

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Design & Fashion Ltd.
Address of the Factory	: 24 Mirpur Road, Shamoli, Dhaka-1207
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 3 rd November 2014

BASIC INFORMATION:

The factory building is a four storied mixed use building with RC beam column framing system. The following information was noted:

- i. Building Usage Type : Mixed use (Shops and Garment factory).
- ii. Structural System : RC beam column frame structure.
- iii. Floor System : Edge supported RC solid floor slab system on RC beam.
- iv. Floor Area : Approximately 6,000 sft per floor.
- v. No. of Stories : Four.
- vi. Construction Year : Before 1990.
- vii. Foundation Type : Isolated footings of different sizes (as per as built drawing, June 2013).
- viii. Design Drawings : As built drawing (FM Engineers Associates, 152/2/A/2 Rowshan Tower, Green Road, Panthapath, Dhaka-1205, Year: June 2013) and approval drawings (RAJUK July, 1986) available.
- ix. Soil Investigation Report : Available (AANSAR'S CREATION, 8# GREEN WAY, 482 BARA MAGH BAZAR, DHAKA-1217, Year: June 2013).
- x. Construction Materials : Reinforced concrete with brick chips and steel plan and deformed rebars 40 Grade (from year of construction).
- xi. Generator : Outside 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) : None

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

Name of the Factory : Design & Fashion Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 16th October 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 (Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</p>	<p>Remove all temporary obstructions from all escape routes, aisles and passageways.</p> <p>Ensure minimum width of corridors, passageways and aisles.</p> <p>Ensure adequate numbers of fire drills.</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 (The remedial works indicated must be carried out within a period of 6 weeks)</p>	<p>Produce proper drawing and plans to create horizontal and vertical fire-rated separation for stairways of appropriate specifications, grills, storage areas, offices, and work areas.</p> <p>Remove all collapsible gates/roller shutters/sliding doors.</p> <p>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>Provide design to install proper detection and alarm system.</p>
<p>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	<p>Install horizontal and vertical fire-rated separation for stairways of appropriate specifications, grills, storage and offices, work areas.</p> <p>Install fire rated enclosure and doors of appropriate dimensions at entry to the stairs to prevent smoke and fire propagation as per approved design.</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. Provide 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>Provide distribution board as per guideline and put identification mark on distribution panel.</p> <p>Remove burnt/broken/loose MCB/MCCB box/socket.</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>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	N/A