Rupa Fabrics Limited (Extension)

Kunia, Board Bazer, National University, Gazipur.

(23.937259, 90.387670)

28 November 2023

1. Building Information

7 Storied Building: Seven storied (B+G+6) RC building with a basement.

Utility Building-2: Three storied (G+2) RC building with a mezzanine floor inside the ground floor and first floor.

Dyeing Shed-2: Single storied prefabricated steel shed.

Dyeing Finishing Shed-3: Single storied prefabricated steel shed.

2. Observations

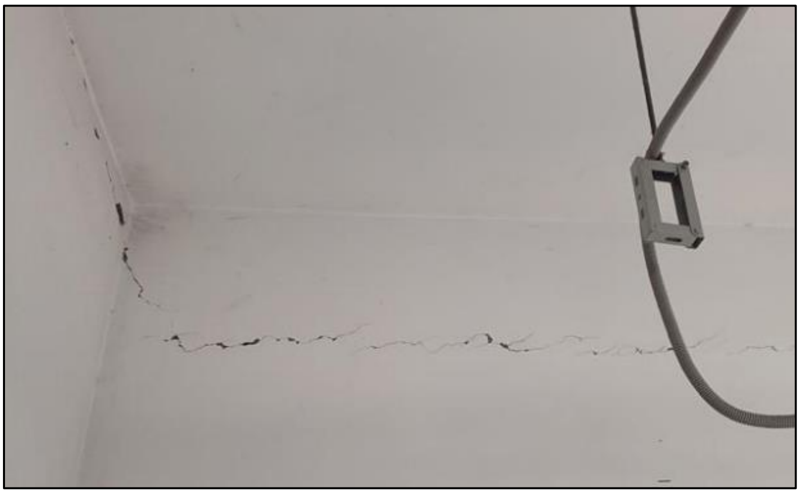
Observation-1: Lack of design document/ geotechnical investigation report (7 Storied Building).

Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design documents shall include as-built drawings and a design report which shall be prepared in compliance with section 1.9.1, part-6 of BNBC. At the time of inspection, the design report/ geotechnical investigation report was not available on site. The building engineer is required to prepare a Detailed Engineering Assessment (DEA) including a geotechnical investigation report.

Observation-2: Dampness on wall. (7 Storied Building)

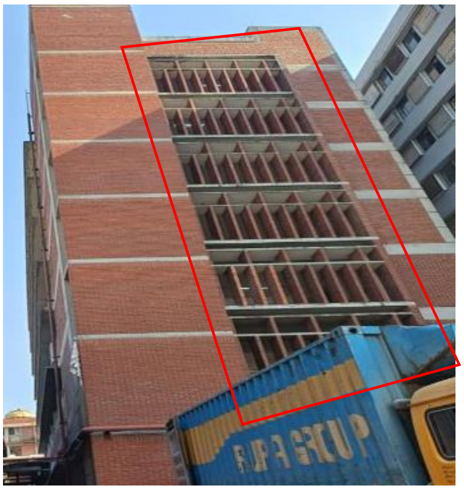
Description: Dampness found in different location. The building engineer is required to identify the source of dampness and take remedial measures to repair the walls accordingly.

Observation-3: Crack on wall (7 Storied Building).



Description: Crack found on the periphery wall on the 6th floor. The factory is required to repair the crack as per the suggestion of building engineer.

Observation-4: Falling Hazard. (7 Storied Building)



Description: Significant gap found in between decorative walls at west side of the building which is prone to falling hazard. Building engineer is required to provide parapet/railing at this location in all floors to avoid possible falling hazard.

Observation-5: Trolly impact on column (7 Storied Building).

Description: Signage of damage found in column due to trolly impact. The building engineer is required to provide necessary column guards properly to resist possible trolley impact.

Observation-6: Lack of design report/geotechnical investigation report (Utility Building-2)

Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, design report/ geotechnical investigation report was not available. The building engineer is required to prepare a Detail Engineering Assessment (DEA) for the structure.

