Asrotex (Extension)

Dharmaganj, Enayetnagar, Fatullah, Narayanganj, Bangladesh
Geographic Coordinates: 24.626362, 90.459574
08th October 2023

RSC RMG SUSTAINABILITY COUNCIL

Building Information

01. Building-2: The structure is a seven (G+6) storied reinforced concrete (RC) building with a semi-basement.

Observations

Inconsistencies in design report

Observations

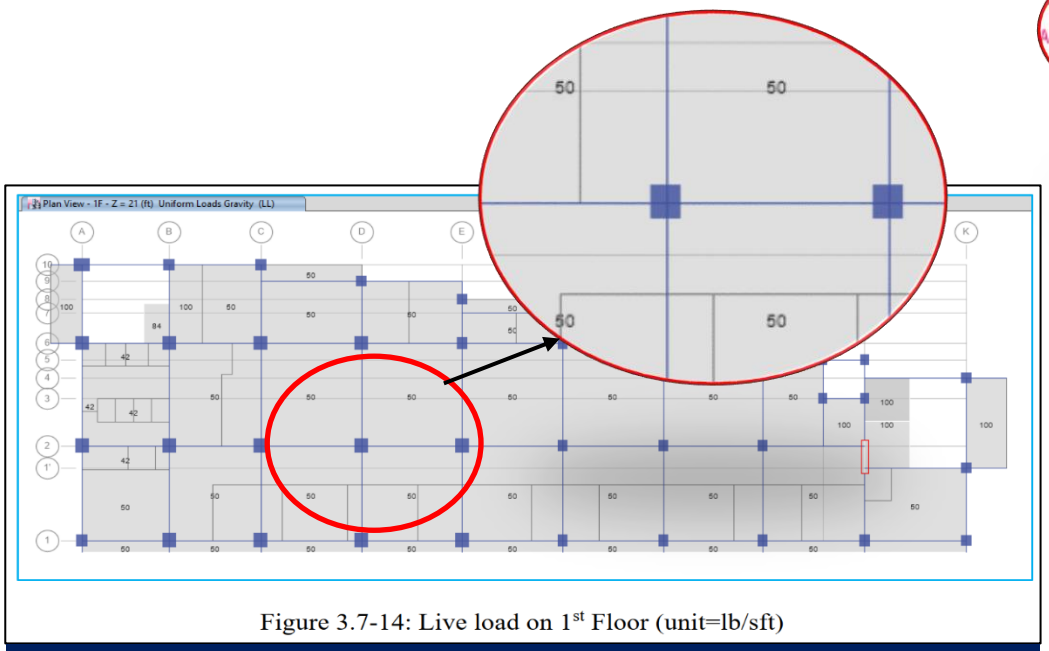
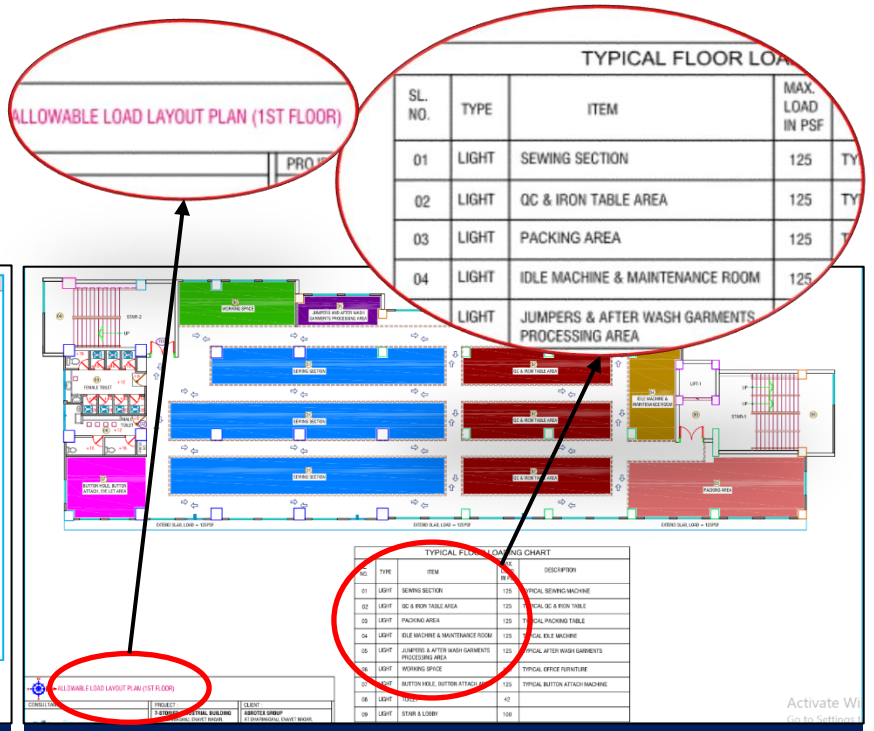


Figure 3.7-14: Live load on 1st Floor (unit=lb/sft)

Software based analysis: 50psf (2.5 kPa) live load



Load plan: 125psf (6 kPa) live load on 1st

In design and analysis, first floor live load was considered as 50psf. Hence, in the posted load plan 125psf has been considered beyond the design & analysis.
Building engineer is required to check the floor load plan, update as per BNBC requirement and revise the revise the design documents accordingly.

