

Scandex (Bd) Ltd (Extension)

B-Bangla, Gouripur, Ashuliya, Savar

(23.890397, 90.317260)

1 December 2025



1. Building Information

1. Store Building: 3-storied (G+2) RC building.

2. Observation

Observation-01: An Inadequate number of cylinder test reports and different types of aggregate used in the column (Store Building).

TEST REPORT

Sl. No.	Date of Casting as per the letter	Specimen Designation	Specimen Area (sq. cm)	Maximum Load (kN)	Crushing Strength (MPa)	Average Crushing Strength	Made of Failure
1	13/8/2024	100	12.55	35.47	35.47	35.47	Combined *
2	13/8/2024	100	12.55	35.47	35.47	35.47	Combined *

TEST REPORT

Sl. No.	Date of Casting as per the letter	Specimen Designation	Specimen Area (sq. cm)	Maximum Load (kN)	Crushing Strength (MPa)	Average Crushing Strength	Made of Failure
1	5/9/2022	100	12.42	54.915	4.397	4.397	Combined *
2	15/4/2022	100	12.55	58.624	4.671	4.671	Combined *
3	15/4/2022	100	12.55	45.267	3.607	3.607	Combined *

Stone chips at the ground

Brick chips on the 2nd floor

Description: An inadequate number of concrete cylinder test reports were available, with no average value, which doesn't meet the frequency of testing as per BNBC. Also, different types of aggregate are used in the column at different floors. The building engineer is required to verify in-situ concrete strength by taking minimum 4-100 mm diameter cores from the structural elements (Column, beam/slab) as per each aggregate types.

Observation-02: Load plan doesn't comply with BNBC (Store Building).

INDUSTRIAL, STORAGE & HAZARDOUS (Occupancy - G, H & J)		Workshop, factory, warehouse	
1	Light workroom without storage	3.0	2.7
2	Machinery hall & circulation area	4.0	4.5
3	Factory, workshop etc.	5.0	4.5
4	Manufacturing : light	6.0	4.5 ^(S)
	heavy	12.0	9.0 ^(S)
	ice	15.0	9.0 ^(S)
5	Printing plant :		^(S)
	Press room	7.0	11.0
	Composing and linotype room	5.0	9.0 ^(S)
	Paper storage room	12.0	9.0 ^(S)
6	Motor room, fan room etc. including the weight of machinery	7.5	4.5
7	Cold storage, grain storage	15.0	9.0 ^(S)
8	Storage warehouses : light	6.0	4.5 ^(S)
	heavy	12.0	9.0
9	Foundries	20.0	12.0



Description: Live load on the 2nd floor is considered as 4 kPa in the prepared load plan. As per BNBC- Part 6, live load for light storage areas is required to be considered a minimum 6 kPa. However, the factory engineer is required to revise the load plan as per the BNBC requirement and check the design accordingly.

Observation-03: Lack of information in design report (Store Building).

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**DETAIL ENGINEERING ASSESSMENT OF
EXISTING 3 STORIED FACTORY BUILDING**

MOTALEB MANSION

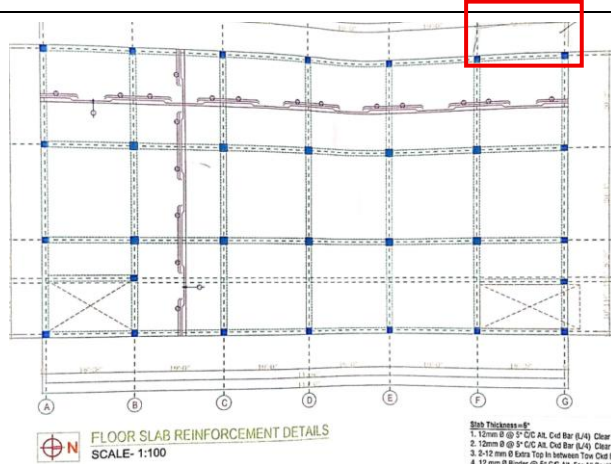
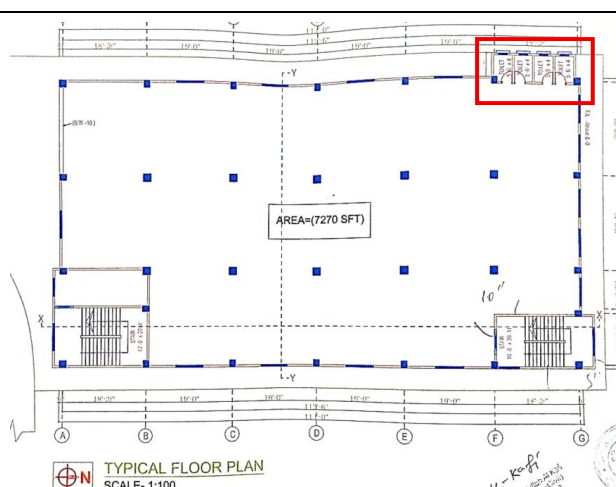
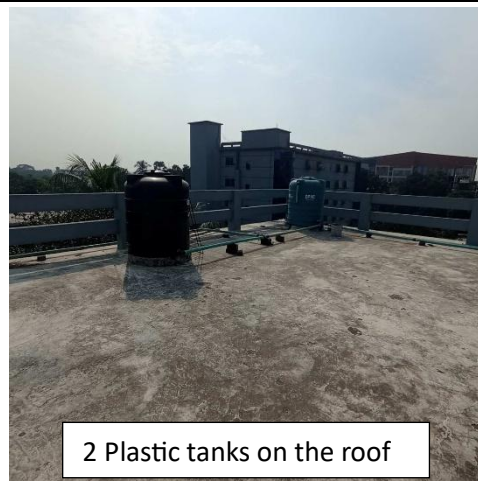
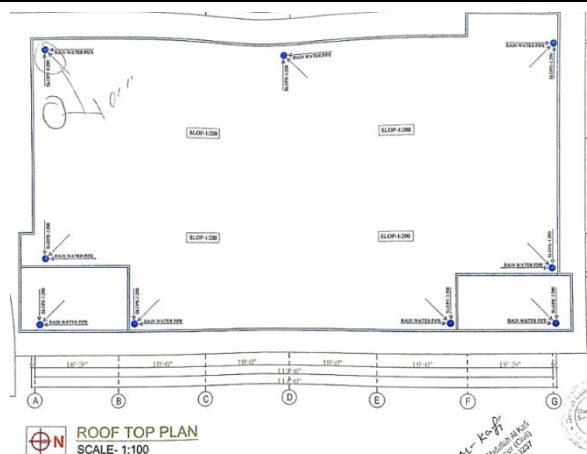


