

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : Benevolent Fashions Int'l Ltd.
Address of the Factory : H-79, Block-J & I, New Airport Road, Banani, Dhaka
Present Status of the Factory : Under Operation
Structural Assessment Conducted by : BUET
Date of Structural Inspection : 27th December 2013

BASIC INFORMATION:

The factory is housed in two adjacent mixed occupancy buildings, one eight (with partial construction on the roof) and the other nine storied RC frame building in blocks J and I respectively of plot no. 79. The both buildings are on individual shallow foundation. The following information was noted:

- i. Building Usage Type : Garment Factory (mixed occupancy)
- ii. Structural System : RC Frame Building (internal long direction beams are absent in GF and six upper floors of J-building)
- iii. Floor System : One way slabs (internal long direction beams are absent in Block J and all long directional beams are absent in I)
- iv. Floor Area : Approximately 7000 sft of I and J-buildings each per floor
- v. No. of Stories : Eight (J) and nine (I) story building
- vi. Construction Year : 1997-2002
- vii. Foundation Type : Individual shallow foundation (as-built drawing)
- viii. Design Drawings : Available for J and I (as-built drawing in 2013)
- ix. Soil Boring Report : Available for J and I (done in 2013)
- x. Construction Materials : Reinforced Concrete (brick chips).
- xi. Generator : In GF of 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) : Because of irregularity of the system, it is recommended to have a Detail Engineering Assessment (DEA) of the structure within six weeks
- Long Term (6-months) : Necessary remediation's after completion of DEA

Name of the Factory : Benevolent Fashions Int'l Ltd.
Fire & Electrical assessment conducted by : BUET
Date of Fire & Electrical Inspection : 24 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
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<p>Short Term</p> <p><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 all temporary obstructions from all escape routes, aisles and passageways.</p> <p>Remove all combustible materials from generator room.</p> <p>Ensure minimum width of corridors, passageways and aisles.</p> <p>Ensure easy access to portable extinguishers and monitor and maintain the same at required interval as per guidelines.</p> <p>Provide proper directional sign and exit sign in Bangla and English as per guidelines</p>
<p>Mid Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<p>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 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>Install command station as per guidelines.</p>
<p>Long Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 months)</i></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>

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(B): Recommendations for Electrical 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>	Ensure well-dressed cabling with lugs and remove loose cabling. Ensure earthing of panel body & door with fitted condition. Provide distribution board as per guideline and put identification mark on distribution panel. Remove burn/broken/loose MCB/MCCB box/socket
Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	Provide separate service ducts for electrical cables. 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