

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

Name of the Factory	: Comilla Fashions Ltd.
Address of the Factory	: Haji Abdur Rahman Super Market (4 <sup>th</sup> Floor), Shimrail, Sanarpar, Siddirganj, Narayanganj.
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 30 <sup>th</sup> November 2014

### **BASIC INFORMATION:**

The factory building is a 6 storied RC structure with one basement. 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 drawing (GF to 3 <sup>rd</sup> Floor) and flat plate with thickness 8" as shown in drawing (Basement, 4 <sup>th</sup> Floor and 5 <sup>th</sup> Floor)
iv.	Floor Area	: Approximately 10500 sq.ft per floor
v.	No. of Stories	: 6 stories and one basement
vi.	Construction Year	: 1999, by Building Owner
vii.	Foundation Type	: Pile footing (As per drawing)
viii.	Design Drawings	: Available (dated 09/11/1999)
ix.	Soil Boring Report	: Available, dated July, 1998
x.	Construction Materials	: Reinforced Concrete (with stone 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) : None

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

Long Term (6-months) : At the North side of the building there is large cantilever flat plate (12 ft) which differs from design drawings. Design review must be done in detail for the North side cantilever part. Some damping was observed on the roof. Damping should be properly taken care of.

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

Name of the Factory : Comilla Fashions Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 18<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>Ensure 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, offices, and work areas as per the Guidelines.</p> <p>Prepare plans to ensure all exit access doors are side-swinging type and open to the direction of traffic flow</p> <p>Also show methods to ensure proper separation of high risk areas (e.g., boiler rooms) as per the Guidelines.</p> <p>Provide design to install standard standpipe, hose and fire pump system.</p> <p>Provide design to install proper detection and alarm system. 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, 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>Install stairways of adequate dimensions and appropriate specifications and convert into continuous fire-rated enclosures equipped with fire-rated doors.</p> <p>Ensure proper separation of high risk areas (e.g., boiler room) as per the Guidelines.</p> <p>Install standard standpipe, hose and fire pump system.</p> <p>Install proper detection and alarm system.</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>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>Ensure well-dressed cabling with lugs and remove loose cabling.</p>

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Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	Provide new Emergency Lighting system. Provide appropriate Lightening 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