

Lavender Fashion Ltd (Unit-01)

Telirchala, Mouchak, Kaliakair, Gazipur-1751

(24.017992, 90.304208)

8 February 2026

Structural Inspection Report

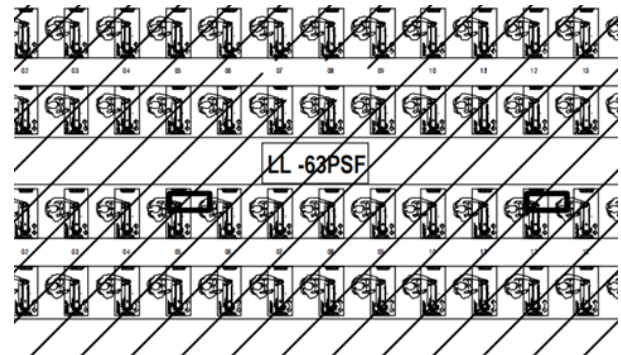
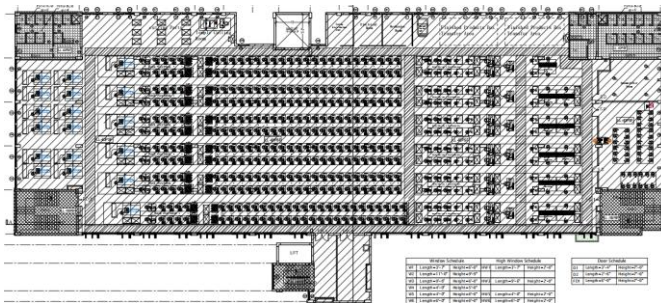


1. Building information

- 1 Production Building (G+5).
- 2 Single storied Utility Building.
- 3 Single storied Security Post.

2. Observation

Observation 1: Inconsistencies in the design report and load plan. (Production Building)



Occupancy or Use	Uniform kN/m ²	Concentrated kN
Hotels	See Residential	
Libraries		
Reading rooms	2.90	4.50
Stack rooms	7.20 ^d	4.50
Corridors above first floor	3.80	4.50
Manufacturing*		
Light	4.00	6.00
Medium	6.00	9.00
Heavy	12.00	13.40
Garments manufacturing floor except stacking or storage area	4.00 ^e	--
Stacking or storage area of garments manufacturing industry	6.00 ^f	10.00 ^f

DDS
DESIGN & DEVELOPMENT SOLUTION
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ABSTRACT

The building is a Six Storied Factory building for LAVENDER FASHION LTD (UNIT-01), At Teli Chala, Mouchak, Kalakour, Gazipur, Bangladesh. Ensuring structural safety need to assessment of this structure. As-built drawing prepared by site visiting and source of drawing. All structural elements of this structure have been designed according to Bangladesh National Building Code-2006 considering 30 psf for Roof live load. Sub-Soil investigation report prepared by "National Soil Engineering Consultant"

1.0) Building Information:

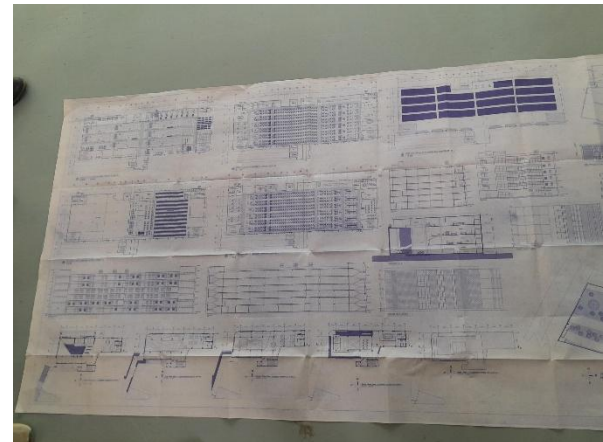
Over all geometrical and environmental information of this building given, below.

