

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : Alim Knit (BD) Ltd. (Building-02)
 Address of the Factory : Nayapara, Kashimpur, Gazipur
 Present Status of the Factory : Under Operation
 Structural Assessment Conducted by : BUET
 Date of Structural Inspection : 23rd January 2014

BASIC INFORMATION:

The factory building is a 9 storied RC beam Column frame structure located at Plot No. CS and SA Dag No. 9, RS Dag No. 18, Mouza-Kashimpur, Gazipur. The following information was noted:

- i. Building Usage Type : Garment factory building
- ii. Structural System : RC Frame Building
- iii. Floor System : Edge supported RCC Slab
- iv. Floor Area : Approximately 930 sq. m (10000 sft) per floor
- v. No. of Stories : Nine Story
- vi. Construction Year : In phase (upto 2nd floor-2005 and 3rd to 9th -2010)
- vii. Design Drawings : Available
- viii. Foundation Type : Mat Foundation
- ix. Soil Investigation Report : Available (Atelier9 Engineering Ltd., 78/ka, picic culture, shamoli, 2005)
- x. Construction Materials : Reinforced Concrete, Stone Chips
- xi. Generator : Ground Floor of building 1.

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) : None.

Long Term (6-months) : None.

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

Name of the Factory : Alim Knit (BD) Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 30th 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
Short Term <i>(Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</i>	Remove all temporary obstructions from all escape routes, aisles and passageways. Remove all combustible materials from generator room. Ensure easy access to portable extinguishers and monitor and maintain the same at required interval as per guidelines.
Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	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

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	<p>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 (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, 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>

(B): Recommendations for Electrical Safety corrective actions:

<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>Ensure earthing of panel body & 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 separate service ducts for electrical cables.</p> <p>Provide new Emergency Lighting system</p> <p>Provide appropriate Lightening 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