

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : Tmat Fashion Ltd.
Address of the Factory : Plot # 355, Satarkul Road, Podordia, Badda, Dhaka
Present Status of the Factory : Under Operation
Structural Assessment Conducted by : BUET
Date of Structural Inspection : 6th November 2014

BASIC INFORMATION:

The factory building is a five storied plus one basement RC frame building. The following information was noted:

- i. Building Usage Type : Garment factory
- ii. Structural System : RC frame Building
- iii. Floor System : RC beam supported
- iv. Floor Area : Approximately 5200 sft per floor.
- v. No. of Stories : Five stories (5 stories plus 1 semi-basement)
- vi. Construction Year : Information not available.
- vii. Foundation Type : Single Footing (as per drawing prepared in 2006)
- viii. Design Drawings : Available (Designed by Engr. Nasima Sultana in 2006)
- ix. Soil Boring Report : Available (Prepared by M/S Amin Foundation Engineering Service, Badda, Dhaka, in 2005)
- x. Construction Materials : Reinforced Concrete (brick chips aggregate verified by breaking).
- 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) : The factory owner has to prepare and submit the load plan for all floors.

Mid Term (6-weeks) : A Detail Engineering Assessment (DEA) has to be completed.

Long Term (6-months) : Necessary remediation's after completion of DEA.

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

Name of the Factory : Tmat Fashion Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 1st December 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>Remove all combustible materials from transformer, substation</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, 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>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., transformer and substation rooms) as per the Guidelines.</p> <p>Provide design to install proper detection and alarm system.</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, basement, lift lobby, offices, and work areas.</p> <p>Ensure proper separation of high risk areas (e.g., transformer and substation rooms) as per the 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>
<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. Provide rubber mat in front of the panel Provide insulated conduits properly Remove obstruction to ensure access to M Provide easy access to the substation DB/MCB Box</p> <p>Ensure well-dressed cabling with lugs & remove messiness</p>

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Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	Provide earthing to body & door. Install MDB/SDB/SB or MCB on metal board. 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