

Pakiza Knit Composite Ltd.

A-1/5, Mojidpur (Borobolimeher), Savar, Dhaka, Bangladesh
(23.841370N, 90.258353E)

30th March 2017





Observation



Knitting Building



Discrepancies between site observations and provided drawings

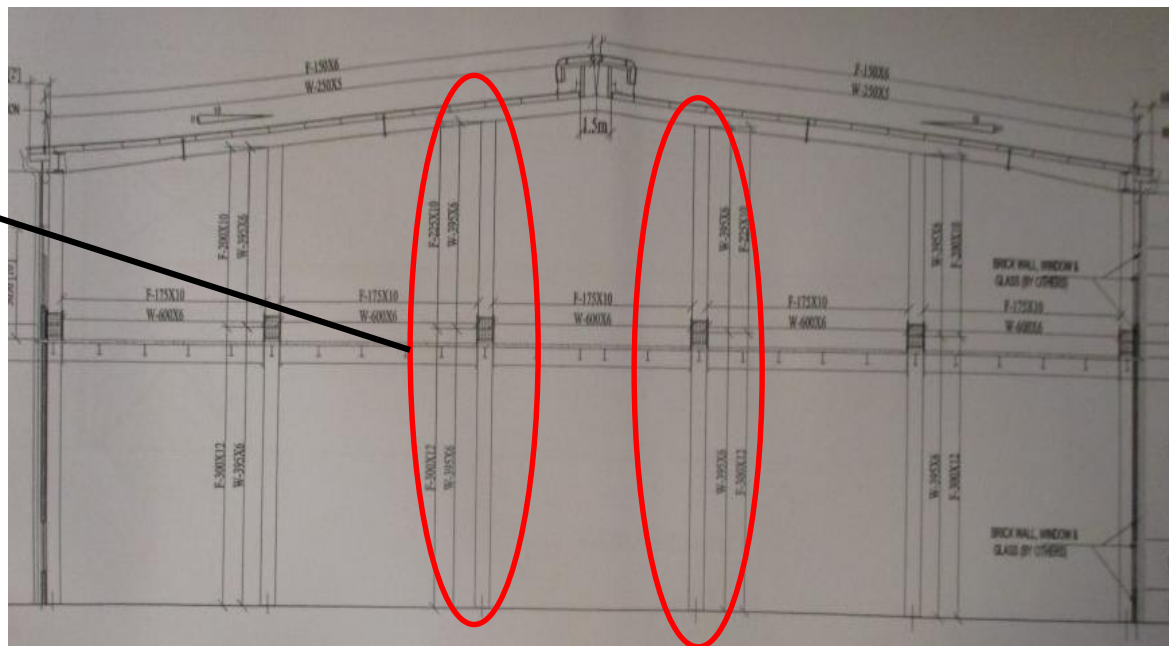
Observation: (Knitting Building)



Width of flange was found
200mm instead of 225 mm on
1st floor



200mm width was measured on 1st floor



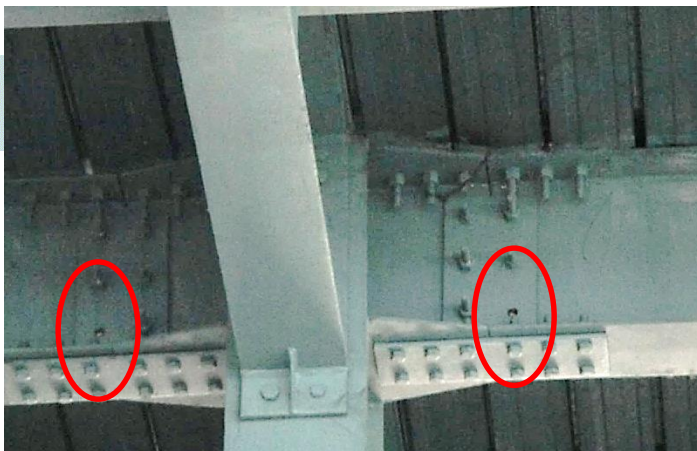
Section of end bay of steel building

Observation: (Knitting Building)

