

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

Name of the Factory	: STAR KNITWEAR (PVT) LTD
Address of the Factory	: Ganakbari, Ashulia, Savar, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 16 <sup>th</sup> November 2014

### **BASIC INFORMATION:**

The factory building is a 3 (three) storied Reinforced Concrete (RC) frame building. The following information was noted:

- i. Building Usage Type : Garment Factory
- ii. Structural System : RC beam-column framing system
- iii. Floor System : RC beam supported slab
- iv. Floor Area : Approximately 4500 ft<sup>2</sup> per floor
- v. No. of Stories : Three
- vi. Construction Year : 1992
- vii. Foundation Type : Individual footing of different sizes (7'-0" x 7'-0" to 10'-6" x 10'-6")
- viii. Design Drawings : Available (without approval from any authority)
- ix. Soil Investigation Report : Available (but could not be produced on site)
- x. Construction Materials : Reinforced Concrete (No test report on construction materials is available), Coarse aggregate: **Brick chips**
- xi. Generator : Ground floor (out side of 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 to prepare and submit the load plan for all floors. The factory owner has to approve the lay out plan as well design drawings from appropriate authority.

Mid Term (6-weeks) : None

Long Term (6-months) : None

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

Name of the Factory	: Star Knitwear (Pvt.) 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

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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 temporary obstructions from all escape routes, aisles and passageways. Ensure adequate numbers of fire drills. Ensure easy access to portable extinguishers and monitor and maintain the same at required interval as per guidelines. 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, grills, storage and assembly areas, offices, work areas. Also design to ensure proper separation of high risk areas (e.g., substation room) as per guidelines. Remove all collapsible gates/roller shutters/sliding doors. Produce design 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 side swinging doors of required dimensions opening in the direction of travel at each floor. 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, grills, storage and assembly areas, offices, work areas. Ensure proper fire separation of high risk areas (e.g. substation room) as per approved design. Install fire rated enclosure and doors of appropriate dimensions at exit to the stairs to prevent smoke and fire propagation as per approved design. Install proper detection and alarm system. Provide fire rated enclosure, install self-closing fire rated door as per guidelines.</p>

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

<p><b>Electrical Safety Issues</b></p>	
<p>Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	<p>N/A</p>
<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. Provide cover on the cable trench and rubber mat in front of the panel. Ensure well-dressed cabling with lugs and remove loose cabling. Ensure earthing of panel body &amp; door with fitted condition. Provide distribution board as per guideline and put identification mark on distribution panel.</p>

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Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	N/A
Long Term <i>(The remedial works indicated must be carried out within a period of 6 months)</i>	N/A