

## Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Update Fashions Ltd.
Address of the Factory	: Fuji Trade Centre, Cha-87/C, Uttar Badda, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 25 <sup>th</sup> June 2014

### **BASIC INFORMATION:**

The factory building is a 12 storied (Approval is for 14 storied) RC structure and is a reinforced concrete flat plate structure (slab thickness 10 inch). The following information was noted:

- |       |                        |   |
|-------|------------------------|---|
| i.    | Building Usage Type    | : Garment factory   |
| ii.   | Structural System      | : Beam-Column frame system  |
| iii.  | Floor System           | : RC Flat plate structure   |
| iv.   | Floor Area             | : Approximately 9,000 sq.ft per floor (Typical grid size 17' x 24') |
| v.    | No. of Stories         | : Twelve stories  |
| vi.   | Construction Year      | : 1999  |
| vii.  | Foundation Type        | : Mat foundation (As per drawing)                                   |
| viii. | Design Drawings        | : Available (Consultant: PAS Engineering, Dhanmondi, Dhaka)         |
| ix.   | Soil Boring Report     | : Not available at site   |
| x.    | Construction Materials | : Reinforced Concrete   |
| xi.   | Generator              | : At the Basement   |

### **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) | : The factory owner has been instructed to prepare and submit a load plan for vetting.                        |
| Mid Term (6-weeks)     | : None  |
| Long Term (6-months)   | : A Detail Engineering Assessment (DEA) has to be completed. Necessary remediation's after completion of DEA. |

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

Name of the Factory	: Update Fashions Ltd.
Fire & Electrical assessment conducted by	: BUET
Date of Fire & Electrical Inspection	: 23 <sup>rd</sup> December 2014

#### ***(A): Recommendations for Fire Safety corrective actions:***

<b>Fire Safety Issues</b>	
<p>Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	N/A
<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 transformer, substation and generator room, if exists.</p> <p>Ensure that portable extinguishers are easily accessible, monitored and maintained at regular interval as per the Guidelines.</p> <p>Provide proper directional signs and exit signs in Bangla and English as per the Guidelines.</p>

## Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

<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, basement, lift lobby, 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 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., generator, boiler, transformer and substation rooms) as per the Guidelines.</p> <p>Provide design to install standard standpipe, hose and fire pump system.</p> <p>Provide design to install proper detection system. Establish command station as per the Guidelines.</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, assembly areas, basement, lift lobby, offices, and work areas.</p> <p>Ensure all exit access doors are side-swinging type and open to the direction of traffic flow.</p> <p>Ensure proper separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per the Guidelines.</p> <p>Install standard standpipe, hose and fire pump system. Install proper detection system.</p>

### **(B): Recommendations for Electrical Safety corrective actions:**

<b>Electrical Safety Issues</b>	
<p>Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	N/A
<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>Provide cover on the cable trench and rubber mat in front of the panel.</p> <p>Ensure well-dressed cabling with lugs and remove loose cabling.</p> <p>Ensure earthing of panel body &amp; 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 separate service ducts for electrical cables.</p> <p>Provide new Emergency Lighting system.</p> <p>Provide appropriate Lightning 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>	N/A