

Fashion Plus Ltd.

Gorat, Ashulia, Savar, Dhaka-1341.

(23.949376, 90.304885)

9 December 2025



1. Building Information

1.	Main Building	Six-storied (B+G+M+5) reinforced concrete (RC) building with a semi basement and mezzanine floor
2.	Utility Shed	Single-storied structure combined RC and steel structure.
3.	Fire Control & Security Room	Single-storey RC structure with an underground tank

2. Observation

Observation-01: Inconsistencies in the design report. (Main Building)

Story	Output Case	Case Type	Step Type	Shear X kip	Drift X in	Stiff X kip/in	Shear Y kip	Drift Y in	Stiff Y kip/in
3RD FL	EQY	LinStatic	Step By Step	0	0.001687	0	308.262	0.073877	4172.631
2ND FL	EQY	LinStatic	Step By Step	0	0.002042	0	339.06	0.068672	4937.368
1ST FL	EQY	LinStatic	Step By Step	0	0.002144	0	362.374	0.055201	6564.612
GR FL	EQY	LinStatic	Step By Step	0	0.001023	0	364.566	0.013106	27815.80

5.0 DESIGN OF VARIOUS MEMBERS

5.1 Design of Foundation

Type: Shallow foundation (footing, raft)

Soil Bearing Capacity: 4.0 Tsf

Concrete: $f_c = 3500$ psi

Reinforcement Steel: $f_y = 60000$ psi

5.4 Design of Slabs

Concrete: $f_c = 3500$ psi

Reinforcement Steel: $f_y = 60000$ psi

Project : Fashion Plus Ltd.

Using Nilson Winter (12th Edition) Chart

Slab Size (La x Lb)	20.00	ft.	x	26.50	ft.
Minimum Slab Thickness	6.20	inch			
Designed Slab Thickness	6.50	inch			
Dead Load due to Slab Thickness	81.25	psf			
Dead Load due to internal wall	30.00	psf			
Dead Load due to Floor Finishing	25.00	psf			
Total Dead Load (DL)	136.25	psf			
Total Live Load (LL)	125.00	psf			
Edge Case	9				
m (La/Lb)	0.75				
Ca (negative) from Table 12.3	0.078				
Cb (negative) from Table 12.3	0.036				
Ca (dead load positive) from Table 12.4	0.036				
Cb (dead load positive) from Table 12.4	0.013				
Ca (live load positive) from Table 12.5	0.049				
Cb (live load positive) from Table 12.5	0.016				

Description: During the inspection, the design report was found on-site, where concrete design strength was considered 3500 psi. Available cylinder number did not meet the frequency of testing requirements. And the equivalent core test result (21.7 MPa = 3147 psi) doesn't satisfy the design strength. In addition, there was no floor live load plan for the building.

The building engineer is required to address all the inconsistencies in the revised design report and submit them to RSC for detailed review.

