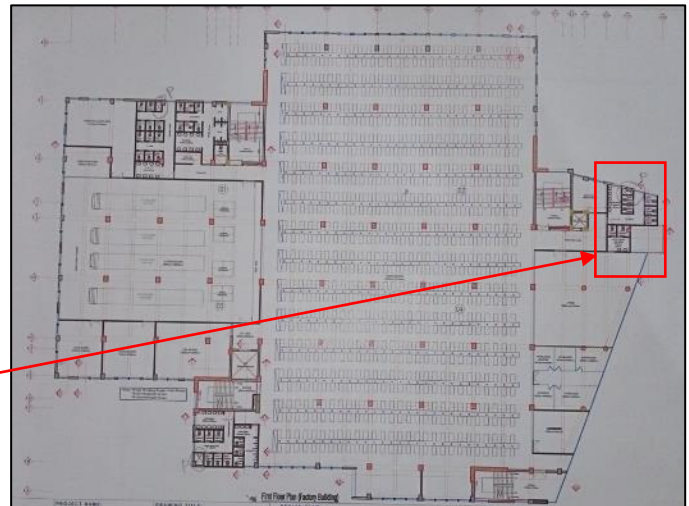
Observation-3: Discrepancies in as-built structural drawings. (Building-1 (Production Building))



At 4th-floor beam layout, the cantilever beam mentioned in the drawing



Not found in as-built condition



150 mm build-up found at the toilet zone of 1st floor which is not mentioned in the drawing.

Description: During the inspection, a mismatch was found in the 4th-floor beam layout and toilet build-up on the 1st floor. The building engineer is required to survey the full structure and produce accurate as-built drawings.

Observation-4: Falling hazard at roof, lift and stair. (Building-1 (Production Building))



Description: No parapet/railing was found on the roof, lift and stair. The building engineer is required to provide edge protection to all the required areas to avoid potential falling hazards.

Observation-5: Columns susceptible to vehicle & trolley impact. (Building-1 (Production Building))



Columns susceptible to vehicle impact.



Trolley impact on column

Description: Columns found which are prone to vehicle/trolley impact. The building engineer is required to provide a separate barrier surrounding the exterior columns to avoid vehicle impact and provide a column edge protection guard to prevent trolley impact on the columns.

Observation 6: Lack of PPE and standard construction safety practices. (Building-1 (Production Building))



Description: The construction workers were working without PPEs. A lack of safety barriers was observed (in the stair/lift core/open roof) on the under-construction floors. Also, construction debris was found on the roof. However, the building engineer to ensure necessary safety measures are taken as per BNBC requirements and maintain the standard construction safety practice accordingly.

3. Action Plan:

Item No.	Observation	Action Plan	Timeline
1	Inconsistencies in Design documents. (Building-1 (Production Building))	The building engineer is required to check the framing system & revise the design parameters, complete the necessary material testing & confirm the material strength and revise the design report accordingly. Submit the design documents to the RSC for review.	within 6 weeks
2	Inconsistencies in Design documents. (Building-1 (Production Building))	Implement remediation work if required.	within 6 months
3	Undesignated storage on ground level suspended floor and 1st floor. (Building-1 (Production Building))	The building engineer is required to update the load plan considering 6 kPa for storage areas and check the design accordingly.	within 6 weeks
4	Discrepancies in as-built structural drawings. (Building-1 (Production Building))	The building engineer is required to survey the full structure and produce accurate as-built drawings.	within 6 weeks
5	Falling hazard at roof, lift and stair. (Building-1 (Production Building))	The building engineer is required to provide edge protection to all the required areas to avoid falling hazards.	within 6 weeks
6	Columns susceptible to vehicle & trolley impact. (Building-1 (Production Building))	The building engineer is required to provide separate barriers surrounding the exterior columns to avoid vehicle impact and provide a column edge protection guard to prevent trolley impact on the columns.	within 6 weeks
7	Lack of PPE and standard construction safety practices. (Building-1 (Production Building))	The building engineer to ensure necessary safety measures are taken as per BNBC requirements and maintain the standard construction safety practice accordingly.	within 6 weeks