Interstoff Apparels Ltd. (9493)

Chandra, Kaliakor, Gazipur

29.April.2014

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Identified Priority 1 Concerns

- Building 6. Dangerous mezzanine in dining area with inadequate steel elements.

- Building 2. - 6 storey building section with reduced overturning resistance.

1st Priority 1 – Major concern

The Dining Area, Building 6. is a single storey building with a steel roof and an improvised steel mezzanine heavily loaded. No construction documents were provided for the mezzanine. The mezzanine showed advanced signs of instability and distress. The Director was advised to evacuate the area and reduce the loading.

At the closing meeting, the Director said the mezzanine would be dismantled.

Upon our departure, most of the storage was outside and being shipped off to another facility.

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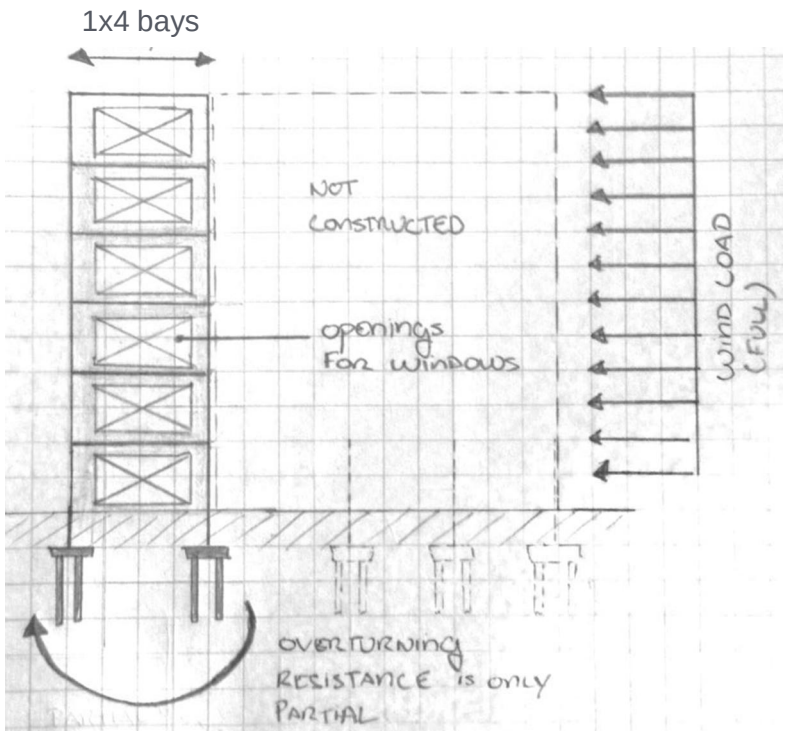

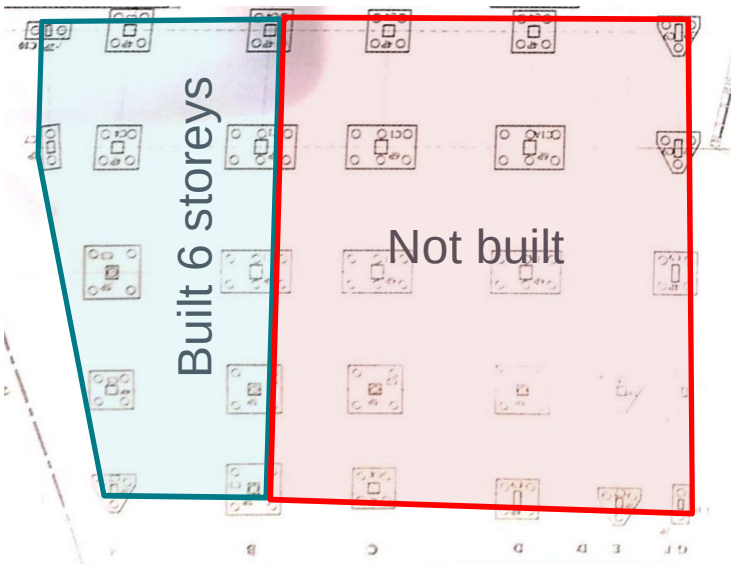

2nd Priority 1 Concern

Building 2. During our visit, we found that a section of the new proposed 11 storey building (currently built to 6 and 9 storeys) had only one bay built and was currently being used. This building section has **currently minimal overturning resistance and we have reasonable doubt that the piles can take the increased uplift forces due to the full wind load**.**This building needs to be braced or otherwise stabilised as quickly as possible.**

For all the other buildings, sway stability of the structures could probably be expected from a rigid frame system (beam and column participation) although no ductile detailing is provided in structural plans. Masonry infill is unrestrained and cannot be considered.

We require that these items be investigated in a Detailed Engineering Assessment immediately.