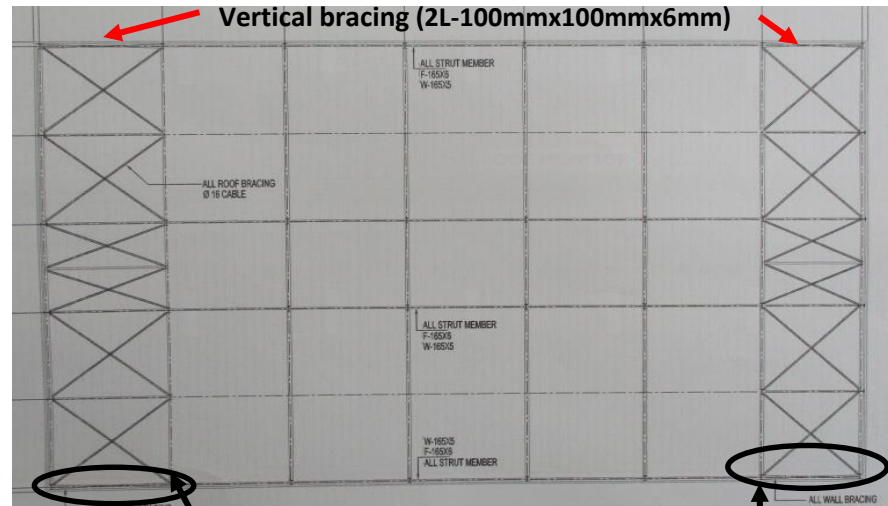


Missing bolts and bracings

Observation: (Knitting Building)



Missing bolts were found on internal column & beam joint on 1st floor



Bracing layout plan in provided drawing



Missing bolts were found on edge column & beam joint on 1st floor



Single angle bracing was found instead of double angle bracing on south-west corner of 1st floor



No vertical bracing was found at south-east corner of 1st floor

Observation: (Knitting Building)