FIGURE 1 : FACTORY BUILDING: 3 STORIED FACTORY BUILDING

Date of Submission: 07.07.2022

Description: A design report was available, which doesn't include the punching/flexural capacity check of the foundation, serviceability and irregularity check of the building as per BNBC. The building engineer is required to update the design report as per 1.9.1 BNBC and submit it to RSC for detailed review.

Observation-04: Lack of information in the provided drawing (Store Building).



Description: 2 plastic tanks (1000 liters each) were found on the roof slab, which were not shown in the roof layout. Also, the cantilever part (red marked) shown in the architectural layout is not shown in the slab layout. The building engineer is required to survey the as-built condition and prepare an accurate set of as-built drawings.

Observation-05: Plaster Crack on the beam (Store Building).



Description: Cracks (plaster) were found on the beam at several locations. The building engineer is required to identify all areas and repair the crack with a suitable method.

Observation-06: Dampness on brick wall (Store Building).



Description: Dampness was found in the brick wall at several locations. The building engineer is required to repair the dampness with a suitable method.

Observation-07: Column plaster damaged due to trolley impact (Store Building).



Description: Column plaster damage was found on the ground floor. The building engineer is required to repair damaged plaster and provide a column guard.

Observation-08: Nonstructural elements found unanchored/unbraced (Store Building).



Description: Nonstructural elements found unanchored/unbraced. Anchor/brace all nonstructural elements within the building.

Observation-09: Construction safety is not being maintained (Under-construction Building).



Description: Construction safety is not being maintained at the under-construction Building. Maintain construction safety practice as per BNBC, Part VII, Chapter 3.

3. Action Plan

Item No	Observation	Action Plan	Timeline
1.	An Inadequate number of cylinder test reports and different types of aggregate used in the column (Store Building).	For each type of aggregate (stone & brick), verify in-situ concrete strength by taking a minimum of 4 (100 mm diameter) concrete cores from lower-tier building columns and a minimum of 4 concrete cores from floors (beam & slab)	within 6 weeks
2.	The load plan doesn't comply with BNBC (Store Building).	The building engineer is required to revise the live load plan as per the BNBC requirement and check the design accordingly.	within 6 weeks
3.		Implement floor live load plan (post accepted allowable load plan, mark storage height & area & maintain floor loading below limit)	within 6 months
4.	Lack of information in the design report (Store Building).	The building engineer is required to update the design report as per 1.9.1 BNBC and submit it to RSC for review.	within 6 weeks
5.		Implement remediation work if required.	within 6 months
6.	Lack of information in the provided drawing (Store Building).	The building engineer is required to survey the structure and prepare accurate set of as-built drawings.	within 6 weeks
7.	Plaster crack on the beam (Store Building).	The building engineer is required to identify all areas and repair the crack with a suitable method.	within 6 weeks
8.	Dampness on brick wall (Store Building).	The building engineer is required to seal the source of water & repair the dampness with a suitable method.	within 6 months
9.	Column plaster damaged due to trolley impact (Store Building).	The building engineer is required to repair damaged plaster and provide a column guard.	within 6 months
10.	Nonstructural elements found unanchored/unbraced (Store Building).	Anchor and/or brace all nonstructural elements within the building.	within 6 months
11.	Construction safety is not being maintained (Under-construction Building).	Maintain standard construction safety practice as per BNBC (Part VII, Chapter 3).	within 6 weeks