

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

Name of the Factory	: Daylight Fashions Ltd.
Address of the Factory	: 587 Solmaeid (Hati Bari), Vatara, Dhaka-1212
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 4 <sup>th</sup> November 2014

### **BASIC INFORMATION:**

The present garment factory is a three storied commercial building with flat plate system with edge beams. The following information were noted:

- i. Building Usage Type : Primarily as Garments Factory.
- ii. Structural System : Flat plate with edge beams.
- iii. Floor System : Flat plate.
- iv. Floor Area : Approx.3,200 sft/floor.
- v. No. of Stories : Three story.
- vi. Construction Year : 2008-2011.
- vii. Foundation Type : Individual footing of different sizes
- viii. Design Drawings : Approval and Design Drawing Available (Engr. Md. Hafizur Rahman, MIEB-20580).
- ix. Soil Investigation Report : Available (GEOTECH, F-17 DIT ROAD, MIDDLE BADDA, DHAKA).
- x. Construction Materials : Reinforced Concrete with brick chips and deformed rebars 60 grade.
- xi. Generator : One Generator is located in the Ground Floor of the building.

### **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) : A Detail Engineering Assessment (DEA) has to be completed.

Long Term (6-months) : Necessary remediation's after completion of DEA.

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

Name of the Factory : Daylight Fashions Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 15<sup>th</sup> October 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 all combustible materials generator room.</p> <p>Ensure minimum width of corridors, passageways and aisles.</p> <p>Ensure adequate numbers of fire drills.</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 sign and exit sign in Bangla and English as per guidelines.</p>
<p>Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<p>Produce proper drawing and plans to create horizontal and vertical fire-rated separation for stairways of appropriate specifications with proper fire/smoke prevention at each floor, grills, storage and work areas. Also design to ensure proper separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per guidelines.</p> <p>Remove all collapsible gates/roller shutters. Produce design drawings to demonstrate how stairways are to be made of adequate dimensions and appropriate specifications with proper fire/smoke prevention at each floor and to be converted into fire-rated enclosures equipped with fire-rated side swinging doors of required dimensions opening in the direction of travel at each floor.</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>Install horizontal and vertical fire-rated separation for stairways of appropriate specifications with proper fire/smoke prevention at each floor, grills, storage and work areas.</p> <p>Ensure proper fire separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per approved design.</p> <p>Install fire rated enclosure and doors of appropriate dimensions at exit to the stairs to prevent smoke and fire propagation as per approved design.</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>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. Provide distribution board as per guideline and put identification mark on distribution panel.</p> <p>Remove burnt/broken/loose MCB/MCCB box/socket.</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>	<p>N/A</p>