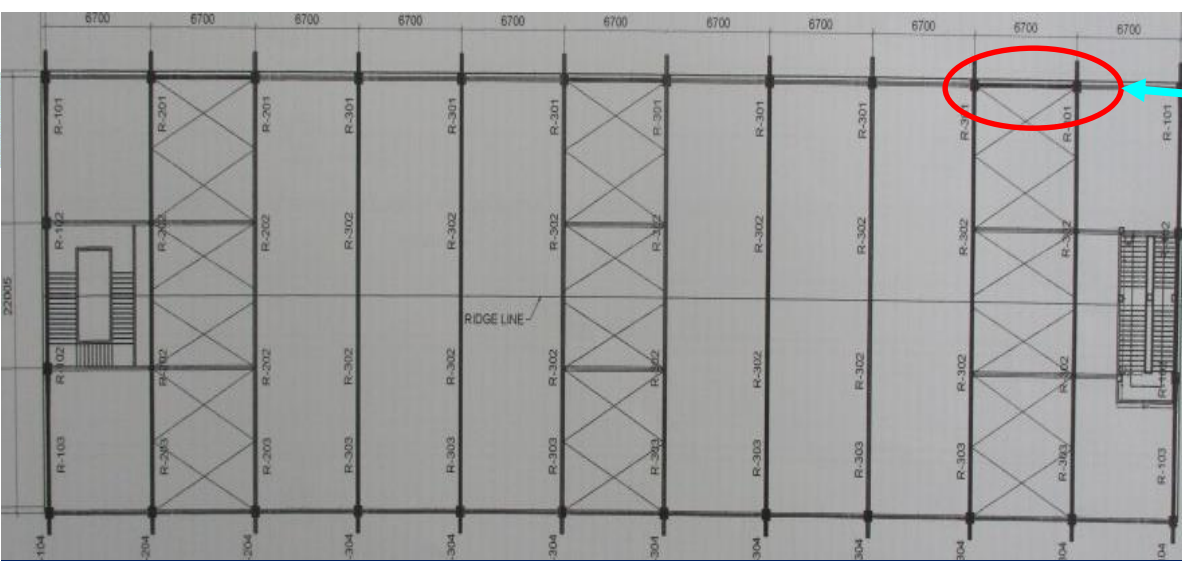


Dyeing Building

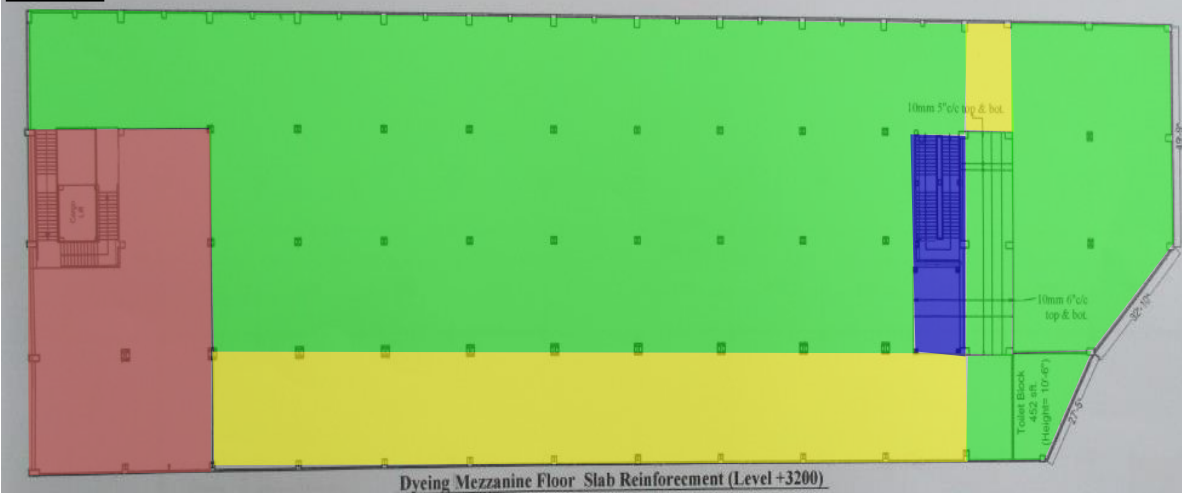


Lack of Information in Drawings

Observation: (Dyeing Building)



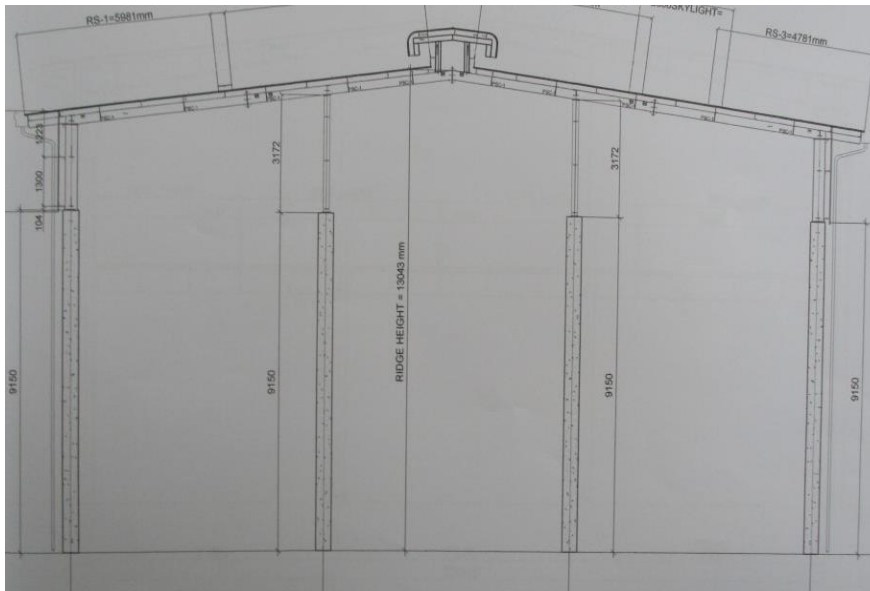
Vertical bracing with compression strut was observed at east & west side on 1st floor but not shown in provided bracing layout drawing



- 4-storey
- 3-storey
- 2-storey
- 1-storey

The shed has different elevation but in provided drawing, no information was found regarding different elevation. Only mezzanine floor was shown in provided drawing.

Observation: (Dyeing Building)



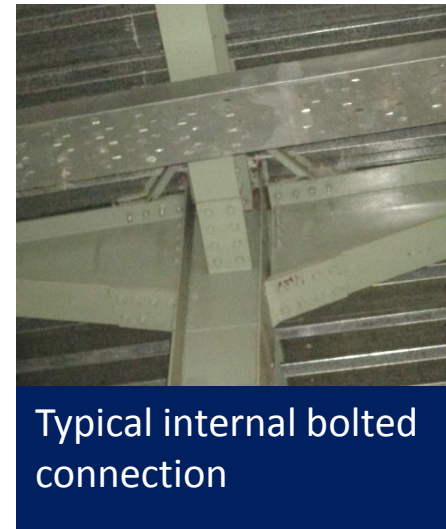
Part-B(Utility block) of the Shed has RC tie beam and column on ground floor for which information was not found in provided drawing



RC column & steel beam bolted connection



Welded connection between RC column and Steel beam



Typical internal bolted connection

No detail drawing of the connections was found in provided drawing

Observation: (Dyeing Building)



