

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

Name of the Factory	: Summer Dress Ltd. (Steel Frame Shed)
Address of the Factory	: Jangaliapara, Bhawal Mirzapur, Gazipur Sadar, 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 one storied factory shed with steel frame structure system. The building is constructed on individual footings as found in the drawings. The following information were noted:

- i. Building Usage Type : As a Garment Factory
- ii. Structural System : Steel frame structure
- iii. Floor System : Single floored building
- iv. Floor Area : Approx. 1,10,770 sft/floor (as per approval drawings)
- v. No. of Stories : One
- vi. Construction Year : 2006-2007
- vii. Foundation Type : Individual footings. The dimensions of the footings are not available in the approval drawings
- viii. Design Drawings : Approval Drawing available (Nextus Engineers & Developers Ltd., House No. 48, Road No 15, Block-D, Banani, Dhaka).
- ix. Soil Investigation Report : Available (By Sufal Soil Engineers, Soil and Foundation Consultant, 218, Elephant Road, Sahera Tropical Centre, 11<sup>th</sup> Floor, Suite No-03, Dhaka-1205, Ph: 01711976071)
- x. Construction Materials : Factory Shed using I-section steel members
- 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) : None

Mid Term (6-weeks) : The factory owner has been instructed to prepare and submit a load plan for vetting.

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	: Summer Dress Ltd.
Fire & Electrical assessment conducted by	: BUET
Date of Fire & Electrical Inspection	: 19 <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 (Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</p>	<p>Remove all temporary obstructions from all escape routes, aisles and passageways.</p> <p>Ensure minimum width of corridors, passageways and aisles.</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 (The remedial works indicated must be carried out within a period of 6 weeks)</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.</p> <p>Also design to ensure proper separation of high risk areas (e.g., substation room) as per guidelines.</p> <p>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.</p>
<p>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	<p>Install horizontal and vertical fire-rated separation for stairways of appropriate specifications, grills, storage and assembly areas, offices, work areas.</p> <p>Ensure proper fire separation of high risk areas (e.g., substation room) 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 (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>Provide cover on the cable trench and rubber mat in front of the panel.</p> <p>Ensure well-dressed cabling with lugs.</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 (The remedial works indicated must be carried out within a period of 6 weeks)</p>	<p>Provide new Emergency Lighting system.</p>
<p>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	N/A

