

Organic Jeans Ltd. (9867)

Fouzderhat, Sagarika Road, Chittagong

(+22.359819N, 91.772423E)

18.MAY.2014



Identified Priority 1 Concerns

1st Priority 1 Concern



The following was observed for the steel and concrete mezzanine on the ground floor of the main building:

- Column position seemed inaccurate
- cantilevered steel deck slab with no support, crooked columns, columns with no anchor bolts, and columns bearing directly on the slab on grade.

In addition, the structural drawings made available were not complete or accurate.

2nd Priority 1 Concern



The following steel erection deficiencies were observed for the steel connections of the main building:

- missing bolts
- missing nuts
- short bolts
- gaps between connection plates
- cut stiffener plates

Identified Priority 2 Concerns

1st Priority 2 Concern



Main Building

No structural drawings were made available for the concrete building extension on the West side of the main building the generator building, and the WTP shed.

1st Priority 2 Concern (cont.)



Generator Room



WTP Shed

2nd Priority 2 Concern



Main Building

No lateral resisting elements (cross-bracing, moment frame, etc.) were observed in the North-South direction. Moment frame was observed in the East-West direction.

3rd Priority 2 Concern



Storage was observed on the 1st floor of the security building. In addition, no loading plans were made available.

Security Building

Identified Priority 3 Concerns

(None)

Overall Stability System



The building did not feature any core or shear walls. All the steel Moment Resisting Frames were oriented in the same direction, resulting in no clear lateral load resisting systems in the other direction.

We require that these items be investigated in a Detail Engineering Assessment

Water Ingress at Roof Level



No waterproofing membrane was visible on the roof of the Security Building. This means that any cracks in the surface finishes on the roof will allow water to seep into the concrete slab beneath the finishes, and cause corrosion of the reinforcing steel.

Priority Actions

Problems Observed Summary

ITEM 1: (Priority 1) Several dubious steel details for the mezzanine were observed such as:

- wrongly positioned columns
- cantilevered steel deck slab with no support
- crooked columns
- columns with no anchor bolts
- columns bearing directly on the slab on grade.

ITEM 2: (Priority 1) Steel erection deficiencies were observed for the steel connections of the main building.

ITEM 3: (Priority 2) No structural drawings were made available for the mezzanine, the concrete building extension on the West side of the main building, the generator building, and the WTP shed.

ITEM 4: (Priority 2) No lateral resisting elements (cross-bracing, moment frame, etc.) were observed in the North-South direction.

ITEM 5: (Priority 2) No loading plans were made available. In addition, storage was observed on the 1st floor of the security building.

Item No.	Observation	Recommended Action Plan	Recommended Timeline
1	Several dubious steel details for the mezzanine were observed	Do not increase loading on mezzanine. Detailed Engineering Assessment is required for the mezzanine (both concrete and steel) to determine design and construction adequacy.	6-weeks
2	Several dubious steel details for the mezzanine were observed	Implement any recommendations from DEA.	6-weeks
3	Steel erection deficiencies were observed for the steel connections of the main building	A Detailed Engineering Assessment is required to determine extent of steel erection deficiencies and to provide correction recommendations.	6-weeks
4	Steel erection deficiencies were observed for the steel connections of the main building	Carry out corrective measures as recommended in DEA.	6-months
5	No structural drawings were made available for the mezzanine, , the concrete building extension on the West side of the main building, the generator building, and the WTP shed.	Structural Engineer to complete engineering assessment and provide as-built drawings for the above mentioned buildings.	6-weeks
6	No lateral resisting elements (cross-bracing, moment frame, etc.) were observed in the North-South direction.	A Detailed Engineering Assessment is required to determine adequacy of lateral resistance in both directions.	6-weeks
7	No lateral resisting elements (cross-bracing, moment frame, etc.) were observed in the North-South direction.	Implement any recommendations from DEA.	6-months
8	No loading plans were made available. In addition, storage was observed on the 1st floor of the security building.	Structural Engineer to assess load bearing capacity of each floor of the main building and provide loading plans.	6-weeks
9	No loading plans were made available. In addition, storage was observed on the 1st floor of the security building.	Post and manage loading plans on each floor.	6-months