

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : T.S.R. Fashion & Design Ltd.
Address of the Factory : House # 296, Dag # 68, Ward # 5, Lane - 5, Chalabon, Shah Kabir, Mazar Road, Uttara, Dhaka
Present Status of the Factory : Under Operation
Structural Assessment Conducted by : BUET
Date of Structural Inspection : 21st November 2014

BASIC INFORMATION:

The present garment factory is one single storey shed with steel roof truss system. The following information were noted:

- i. Building Usage Type : Primarily as Garments Factory
- ii. Structural System : Steel roof truss covered by C.G.I sheet with brick column support
- iii. Floor System : Ground floor is cement concrete slab
- iv. Floor Area : Two sheds having floor area is 3240 sft each (as per the machine lay-out plan)
- v. No. of Stories : Presently single storey
- vi. Construction Year : 2014
- vii. Foundation Type : Unknown
- viii. Design Drawings : Machine lay-out plan available (approval from Department of Inspection for Factories & Establishments, Memo No. 3867 and Date: 17-07-2014)
Architectural and structural working drawings are not available
- ix. Soil Investigation Report : Not available
- x. Construction Materials : Brick aggregate (as checked) and structural steel section (as found)
- xi. Generator : One generator is located inside the shed at west side

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 been instructed to prepare and submit a load plan for vetting.

Mid Term (6-weeks) : None

Long Term (6-months) : None

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

Name of the Factory : T.S.R. Fashion and Design Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 28 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 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 generator room, if exists.</p> <p>Confirm adequate numbers of fire drills.</p> <p>Make sure 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 (The remedial works indicated must be carried out within a period of 6 weeks)</p>	<p>Prepare drawings to ensure adequate horizontal fire-rated separation inside one floor e.g. separation with storage and work areas as per the Guidelines.</p> <p>Prepare plan to ensure all exit access doors are side- swinging type and open to the direction of traffic flow.</p> <p>Also show methods to ensure proper separation of high risk areas (e.g., generator room) as per the Guidelines.</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>Ensure adequate horizontal fire-rated separation inside one floor and between different floors, e.g. separation with storage work areas.</p> <p>Ensure proper separation of high risk areas (e.g. generator) as per the Guidelines.</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 (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 & door with fitted condition.</p> <p>Provide distribution board as per guideline and put identification mark on distribution panel.</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