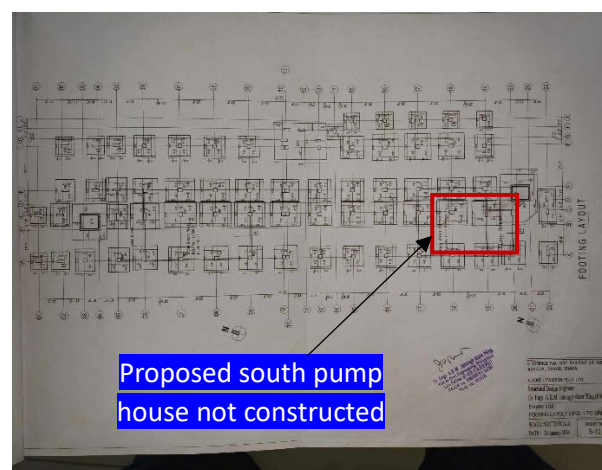
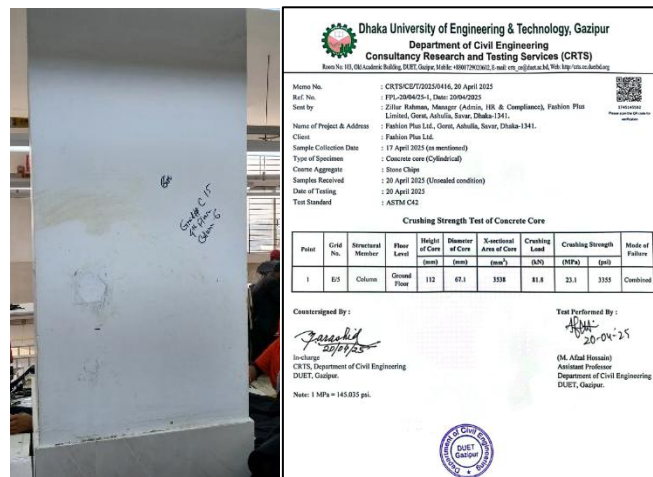
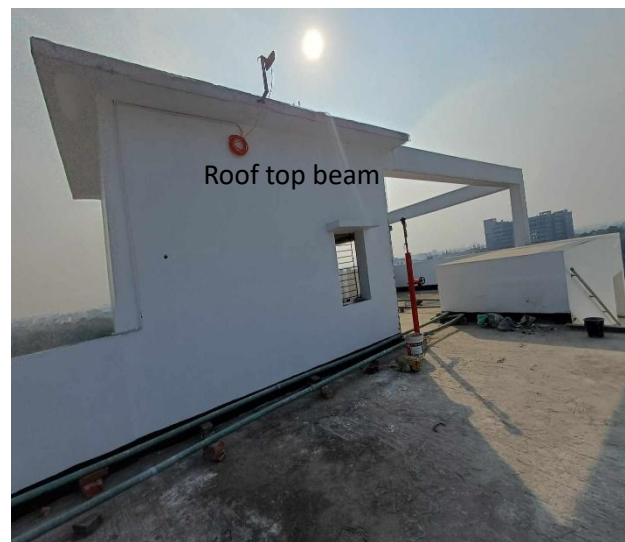
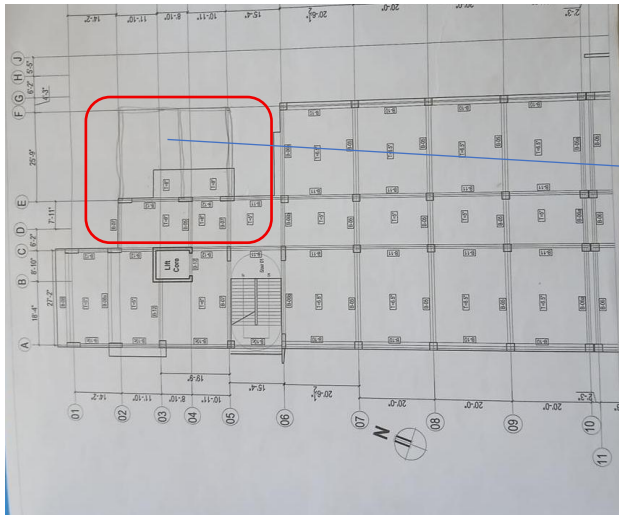
Observation-02: Slenderness exists in the shear walls and columns. (Main Building)



Description: The RC column (600mm X 600mm) unsupported length is 6m. Also, the shear wall (450mm X 1200mm) unsupported length is 9.2m. The height-to-thickness ratio of the shear wall and RC column exceeds the limit.

The building engineer is required to consider the slenderness effects in the design report.

Observation-03: Mismatches/lack of as-built drawings. (Main Building)



Description: Beam layout of roof floor didn't fully match with as-built conditions. At the North open beams are not shown in drawings. Also, beam layout for mezzanine floor & roof top and concrete core layouts were missing in the provided drawings. Moreover, Pump House of the South side has not been constructed.

Observation-04: Non-structural elements found unbraced/unanchored. (Main Building)



Description: Non-structural elements storage racks and PVC tanks were found unbraced/unanchored. The building engineer is required to brace/anchor all non-structural elements.

Observation-05: Lack of structural drawings and design documents.
(Utility Shed; Fire Control & Security Room)



Utility Shed



Fire Control & Security Room

Description: As-built structural drawings and design documents were not available for Utility Shed and Fire Control & Security Room. Building engineer is required to survey the whole structures and prepare as-built structural drawings with complete structural details. Also prepare design report for both structures.

3. Action Plan

Item No	Observation	Action Plan	Timeline
1.	Inconsistencies in the design report and slenderness effect of column & shear wall. (Main Building)	The building engineer is required to address all the inconsistencies and slenderness effect in the revised design report and submit to RSC for detailed review.	within 6 weeks
2.		Produce and actively manage a loading plan for all floor plates.	within 6 weeks
3.		Implement remediation work (if required) after acceptance from RSC.	within 6 months
4.		Implement floor load plan (post the allowable live load plan, mark storage area & height and maintain floor loading).	within 6 weeks
5.	Mismatches in as-built drawings (Main Building)	The building engineer is required to survey the whole structure and produce an accurate as-built drawing.	within 6 weeks
6.	Non-structural elements found unbraced / unanchored. (Main Building)	The building engineer is required to brace/anchor all non-structural elements.	within 6 months
7.	Lack of structural drawings and design documents. (Utility Shed)	Building engineer is required to survey the whole structures and prepare as-built structural drawings with complete structural details.	within 6 weeks
8.		Prepare complete design report for the structures.	within 6 weeks
9.		Implement remediation work (if required) after acceptance from RSC.	within 6 months
10.	Lack of structural drawings and design documents. (Fire Control & Security Room)	Building engineer is required to survey the whole structures and prepare as-built structural drawings with complete structural details.	within 6 weeks
11.		Prepare complete design report for the structures.	within 6 weeks
12.		Implement remediation work (if required) after acceptance from RSC.	within 6 months