

M.A.C.K Shirts Ltd (9649)

Basic Apparels Ltd (9791)

Plot #135-138, Abdullahpur, Uttara
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Identified Priority 2 Concerns



1st Priority 2 Concern

No loading plan in place on the upper floors to insure full compliance with specified design loads.

No loading plan in place



2nd Priority 2 Concern

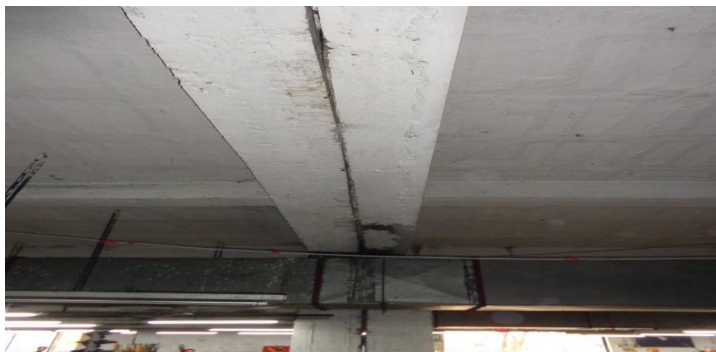
Capacity of the roof slab with regards to the quantity of water tanks in small area. These should be spread out ensure that the load is not carried out by same structural elements

Multiple water tanks on the roof



3rd Priority 2 Concern

Multiple changes in the arrangement and location of the same movement joint at each floor level. The plans received do not detail the resulting cantilevered sections and the joint variations.



Movement joint at each floor



4th Priority 2 Concern

Many shear cracks at the intersection of the secondary and main (axis) beams located at the 4th floor. This is usually a sign that there are no additional shear link stirrups for the punching load/shear.

Shear Cracks

Identified Priority 3 Concerns



Roof made of structural steel.

1st Priority 3 Concern

The roof is made of structural steel, there are many concerns with members and their connections.

There are no lateral restraints against uplift forces on the bottom chords of trusses.

We require a Detailed Engineering Assessment of this steel shed.



3rd 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.

Roof floor does not appear to have any waterproof membrane to protect the structure from water damage

Priority Actions

Problems Observed Summary

ITEM 1: 1st priority 2 – No loading plan currently being used.

ITEM 2: 2nd priority 2 – Capacity assessment of slabs below roof water tanks is required.

ITEM 3: 3rd priority 2 – An Engineering Assessment of the cantilevered sections at the movement joint at each floor level is required.

ITEM 4: 4th priority 2 – Numerous cracks located at the intersection of secondary and main beams.

ITEM 5: 1st priority 3 – A Detailed Engineering Assessment of the steel roof structure is required.

ITEM 6: 2nd priority 3 – Lack of roof waterproofing.

Item 1 and actions

No loading plan in place

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 – weeks)

- Factory Engineer to produce and actively monitor a loading plan for all floor plates within the factory, with consideration given to slab, column and foundation capacities.

Priority 3 (within 6-months)

- Maintain and enforce the loading plans.

Item 2 and actions

Capacity of the roof slab and columns under the water tanks

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- Verify the capacity of the slabs, beams and columns beneath the water tanks.

Priority 3 (within 6-months)

- This item can be managed by the loading plan mentioned in the item 1.

Item 3 and actions

Movement joint at each floor level

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- At the joint at each floor level, verify the cantilevered sections of slabs and beams.
- Produce an assessment by the Factory Engineer.

Priority 3 (within 6-months)

- None required

Item 4 and actions

Shear cracks located at the intersection of the main and secondary beams.

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- None required

Priority 3 (within 6-months)

- Produce an assessment by the Factory Engineer for the validation for the shear design of the beams.

Item 5 and actions

Steel shed at roof level

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- None required

Priority 3 (within 6-months)

- Produce a Detailed Engineering Assessment of the steel shed at roof level.

Item 6 and actions

Roof appears not to have any waterproofing system applied.

Priority 1 (Immediate – Now)

- None required.

Priority 2 (within 6 – weeks)

- None required.

Priority 3 (within 6-months)

- Apply a new waterproofing membrane.