

Hi-Fashion Composite Textiles Ltd.

Shirir Chala, Bagher Bazar, Gazipur, Bangladesh

(+24.171991N, 90.423884E)

04.MARCH.2014

ACC RD
on Fire and Building Safety in Bangladesh



Uncontrolled Heavy Storage Loading



Priority 2 Concern



Uncontrolled heavy storage loading on 5th floor. It is required to reduce in height to no more than 4 bags (considering a single bag to have a total weight of approx. 50kg)

No movement joint provided to separate these two main buildings at ground floor level and no waterproofing material applied at roof level including the reinforcement left exposed .

Priority 3 Concern



The main factory building seems to be separated with one storey building at the back which is composed of knitting section. From the survey, the ground and roof slab as shown in the picture has been casted continuously with out any movement joint provided. Therefore, in order to maintain the structural stability, a proper movement joint is required.

Priority 3 Concern



An appropriate layer of waterproofing needs to be applied including rust-proof paint for the exposed reinforcement.

Water ingress causing damage and corrosion





It is found that water ingress at an interior wall, adjacent to the toilet may cause deterioration to structural elements.

Priority Actions



Problems Observed Summary

ITEM 1: Uncontrolled Heavy Storage Loading

ITEM 2: No Movement Joint Provided

ITEM 3: No Waterproofing Material Applied on the Roof Slab

ITEM 4: Floor Extension to Be Approved by the Local Authority

ITEM 5: Stability System and Foundations

ITEM 6: Cantilevered Slab Along The Front Side to be managed by controlling applied loading in accordance with item 4 above.



Item 1 and actions

Uncontrolled Heavy Storage Loading

Priority 1 (Immediate – Now)

- Removed immediately reduced in height to no more than 4 bags (considering a single bag to have a total weight of approx. 50kg)

Priority 2 (within 6 – weeks)

- Adopt some sort of signage/staff guidance to ensure that the maximum height of storage is not exceeded .

Priority 3 (within 6-months)

- Maintain standards of quality control to ensure that storage procedures are correctly followed so that overloading problems do not arise in the future.

Item 2 and actions

No Movement Joint for Two Building Attached

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- The Factory's Building Structural Engineer should carry out a Detailed Engineering Assessment to prove the capacity of the building in its existing state, a further building approval should be gained for the building as it exists, as altered since the original approval. Alternatively, the extension building should be separated by a non-structural joint and allowed to act as a fully structurally independent structure.

Priority 3 (within 6-months)

- Do not construct any further buildings connected to the existing factory, without thorough structural design and full building approval.

Item 3 and actions

No Waterproofing Material Applied on the Roof Slab

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- The existing roof level does not have any waterproofing. This is not a long-term problem as another level is currently being constructed above. However, it should be considered as an on-going action to apply temporary waterproofing measures during construction, while the 6th floor acts as a roof level.

Priority 3 (within 6-months)

- Ensure that an appropriate layer of waterproofing is included in the build-up of the final roof level, once construction is complete.

Item 4 and actions

Floor Extension to Be Further Approved by the Authority

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- None required

Priority 3 (within 6-months)

- Extension of roof floor is under construction. This level is covered in the current architectural approval drawings, however if any further storeys are to be added, approval should be updated as necessary.

Item 5 and actions

Stability System / Moment Frame Capacity

Priority 1 (Immediate – Now)

- None required

Priority 2 (within 6 – weeks)

- Detail Engineering Assessment to be carried out, in particular the overall stability and foundation aspects should be investigated in detail.

Priority 3 (within 6-months)

- None required

Item 6 and actions

Cantilevered Slab Along The Front Side Needs to Be Maintained with Controlled Loading

Priority 1 (Immediate – Now)

- No heavy stockpile of garments on this area.

Priority 2 (within 6 – weeks)

- Detailed assessment is required to confirm what level of load the cantilevered slab can carry as no structural details have been provided to date.
- Produce and actively manage loading plan for all floor plates giving consideration to floor capacity and column capacities.

Priority 3 (within 6-months)

- Update the structural drawings with the as built details provided from the assessment.
- Continue to implement loading plan.