

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

Name of the Factory : SHRABONY KNITWEAR LTD.(Single Storey Shed)  
Address of the Factory : 3083 & 3085, Khatian No. 64 & 110, Mouja: Dhononjoypur No. 76, Sit No. 3, Vill: Kathgora, P.O: Zirabo, Thana: Ashulia, Dhaka  
Present Status of the Factory : Under Operation  
Structural Assessment Conducted by : BUET  
Date of Structural Inspection : 3<sup>rd</sup> November 2014

### **BASIC INFORMATION:**

There are two single story sheds within the compound of the present garment factory. The following information was noted:

- i. Building Usage Type : Primarily as Garments Factory
- ii. Structural System : Steel roof truss for Shed-1 and Steel grid for Shed-2 with partially steel pipe column and partially RCC column support
- iii. Floor System : Ground floor: At grade CC slab
- iv. Floor Area : Shed-1: 10080 sft; Shed-2: 1640 sft (as measured)
- v. No. of Stories : Single storey
- vi. Construction Year : 2008 to 2009
- vii. Foundation Type : Individual column footing as verbally reported
- viii. Design Drawings : Not available
- ix. Soil Investigation Report : Available and submitted by Design & Planning Consultant, November 2006
- x. Construction Materials : Brick aggregate (as checked) ) and steel deformed rebars 60 Grade (assumed as per construction year)
- xi. Generator : No generator

### **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 : Shrabony Knitwear 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:***

<b>Fire Safety Issues</b>	
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>Confirm adequate numbers of fire drills.</p> <p>Make sure 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>
<p>Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></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, assembly areas, offices, and work areas as per the Guidelines.</p> <p>Prepare plan 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>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, assembly areas, 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 rooms) 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:**

<p align="center"><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 align="center">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.</p> <p>Ensure well-dressed cabling with lugs and remove loose cabling.</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 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 align="center">N/A</p>