Observation-7: Missing information in as-built drawing (Utility Building-2)

Two mezzanine floor inside ground floor

Upper mezzanine (level-2)

Description: Two mezzanine floor were found inside ground floor (east side) but not shown in floor layout/section. The building engineer is required to update the as-built drawing.

Observation-8: Apparently inadequate connection of steel stair/ladder (Utility Building-2)

Description: The connection of steel stair/ladder appeared to be inadequate. The building engineer is required to check the connection adequacy of the stair/ladder.

Observation-9: Falling hazard at several locations (Utility Building-2)

Description: Edge protection was not found at several places. Also, a huge gap was observed between steps of the steel stair/ladder near mezzanine floor inside ground floor. The building engineer is required to take necessary steps to avoid falling hazard.

Observation-10: Lack of design report/geotechnical investigation report/as-built structural drawing (super structure) (Dyeing Shed-2).

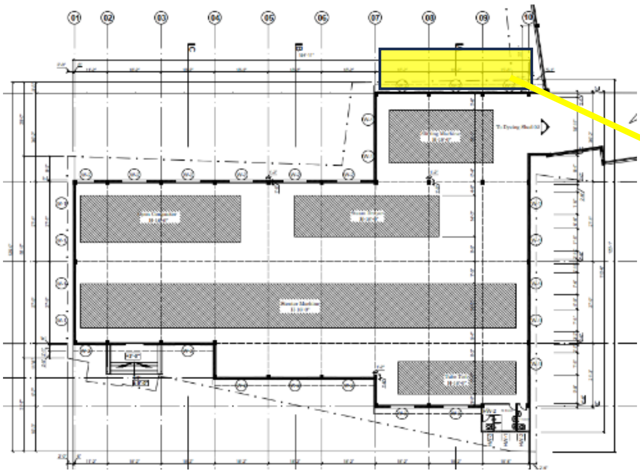
Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design documents shall include as-built drawings and a design report which shall be prepared in compliance with section 1.9.1, part-6 of BNBC.

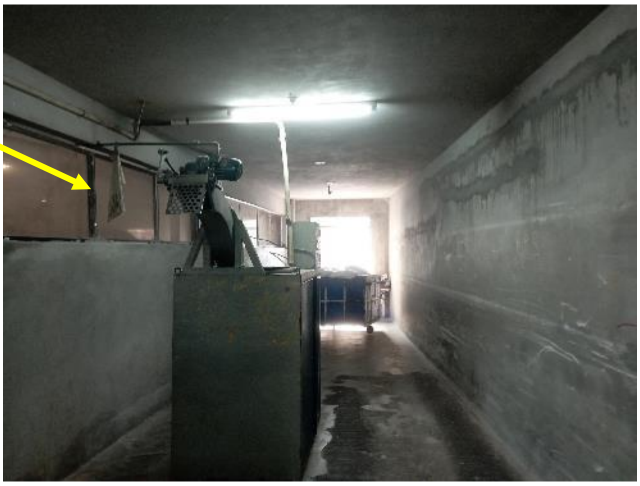
At the time of inspection, design report/ geotechnical investigation report was not available on site. The building engineer is required to prepare a Detailed Engineering Assessment (DEA) including a geotechnical investigation report.

Observation-11: Lack of design report/geotechnical investigation report/as-built structural drawing (super structure) (Dyeing Finishing Shed-3)

Description: As per BNBC, every building or structure designed shall have its design documents prepared in accordance with the provision of Section 1.9.1. The design document shall include a design report, and a set of structural drawings, which shall be prepared in compliance with section 1.9.1.1 and section 1.9.1.2 as per BNBC. At the time of inspection, design report/geotechnical investigation report/as-built structural drawing (super structure) was not available. The building engineer is required to prepare a Detail Engineering Assessment (DEA) for the structure.

Observation-12: Missing information in as-built drawing (Dyeing Finishing Shed-3)





Description: A small RC horizontal extension part was found at the west side of shed which was not shown in as-built drawing. The building engineer is required to update the as-built drawing.

Observation-13: Loose roof/wall bracing (Dyeing Finishing Shed-3)

Description: Loose roof/wall bracing was found loose. The building engineer is required to identify the locations and tighten all the loose bracings.