Crack on Beam and Slab

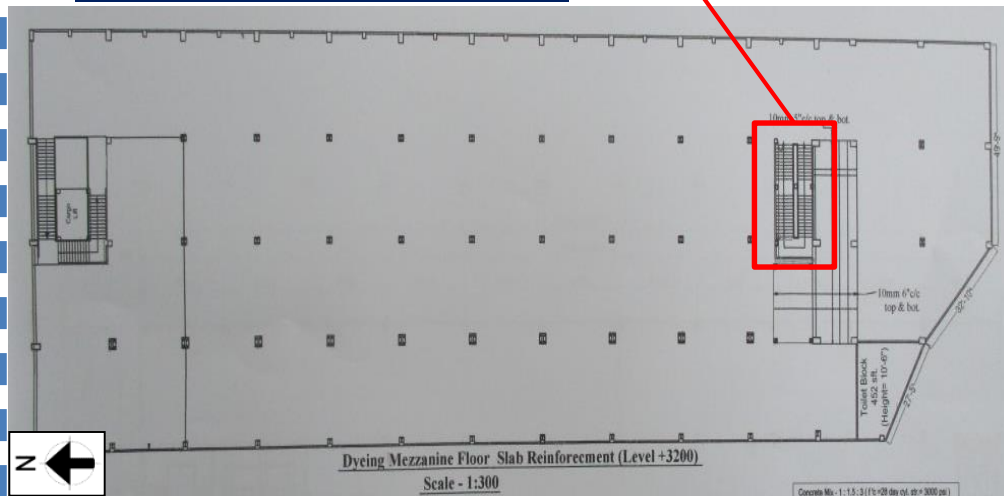
Observation: (Dyeing Building)



RC beam column system of
South side Stair



Crack on beam and landing slab



Ground floor layout plan

Crack was found on south side stair's beam and adjacent slab. This crack is required to be investigated and repair with appropriate method

Observation: (Dyeing Building)



Corrosion observed on structural steel members

Observation: (Dyeing Building)



Corrosion was observed at Steel column to pedestal connection in dyeing section

Long term corrosion may cause serious damage on structural members. Factory is required to protect the members from corrosion .

Observation: (Dyeing Building)



Medical & Day care shed and Storage & Dining shed



Apparently non-engineered light weight roof shed

Observation:(Medical & Day care shed and Storage & Dining shed)



Medical & Day care shed



Medical & Day care shed



Light weight steel frame system



Welded connection between Steel 'I' section and angle



Steel roof angle was supported on edge by brick wall

The support condition of those steel sheds were vulnerable and non engineered due to poor detailing of connection between members

Observation: (Medical & Day care shed and Storage & Dining shed)



Problems Observed

Knitting Building:

Item 1: Discrepancies between site observations and provided drawings

Item 2: Missing bolts and bracings

Dyeing Building:

Item 3: Lack of Information in Drawings

Item 4: Crack on Beam and Slab

Item 5: Corrosion observed on structural steel members

Medical & Day care shed and Storage & Dining shed :

Item 6 : Apparently non-engineered light weight roof shed



Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Knitting Building Discrepancies between site observations and provided drawings	Building engineer to survey the whole building and produce as-built documentation reflecting the as constructed condition.	6-weeks
2	Knitting Building: Missing bolts and bracings	Building Engineer to identify all the omissions and supervise remedial works to the joint to ensure structural adequacy.	6-weeks
3	Knitting Building: Missing bolts and bracings	Reinstate disconnected bracing in braced bays	6-weeks
4	Knitting Building: Missing bolts and bracings	Building engineer to check the capacity of the steel building under lateral and vertical loading.	6-weeks
5	Knitting Building: Missing bolts and bracings	Carry out remedial works resulting from engineering assessment if necessary.	6-months
6	Dyeing Building: Lack of Information in Drawings	Building engineer to survey the whole building and produce as-built documentation reflecting the as constructed condition.	6-weeks
7	Dyeing Building: Lack of Information in Drawings	Building engineer to check the capacity of the steel building under lateral and vertical loading.	6-weeks
8	Dyeing Building: Lack of Information in Drawings	Carry out remedial works resulting from engineering assessment if necessary.	6-months



Item No.	Observation	Recommended Action Plan	Recommended Timeline
9	Dyeing Building: Crack on Beam and Slab	Sections of plaster finish to be removed to investigate if cracks penetrate the building structure.	6-weeks
10	Dyeing Building: Crack on Beam and Slab	Factory Engineer to prepare the investigation report as part of the Engineering Assessment.	6-weeks
11	Dyeing Building: Crack on Beam and Slab	Carry out remedial works resulting from engineering assessment if necessary.	6-months
12	Dyeing Building: Corrosion observed on structural steel members	Building Engineer to suggest and implement proper remedial measures to protect steel sections from corrosion.	6-weeks
13	Medical & Day care shed and Storage & Dining shed: Apparently non-engineered light weight roof shed	Building engineer to check the capacity of the lightweight steel roofs under lateral and vertical loading.	6-weeks
14	Medical & Day care shed and Storage & Dining shed: Apparently non-engineered light weight roof shed	Carry out remedial works resulting from engineering assessment if necessary.	6-months