

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Appolo Fashion Ltd.
Address of the Factory	: Plot # I-5/2, Road # 7, Section # 7, Mirpur, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 29 th September 2014

BASIC INFORMATION:

The factory building is a 7 storied RC beam column frame structure at Plot # I-5/2, Road # 7, Section # 7, Mirpur, Dhaka. The following information was noted:

- i. Building Usage Type : Garment factory building
- ii. Structural System : RC Frame Building
- iii. Floor System : Edge supported RCC slabs
- iv. Floor Area : Approximately 358 sq. m (3850 sft) per floor
- v. No. of Stories : Existing 7-Story, but designed as 6- story.
- vi. Construction Year : 1997-1998
- vii. Foundation Type : Isolated individual footing
- viii. Design Drawings : Not available
- ix. Soil Investigation Report : Available
- x. Construction Materials : Reinforced Concrete, Brick Chips (verified)
- xi. Generator : 35 kVA generator at the ground floor

RECOMMENDATIONS FOR CORRECTIVE ACTION:

The recommendations of corrective action for both Structural and Fire & Electrical Safety comprises in Short Term, Mid Term and Long Term basis.

The recommendations for **Structural Safety** corrective action are:

Short Term (Immediate) : None

Mid Term (6-weeks) : None

Long Term (6-months) : Due to non availability of footing dimensions, foundation adequacy could not be checked. As built drawing of foundation and structure must be constructed and foundation adequacy check shall be done by a professional engineer. A thorough structural adequacy check will also be needed in future for vertical extension of the building.

The recommendations for **Fire & Electrical Safety** corrective action are:

Name of the Factory : Appolo Fashion Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 21st December 2014

(A): Recommendations for Fire Safety corrective actions:

Fire Safety Issues	
Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i>	N/A

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<p>Short Term <i>(Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</i></p>	<p>Remove obstructions from all escape routes, aisles and passageways.</p> <p>Maintain minimum effective width of corridors, passageways and aisles.</p> <p>Remove all combustible materials from generator room.</p> <p>Ensure easy access to portable extinguishers and monitor and maintain the same at required interval as per guidelines.</p> <p>Provide proper directional signs and exit signs in Bangla and English as per the Guidelines.</p>
<p>Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<p>Remove temporary structures from roof top.</p> <p>Prepare drawings to ensure adequate horizontal and vertical fire-rated separation inside one floor and between different floors, e.g. separation with stairways, storage, offices, and work areas as per the Guidelines.</p> <p>Prepare plans to ensure all exit access doors are side-swinging type and open to the direction of traffic flow.</p> <p>Produce drawings to demonstrate how stairways are to be made of adequate dimensions and appropriate specifications and to be converted into fire-rated enclosures equipped with fire-rated doors.</p> <p>Also show methods to ensure proper separation of high risk areas (e.g., boiler room) as per the Guidelines.</p> <p>Provide design to install proper detection and alarm system.</p>
<p>Long Term <i>(The remedial works indicated must be carried out within a period of 6 months)</i></p>	<p>Ensure adequate horizontal and vertical fire-rated separation inside one floor and between different floors, e.g. separation with stairways, storage, , offices, and work areas.</p> <p>Ensure proper separation of high risk areas (e.g., boiler room) as per the Guidelines.</p> <p>Install proper detection and alarm system.</p> <p>Provide fire rated enclosure, install self-closing fire rated door as per guidelines.</p>

(B): Recommendations for Electrical Safety corrective actions:

Electrical Safety Issues	
<p>Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	<p>N/A</p>

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<p>Short Term <i>(Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</i></p>	<p>Provide instructions for first aid and artificial respiration from exposure to electrical shock.</p> <p>Ensure well-dressed cabling with lugs and remove loose cabling.</p> <p>Ensure earthing of panel body & door with fitted condition.</p> <p>Provide distribution board as per guideline and put identification mark on distribution panel.</p>
<p>Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<p>Provide new Emergency Lighting system.</p> <p>Provide appropriate Lightening Protection System as per guidelines.</p>
<p>Long Term <i>(The remedial works indicated must be carried out within a period of 6 months)</i></p>	<p>N/A</p>