

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

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Name of the Factory : Alim Knit Wears Ltd.  
Address of the Factory : 27, Harunabad, Senanibas Road, Pallabi, Mirpur, Dhaka  
Present Status of the Factory : Under Operation  
Structural Assessment Conducted by : BUET  
Date of Structural Inspection : 31<sup>st</sup> January 2014

### **BASIC INFORMATION:**

The factory consists of a six storied RC frame building with a roof top tin shed and a separate tin shed warehouse. The six storied building is on individual shallow foundation. The following information was noted:

- i. Building Usage Type : Garment Factory.
- ii. Structural System : RC Frame Building
- iii. Floor System : Two way beam supported slab of on GF & 1<sup>st</sup> floors and flat slab on other floors.
- iv. Floor Area : Approximately 2850 sft per floor
- v. No. of Stories : Six story building and tin shed on roof
- vi. Construction Year : Up to six story in 2001-2002
- vii. Foundation Type : Individual shallow foundation (as verbally reported)
- viii. Design Drawings : Not available
- ix. Soil Boring Report : Available (done in 2013)
- x. Construction Materials : Reinforced Concrete (brick chips).
- xi. Generator : In GF 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) : None  
Mid Term (6-weeks) : None  
Long Term (6-months) : A Detail Engineering Assessment (DEA) is to be carried out within six months to ensure safety of the structure as a six story (with roof top tin shed) construction.

Name of the Factory : Alim Knit Wears Ltd.  
Fire & Electrical assessment conducted by : BUET  
Date of Fire & Electrical Inspection : 30 January 2014

### ***(A): Recommendations for Fire Safety corrective actions:***

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</p> <p><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.</p> <p>Remove all combustible materials from generator room.</p> <p>Ensure easy access to portable extinguishers and monitor and maintain the same at required interval as per guidelines.</p>
<p>Mid Term</p> <p><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, lift lobby, offices, 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. 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>Produce design to install standard standpipe, hose and fire pump system.</p> <p>Provide design to install proper detection and alarm system.</p>
<p>Long Term</p> <p><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, grills, storage and assembly areas, lift lobby, offices, 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 at exit to the stairs to prevent smoke and fire propagation as per approved design</p> <p>Install standard standpipe, hose and fire pump system.</p> <p>Install proper detection and alarm system.</p> <p>Provide fire rated enclosure, install self closing fire rated door as per guidelines.</p>

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

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