- Building Location: Gazipur.
- Seismic Zone: 2 as per BNBC 2006
- Wind Speed at Building Location: 215 km/hr.
- Building Type: RCC Factory Building
- No of story: Six
- Height of structure: 81'-4" From Base to Roof
- Length=302'6", Width=132'-8"

Story	Height ft	Elevation ft
LT	7	100.3333
5T	10.8333	93.3333
RF	14	82.5
5TH	14	68.5
4TH	11.75	54.5
3RD	11.75	42.75
2ND	11.75	31
1ST	11.75	19.25
GB	7.5	7.5
Base		0

Based on existing structural detailing, Intermediate Moment Resisting Frame (IMRF) has adopted.
(Ref. BNBC, Part-6, Sect.3.2)

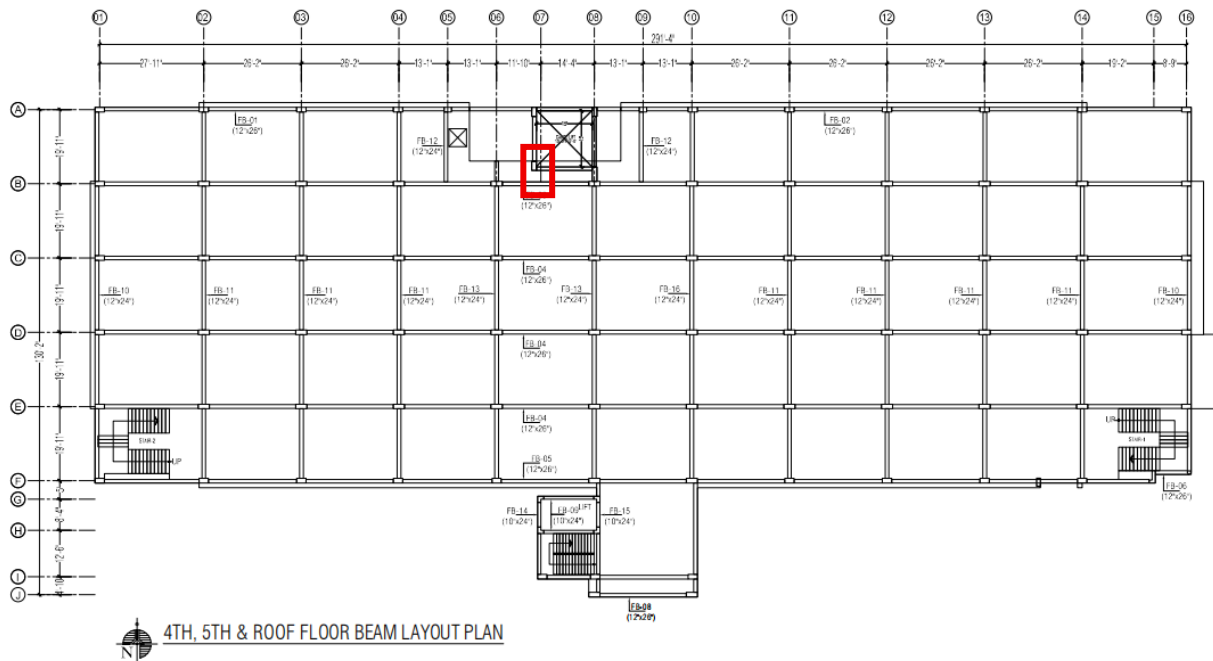
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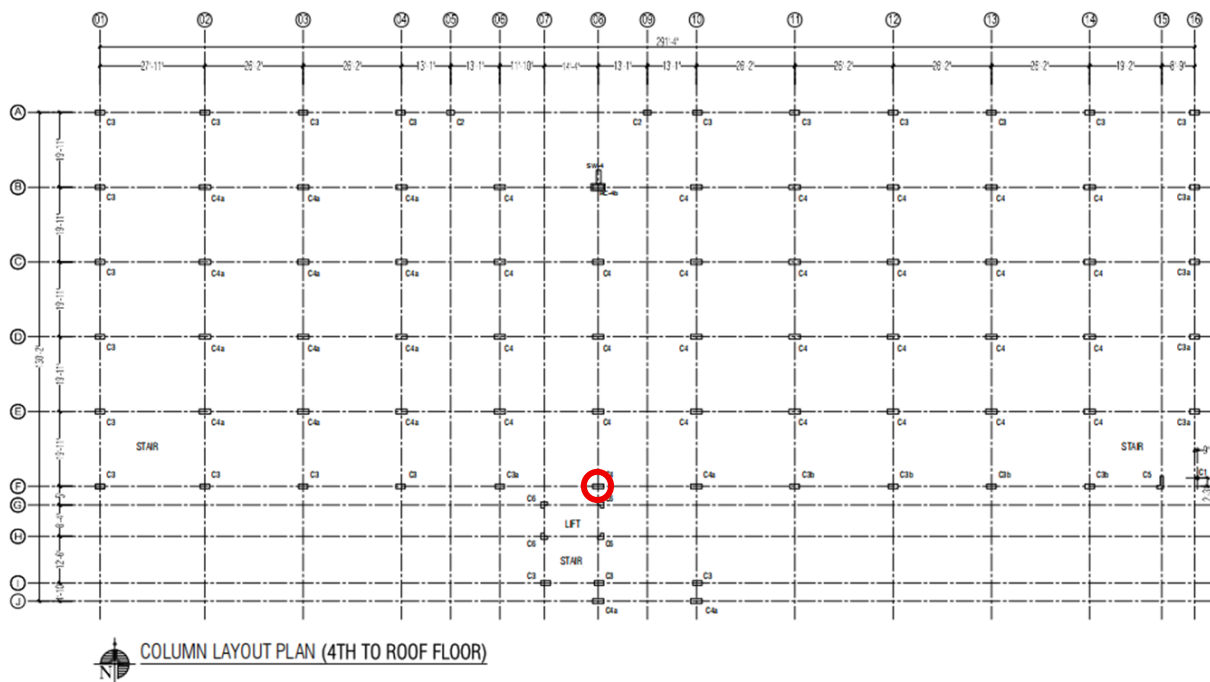
Description: Permit drawing was approved after February 2021. The design documents were prepared for the building considering BNBC-06 and design live load was considered as 3.0 kPa for the production area. However, as per the BNBC 2020, the required live load for a "garments manufacturing floor" is 4.0 kPa.

