

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

Name of the Factory	: Deoti Fashion Ltd.
Address of the Factory	: 26/1, Shataish Road, Tongi, Gazipur
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 1 <sup>st</sup> November 2014

### **BASIC INFORMATION:**

The factory building is a 7 (seven) storied Reinforced Concrete (RC) frame building. The following information was noted:

i.	Building Usage Type	: Garment Factory
ii.	Structural System	: RC beam-column framing system
iii.	Floor System	: RC beam supported slab
iv.	Floor Area	: Approximately 1206 m <sup>2</sup> per floor
v.	No. of Stories	: Seven
vi.	Construction Year	: 1 <sup>st</sup> phase (GF to 5 <sup>th</sup> Floor) :2006-2008, 2 <sup>nd</sup> phase (6 <sup>th</sup> floor) 2014
vii.	Foundation Type	: Individual Footing (3600mm x 3600mm)
viii.	Design Drawings	: Not available
ix.	Soil Investigation Report	: Available (MRITTIKA FOUNDATIONS AND ENGINEERS, Dattapara, Tongi, Gazipur)
x.	Construction Materials	: Reinforced Concrete (No test report on construction materials is available), Coarse aggregate: <b>Brick chips</b>
xi.	Generator	: Located 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) : The factory owner has to prepare and submit the load plan for all floors.

Mid Term (6-weeks) : None

Long Term (6-months) : Preparation of the details as-built drawing within six months.

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

Name of the Factory : Deoti Fashion Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 23 December 2014

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

<b>Fire Safety Issues</b>	
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 obstructions from all escape routes, aisles and passageways. Maintain minimum effective width of corridors, passageways and aisles. Ensure that portable extinguishers are monitored and maintained at regular interval as per the Guidelines. Provide proper directional signs and exit signs in Bangla and English as per the Guidelines.

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

<p>Mid Term (The remedial works indicated must be carried out within a period of 6 weeks)</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>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>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 (The remedial works indicated must be carried out within a period of 6 months)</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>Ensure proper separation of high risk areas (e.g., boiler rooms) as per the Guidelines.</p> <p>Install standard standpipe, hose and fire pump system. 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 (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 and remove loose cabling.</p> <p>Ensure earthing of panel body &amp; door with fitted condition.</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 Lightning 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