

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

Name of the Factory	: Sydney Fashions Ltd. (RCC Frame Building)
Address of the Factory	: 15/88, Degerchala Road, National University, Gazipur
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 15 <sup>th</sup> November 2014

### **BASIC INFORMATION:**

The present garment factory is a three storied building with beam-column frame system. The following information were noted:

- i. Building Usage Type : As a Garment Factory
- ii. Structural System : RC beam column frame structure
- iii. Floor System : Edge supported RC solid floor slab system on RC beam
- iv. Floor Area : Approx. 3,971 sft/floor (as per structural drawings)
- v. No. of Stories : Six
- vi. Construction Year : First phase upto three stories in 2011-2012, Second phase upto six stories is ongoing from 2014
- vii. Foundation Type : Individual footings of different sizes (10.5'× 10.5' for central footings, 9'× 9' for edge footings and 7.5'×7.5' for corner footings as per the design drawings).
- viii. Design Drawings : Approval drawing, structural and architectural drawings available (Udayan Consultants, Architects, Engineers, Planners, Board Bazar, Gazipur).
- ix. Soil Investigation Report : Available (By Anonnya Soil Layer Exploration, Vhai Vhai Market (1<sup>st</sup> Floor), Board Bazar, Gazipur Sadar, Gazipur).
- x. Construction Materials : Reinforced Concrete with brick chips (stone chips were used in foundations only, as reported) and deformed 60 Grade reinforcement (as observed during factory visit)
- xi. Generator : One Generator is located outside 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. Necessary remedial measures should be taken to remove PVC water tanks from the 3rd floor to the designated design location of water tanks.

Mid Term (6-weeks) : None

Long Term (6-months) : None

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

Name of the Factory	: Sydney Fashions Ltd.
Fire & Electrical assessment conducted by	: BUET
Date of Fire & Electrical Inspection	: 17 <sup>th</sup> November 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

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

<p>Short Term (Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</p>	<p>Remove obstructions from all escape routes, aisles and passageways.</p> <p>Maintain minimum effective width of corridors, passageways and aisles.</p> <p>Provide proper directional signs and exit signs in Bangla and English as per the Guidelines.</p>
<p>Mid Term (The remedial works indicated must be carried out within a period of 6 weeks)</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 and boiler rooms) as per the Guidelines.</p> <p>Provide design to install proper detection and alarm system.</p>
<p>Long Term (The remedial works indicated must be carried out within a period of 6 months)</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 and boiler rooms) as per the Guidelines.</p> <p>Install proper detection and alarm system.</p>

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

Electrical Safety Issues	
<p>Immediate (the factory should not continue to be occupied until these non-conformities have been rectified):</p>	N/A
<p>Short Term (Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</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 door with fitted condition.</p> <p>Provide distribution board as per guideline and put identification mark on distribution panel.</p>
<p>Mid Term (The remedial works indicated must be carried out within a period of 6 weeks)</p>	<p>Provide new Emergency Lighting system.</p> <p>Provide appropriate Lightning Protection System as per guidelines.</p>
<p>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	N/A