Shafi Knit Ltd.

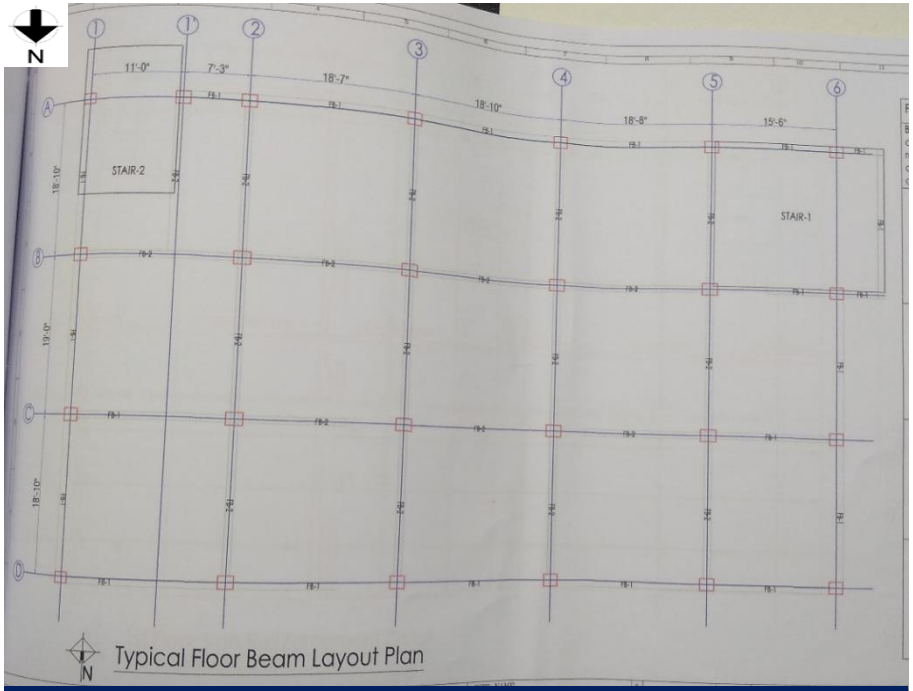
Natun Para, Baipail (beside DEPZ-2), Ashulia, Savar, Dhaka
(23.945646N, 90.277794E)
12th May 2019

ACCORD
on Fire and Building Safety in Bangladesh

Observations

Discrepancies between provided drawings and on-site condition

Observations: Main Building



Typical floor beam layout

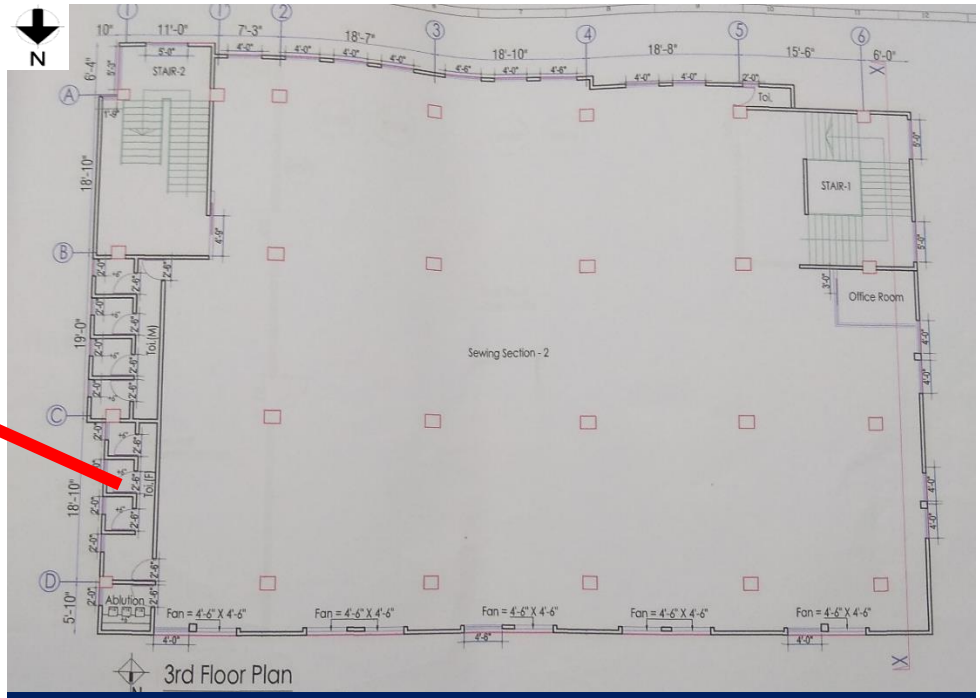
Cantilever beam on roof floor beam

Cantilever beams were found only at 3rd floor roof. A Typical Floor Beam Layout Plan shows cantilever beams. In addition, beam down stand was measured 200 mm instead of 250 mm (as per provided as-built drawing) at 1st to 3rd floor beams.