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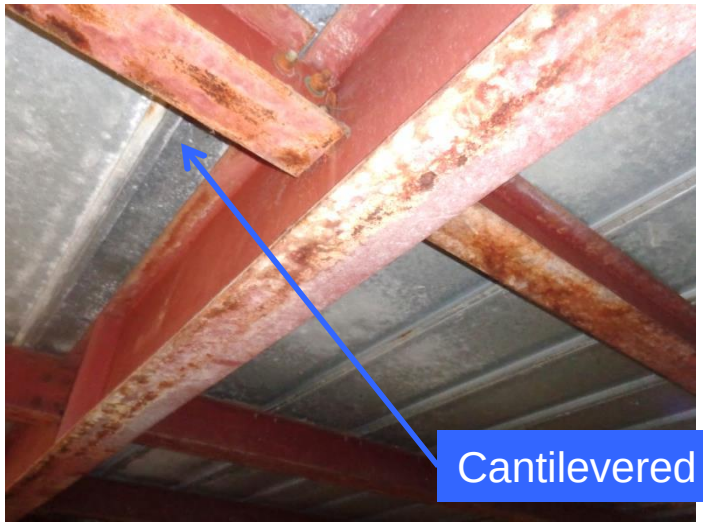
Identified Priority 2 Concerns

- Building 1. Steel mezzanine at ground floor of 6 storey building with inadequate detailing

- Building 1. Steel mezzanines with inadequate detailing.

- Building 1. Torsional loading on beam at top floor of 6 storey building.



1st and 2nd Priority 2 Concerns

Multiple mezzanines in the main building were visually inspected during our survey and we found elements that caused concern.
Building 1.
1. Main mezzanine at ground floor of 6 storey building
1 Main mezzanine at top floor of 6 storey building

Notable elements:

1. Poor rigid connection detailing.
2. Poor weld quality.
3. Missing anchor bolts.
4. Unrestrained compression flanges.

We require a full Detailed Engineering Assessment of all of the steel work.

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3rd Priority 2 Concerns

Building 1. On the top floor of the 6 storey building, there are some cantilevered beam sections fixed to a perpendicular beam.

We've found localised cracking in the receiving beam.

The receiving beam should be verified for its torsional resistance.

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Identified Priority 3 Concerns

- No waterproofing at roof.

1st Priority 3 concern

No waterproofing membrane was visible on the roof of the 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 long-term soaking of the slab.

Certain areas had floor finishes but they were cracked and do not represent an efficient water barrier system

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Priority Actions

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Problems Observed Summary

ITEM 1: Priority 1 – Building 6. Dangerous mezzanine in dining area with inadequate steel elements.

ITEM 2: Priority 1 – Building 2. Unstable building section with regard to lateral loads

ITEM 3: Priority 2 – Building 1. Steel mezzanine at ground floor of main building with inadequate detailing

ITEM 4: Priority 2 – Building 1. Steel mezzanine at top storey of main building with inadequate detailing

ITEM 5: Priority 2 – Building 1. Torsional loading on beam at last floor of main building

ITEM 6: Priority 3 - No waterproofing at roof level of all buildings.

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Item 1 and actions

Building 6. Dangerous mezzanine in dining area with inadequate steel elements.

Priority 1 (Immediate – Now)	• Dangerous mezzanine in dining area with inadequate steel elements. • Mezzanine to be dismantled immediately.
Priority 2 (within 6 – weeks)	• None
Priority 3 (within 6-months)	• None

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Item 2 and actions

Building 2. Unstable building section with regard to lateral loads.

Priority 1 (Immediate – Now)	• Commence immediate Detailed Engineering Assessment that evaluates the lateral stability of the building in its current state. • Temporarily brace the building.
Priority 2 (within 6 – weeks)	• Carry out all recommendations of the DEA.
Priority 3 (within 6-months)	• Complete all recommendations of the DEA.

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Item 3 and actions

Building 1. Steel mezzanine at ground floor of main building with inadequate detailing.

Priority 1 (Immediate – Now)	• None
Priority 2 (within 6 – weeks)	• Carry out a full Detailed Engineering Assessment of the steel mezzanine taking into account the actual site conditions.
Priority 3 (within 6-months)	• Carry out and complete all recommendations of the completed DEA.

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Item 4 and actions

Building 1. Steel mezzanine at top storey of main building with inadequate detailing.

Priority 1 (Immediate – Now)	• None
Priority 2 (within 6 – weeks)	• Carry out a full Detailed Engineering Assessment of the steel mezzanine taking into account the actual site conditions.
Priority 3 (within 6-months)	• Carry out and complete all recommendations of the completed DEA.

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Item 5 and actions

Building 1.Torsional loading on beam at the top floor of main building.

Priority 1 (Immediate – Now)	• None
Priority 2 (within 6 – weeks)	• A Detailed Engineering Assessment should be carried out with regard to the torsional resistance of the receiving beam.
Priority 3 (within 6-months)	• Carry out and complete all recommendations of the completed DEA.

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Item 6 and actions

No waterproofing at any roof level.

Priority 1 (Immediate – Now)	• None
Priority 2 (within 6 – weeks)	• None
Priority 3 (within 6-months)	• Apply a new waterproofing membrane.