Observations

Exposed reinforcement left at each level

Observations

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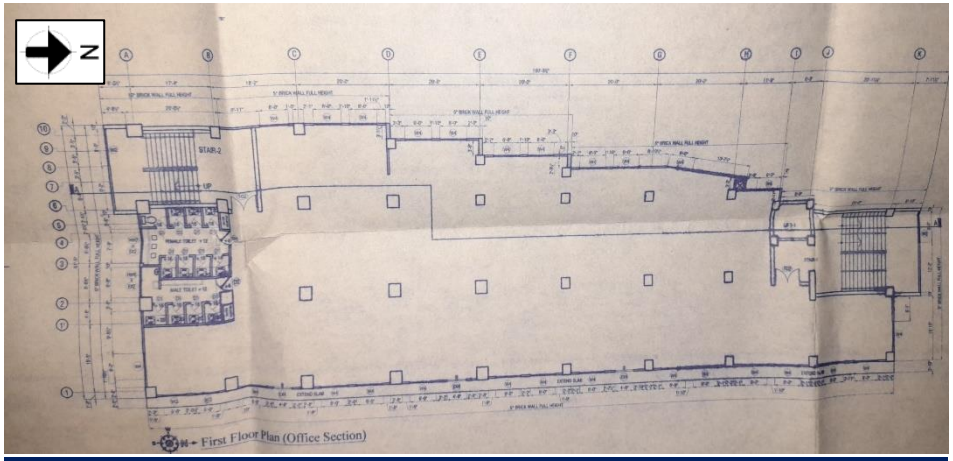
Exposed reinforcements had been left at each floor level staircase which were prone to corrosion. Factory is required to provide rust proof paint on exposed reinforcement to protect from corrosion.

Observation

Possible horizontal expansion

Observations



Floor outline in the permit drawing

Projected reinforcement left at east side which indicates possible future horizontal expansion

The building is currently existed as per the permit drawing.
However, the factory has a plan to conduct horizontal expansion in future. Projected reinforcement left at east side which indicates possible future horizontal expansion.

The factory is required to collect building permit drawing considering expansion part and prepare a Detailed Engineering Assessment (DEA) report prior conducting any horizontal expansion.

Observation

Non-structural elements found unbraced/not anchored

Observations

Storage rack found within the building without braced/anchored

Non-structural elements suspended from, attached to, or resting atop the structure shall be adequately anchored and braced to resist earthquake forces. Factory is required to brace/anchor all non-structural elements.

Observation

Column and wall susceptible to impact load

Observations

Affected columns at lift zone

Wall

Columns and walls are susceptible to impact loading from trolley. Signs of damages were observed at several floor. Factory is required to provide necessary protection on the affected and suspected locations.

Observation

Corrosion on steel members

Corrosion on steel member

Corrosion was observed on steel members on roof shed. Factory is required to provide rust proof paint on steel members.

Observation

Priority Actions

Problems Observed

Item 1: Inconsistencies in design report.

Item 2: Exposed reinforcement left at each level.

Item 3: Non-structural elements found unbraced/not anchored.

Item 4: Column and wall susceptible to impact load.

Item 5: Corrosion on steel members.

Item 6: Possible horizontal expansion.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
01	Inconsistencies in design report.	Building engineer is required to check the floor load plan, update as per BNBC requirement and revise the revise the design documents accordingly.	6-weeks
02	Inconsistencies in design report.	Carry out the remedial works if required.	6-months
03	Exposed reinforcement left at each level.	Factory is required to provide rust proof paint on exposed reinforcement to protect from corrosion.	6-months
04	Non-structural elements found unbraced/not anchored	Factory is required to brace/anchor all non-structural elements.	6-months
05	Column and wall susceptible to impact.	Factory is required to provide necessary protection on the affected and suspected locations.	6-months
06	Corrosion on steel members with poor connection.	Factory is required to provide rust proof paint on steel members.	6-weeks
07	Possible horizontal expansion.	The factory is required to collect building permit drawing considering expansion part and prepare a Detailed Engineering Assessment (DEA) report prior conducting any horizontal expansion.	6-months
08	Possible horizontal expansion.	Carry out the remedial works if required.	6-months