Observations: Main Building

Toilet Zone

Number of toilets did not match with as-built drawings. Six nos. of female toilets were found on site where as-built drawing shows three nos.

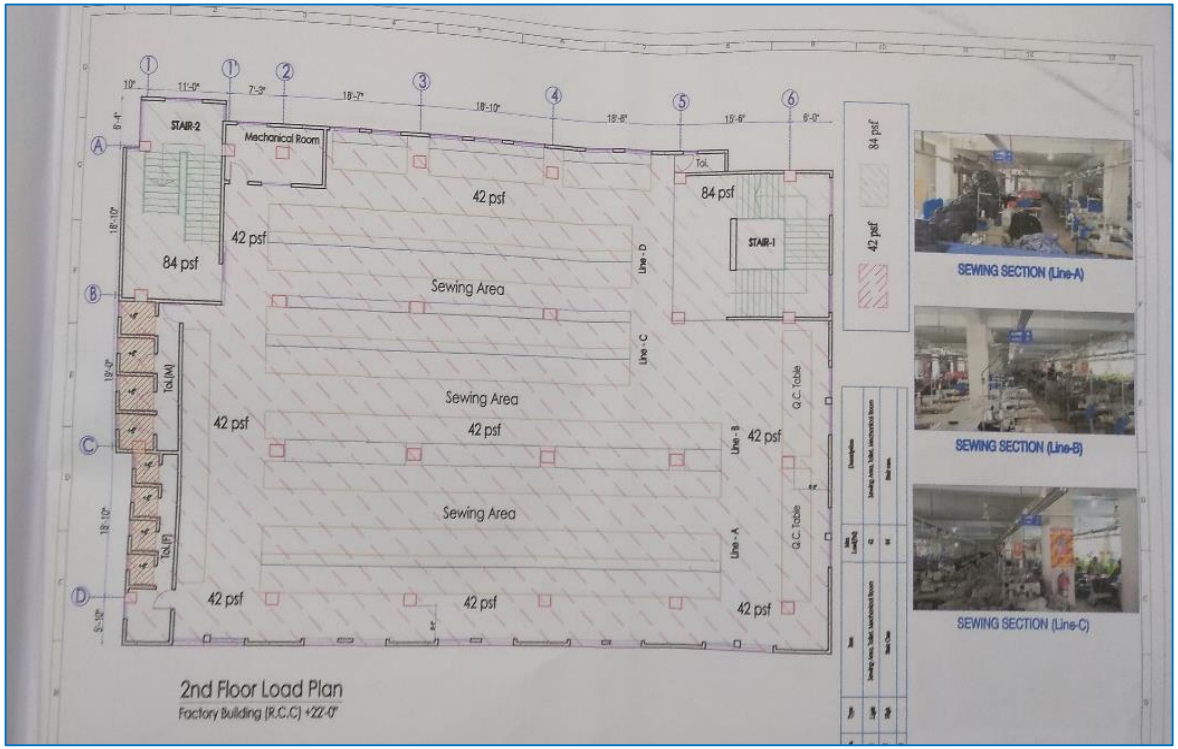


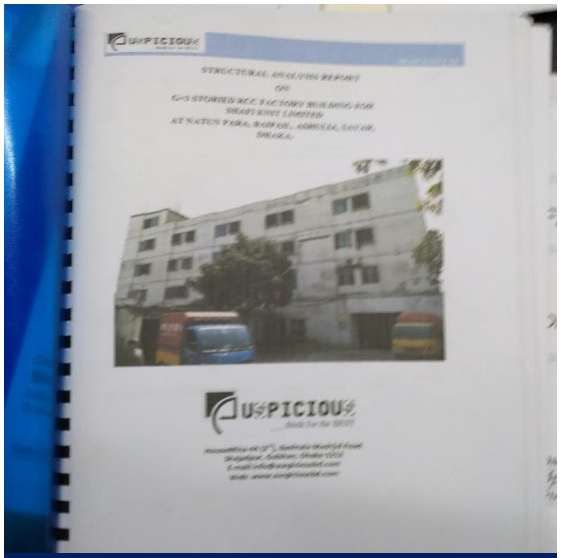
Third Floor Layout

Observations: Main Building

Load plan & design reports required to be revised and submitted to Accord for further review

Observations: Main Building





Design Report

Floor loading

The provided Load Plan shows 2 kPa loading. As the second phase of construction started in July 2015 and ended in March 2016 up to roof top shed the Load Plan must be in accordance with BNBC Standard.

Factory is required to revise the DEA including Load Plan as per actual onsite condition and submit to Accord.

During inspection no over loading was found. FoS calculation for internal & external columns were found satisfactory considering 3 KPa allowable floor live loading for all buildings.

Observations: Main Building

Apparent non-engineered Shed at roof without as-built documentation

Observation : Main Building

Roof Shed

Non-engineered connection

Light weight roof supported on brick wall

Apparent non-engineered shed was found at roof level. Light weight roof structure supported on 125 mm brick wall. The connections appeared to be non-engineered.
No documentation was available onsite.

