

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

Name of the Factory	: Star Apparels Ltd.
Address of the Factory	: 230-231, Nizam Nagar, Singair Road, Hemayetpur, Savar, Dhaka.
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 21 <sup>st</sup> December 2014

### **BASIC INFORMATION:**

The factory building is a 7 storied RC structure. It has reinforced concrete beam-column framing system structure. The following information was noted:

i.	Building Usage Type	: Garment factory
ii.	Structural System	: Beam-Column frame system
iii.	Floor System	: Edge supported RC slabs with thickness 6" (as shown in As-built drawing).
iv.	Floor Area	: Approximately 9000 sq.ft per floor
v.	No. of Stories	: 7 stories
vi.	Construction Year	: Not available
vii.	Foundation Type	: Pile footing (As per As-built drawing)
viii.	Design Drawings	: Available (recently prepared As-built drawing)
ix.	Soil Investigation Report	: Available, dated March, 2009
x.	Construction Materials	: Reinforced Concrete (with brick chips)
xi.	Generator	: Outside of 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) : Overloading on 2<sup>nd</sup> floor due to storage of fabrics must be removed immediately. During visit, the factory management was instructed to remove the excess loads. Necessary measures need to be taken by the proper authority regarding removal of the excess loads. The 5" brick wall on 2<sup>nd</sup> floor (North South direction) should be removed also.

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

Long Term (6-months) : None

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

Name of the Factory	: Star Apparels Ltd.
Fire & Electrical assessment conducted by	: BUET
Date of Fire & Electrical Inspection	: 27 <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 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>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, lift lobby, offices, and work areas as per the Guidelines.</p> <p>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 standard standpipe, hose and fire pump system.</p> <p>Provide design to install proper detection and alarm system.</p> <p>Establish command station as per the Guidelines.</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, lift lobby, offices, and work areas.</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:**

Electrical Safety Issues	
<p>Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	N/A
<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>Ensure earthing of panel door with fitted condition.</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 new Emergency Lighting system.</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>	N/A