Observation-14: Lack of permit drawing from local authority (Dyeing Finishing Shed-3)

Description: At the time of inspection, the permit drawing was not available from the local authority. The factory is required to collect the permit drawing from the local authority.

3. Action Plan

Observation	Action Plan	Timeline
7 Storied Building		
Lack of design report/geotechnical investigation report (7 Storied Building).	The building engineer is required to prepare a Detailed Engineering Assessment (DEA). including a geotechnical investigation report.	within 6 weeks
Lack of design report/geotechnical investigation report (7 Storied Building).	Assign a geotechnical engineer to prepare a geotechnical investigation report.	within 6 weeks
Lack of design report/geotechnical investigation report (7 Storied Building).	Produce and actively manage load plan.	within 6 weeks
Lack of design report/geotechnical investigation report (7 Storied Building).	Carry out suggested remedial works if required.	within 6 months
Dampness on the wall. (7 Storied Building)	Building engineer is required to identify the source of dampness and take remedial measures to repair the wall accordingly.	within 6 weeks
Crack on wall (7 Storied Building).	The building engineer is required to repair the crack as per the suggestion of the building engineer.	within 6 weeks
Falling Hazard. (7 Storied Building)	Building engineer is required to provide a parapet/railing at this location on all floors to avoid possible falling hazards.	within 6 weeks
Trolly impact on column (7 Storied Building).	Building engineer is required to provide the necessary column guards properly to resist possible trolley impact.	within 6 weeks
Utility Building-2		
Lack of design report/geotechnical investigation report (Utility Building-2)	The building engineer is required to prepare a Detail Engineering Assessment (DEA) for the structure.	within 6 weeks
Lack of design report/geotechnical investigation report (Utility Building-2)	Assign a geotechnical engineer to prepare a geotechnical investigation report.	within 6 weeks
Lack of design report/geotechnical investigation report (Utility Building-2)	Produce and actively manage load plan.	within 6 weeks
Lack of design report/geotechnical investigation report (Utility Building-2)	Implement remediation work if required.	within 6 months
Missing information in as-built drawing (Utility Building-2)	The building engineer is required to update the as-built drawing.	within 6 weeks

Observation	Action Plan	Timeline
Apparently inadequate connection of steel stair/ladder (Utility Building-2)	The building engineer is required to check the connection adequacy of the steel stair/ladder.	within 6 weeks
Apparently inadequate connection of steel stair/ladder (Utility Building-2)	Implement remediation work if required.	within 6 months
Falling hazard at several locations (Utility Building-2)	The building engineer is required to take the necessary steps to avoid falling hazards.	within 6 weeks
Dyeing Shed-2		
Lack of design report/geotechnical investigation report (Dyeing Shed-2).	The building engineer is required to prepare a Detailed Engineering Assessment (DEA) including a geotechnical investigation report.	within 6 weeks
Lack of design report/geotechnical investigation report (Dyeing Shed-2).	Carry out suggested remedial works if required.	within 6 months
Dyeing Finishing Shed-3		
Lack of design report/geotechnical investigation report/as-built structural drawing (superstructure) (Dyeing Finishing Shed-3)	The building engineer is required to prepare a Detailed Engineering Assessment (DEA) including a geotechnical investigation report.	within 6 weeks
Lack of design report/geotechnical investigation report/as-built structural drawing (superstructure) (Dyeing Finishing Shed-3)	The building engineer is required to produce the as-built drawing for super structure.	within 6 weeks
Lack of design report/geotechnical investigation report/as-built structural drawing (superstructure) (Dyeing Finishing Shed-3)	Implement remediation work if required.	within 6 months
Missing information in as-built drawing (Dyeing Finishing Shed-3)	The building engineer is required to update the as-built drawing.	within 6 weeks
Loose roof/wall bracing (Dyeing Finishing Shed-3)	The building engineer is required to identify the locations and tighten all the loose bracings.	within 6 weeks
Lack of permit drawing from local authority (Dyeing Finishing Shed-3)	The building engineer is required to collect the permit drawing from the local authority.	within 6 months