Observation : Main Building

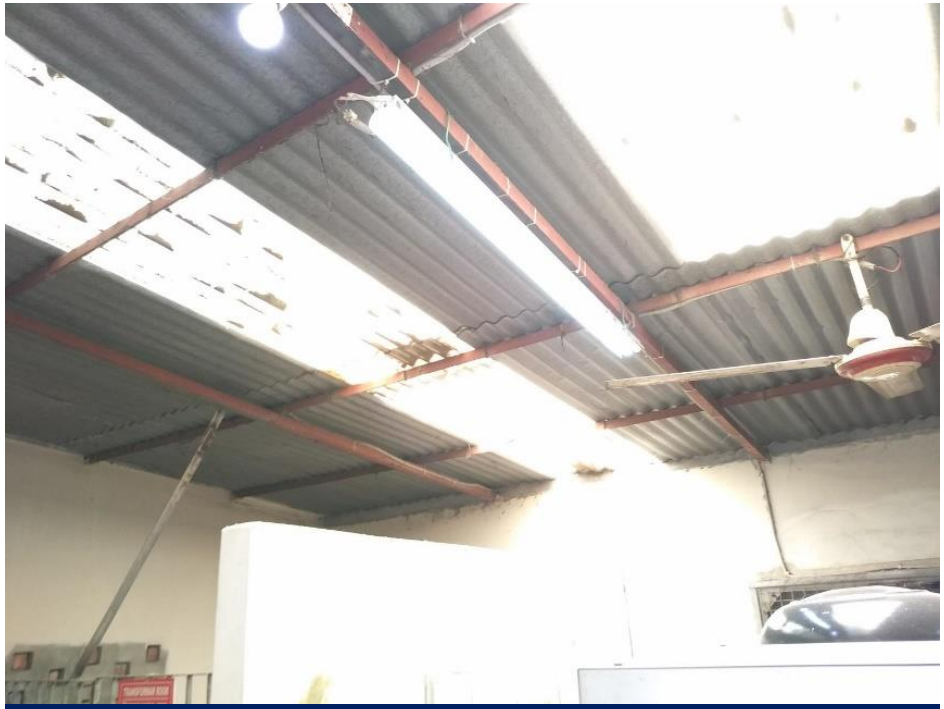
Lack of as-built documents

Observation : Shed 1 & 2

Shed-1

Shed-1

No documents were available for shed 1 & 2. Building engineer is required to prepare “as constructed” drawings that includes connection details which reflect the actual site dimensions with complete structural information.



Shed-2

Observations: Shed 1 & 2

Significant gap between steel baseplate and RCC column of Shed-1

Observations: Shed-1

Significant gap observed between steel baseplate and RCC column.

Poor/non-engineered connection was found at extension of shed-1 (doctor's room)

Observations: Shed-1

Problems Observed

Main Building:

Item-01: Discrepancies between provided drawings and on-site condition.

Item-02: Load plan & design reports required to be revised and submitted to Accord for further review.

Item-03: Apparent non-engineered Shed at roof without as-built documentation .

Shed 1& 2:

Item-04: Lack of as-built documents.

Item-05: Significant gap between steel baseplate and RCC column of Shed-1.

Priority Actions

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Discrepancies between provided drawings and on-site condition	Building Engineer to survey the structure and prepare accurate as-built drawings.	**6-weeks**
2	Load plan & design reports required to be revised and submitted to Accord for further review	Design report required to be reviewed by ACCORD.	**6-weeks**
3	Load plan & design reports required to be revised and submitted to Accord for further review	Produce and actively manage a loading plan for all floor plates within the factory, considering floor, column and foundation capacity as per BNBC provision.	**6-weeks**
4	Load plan & design reports required to be revised and submitted to Accord for further review	Complete remedial works arising from design report.	**6-months**
5	Load plan & design reports required to be revised and submitted to Accord for further review	Continue to implement load plan.	**6-months**

Item No.	Observation	Recommended Action Plan	Recommended Timeline
6	Apparent non-engineered Shed at roof without as-built documentation	Prepare “as constructed” drawings which reflect the actual site dimensions with complete structural information.	**6-weeks**
7	Apparent non-engineered Shed at roof without as-built documentation	Building engineer to check the capacity of the light weight roof structure against lateral loading.	**6-weeks**
8	Apparent non-engineered Shed at roof without as-built documentation	Carry out remedial works resulting from engineering assessment if necessary.	**6-months**
9	Lack of as-built documents	Prepare “as constructed” drawings which reflect the actual site dimensions with complete structural information.	**6-weeks**
10	Significant gap between steel baseplate and RCC column of Shed-1	Check the adequacy of the connections.	**6-weeks**
11	Significant gap between steel baseplate and RCC column of Shed-1	Carry out suitable remedial works as per suggestion of factory engineer.	**6-weeks**