The building engineer is required to revise the load plan in compliance with BNBC 2020, update the design report according to BNBC 2020 and submit the complete set of documents, including the lift core and roof top shed to RSC for review.

Observation-2: Mismatch in as-built drawing and no credible structural construction drawing (Production Building).



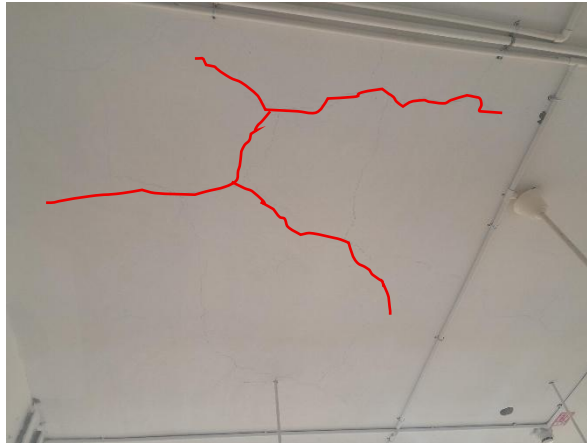
RC Beam found connected with main structure in this location on all floors not shown in drawing



Marked RC column size was found 375X750 mm instead of 375X900 mm

Description: During inspection, mismatch was found in between as-built drawing and onsite condition of Production Building. Also, no credible structural construction drawing was found to verify the foundation information. Factory engineer is required to verify foundation information and prepare accurate as-built drawings.

Observation-3: Crack found on 2nd floor roof slab (Production Building)



Description: The building engineer is required to investigate the extent and reason of crack and prepare a crack investigation report along with appropriate remediation measures. Necessary repairs must be carried out as per recommendation.

Observation-4: Non-structural elements not anchored or braced. (Production Building)



Description: Some racks on floors are not anchored or braced to resist lateral (earthquake) forces. The factory engineer is required to anchor/brace all non-structural elements adequately to resist earthquake forces.

Observation 5: Lack of as-built drawing (Security Post)



Description: No as-built drawing was found during inspection. The building engineer is required to prepare a full set of as-built drawings for this structure.

5. Action Plan

Item No.	Observation	Action Plan	Timeline
1.	Inconsistencies in the design report and load plan. (Production Building)	The factory engineer is required to revise the load plan as per the BNBC 2020 requirement and check the design accordingly.	within 6 weeks
2.		The building engineer is required to submit the updated design documents, including the lift core and roof top shed.	within 6 weeks
3.		Carryout suggested remedial works (if required).	within 6 months
4.	Mismatch in as-built drawing and no credible structural construction drawing (Production Building).	Factory engineer is required to verify foundation information and prepare accurate as-built drawings.	within 6 weeks
5.	Crack found on 2nd floor roof slab (Production Building)	The building engineer is required to investigate the extent and reason of crack and prepare a crack investigation report along with appropriate remediation measures. Necessary repairs must be carried out as per recommendation.	within 6 weeks
6.	Non-structural elements are not anchored or braced. (Production Building)	Factory engineers are required to brace/anchor all non-structural elements.	within 6 weeks
7.	Lack of as-built drawing (Security Post)	Factory engineer is required to prepare a full set of as-built drawings for this structure.	within 6 weeks