

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Atashi Fashion Ltd.
Address of the Factory	: 81, Kalamessar, Jalal Shopping Complex, Board Bazar, Gazipur-1704
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 5 th June 2014

BASIC INFORMATION:

The present garment factory building is housed only 3rd floor to 5th floor of (6+1)-storied multipurpose used Reinforced Concrete (RC) flat plate framing system. The following information were noted:

i. Building Usage Type	: Multipurpose building (Basement floor for garments, Ground floor for shops, 1st floor to 5th floor for garments)
ii. Structural System	: RC beam-column framing system (Basement floor), RC flat plate (Remaining floors)
iii. Floor Area	: Approximately 15,000 sft/floor
iv. No. of Stories	: Six storied plus the basement level floor
v. Construction Year	: Phase 1(Basement floor to 2nd floor): 2004-2006; Phase 2(3rd floor to 5th floor):2007
vi. Foundation Type	: Individual column footing of different sizes (15' x 15' for central columns, 14'-0" x 8'-6" for corner and edge columns as per structural drawing).
vii. Design Drawings	: Available (Udayan Consultants, Board Bazar, Gazipur)
viii. Soil Investigation Report	: Available (Geotechnical Engineers & Consultants, East Rampura, Dhaka, November 2001)
ix. Construction Materials	: Reinforced concrete with brick chips and steel deformed bar 60 Grade (as per drawings and No test report on construction materials is available)
x. Generator	: Located outside of the main 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. Intensity of load does not exceed 40 psf (2.0 kN/m²) at any location.

Long Term (6-months) : A minimum of 4 number 4 inch diameter cores are to be taken (3 inch if taken from columns). A scanning of rebars of the columns at the basement floor location is also to be accomplished within 6 months.

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

Name of the Factory : Atashi Fashion Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 23rd December 2014

(A): Recommendations for Fire Safety corrective actions:

Fire Safety Issues	
Immediate (the factory should not continue to be occupied until these non-conformities have been rectified):	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>Make sure that portable extinguishers are adequate in number and 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, basement, 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>Prepare drawings to relocate and distribute the exits as remote as possible with regular interval.</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. 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, basement, 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>Relocate and distribute the exits as remote as possible with regular interval.</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>	<p>N/A</p>

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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>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 & door with fitted condition.</p> <p>Remove wooden board used for fixing MCB/MCCB box/socket.</p>
<p>Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<p>Provide separate service ducts for electrical cables.</p> <p>Provide new Emergency Lighting system.(CE)</p> <p>Provide appropriate Lightening 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>	<p style="text-align: center;">N/A</p>