

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : Sterling Fashion Wear Ltd.
Address of the Factory : 474, D.I.T. Road, Malibagh, Dhaka
Present Status of the Factory : Under Operation
Structural Assessment Conducted by : BUET
Date of Structural Inspection : 27th November 2014

BASIC INFORMATION:

The present building is a 6-storied (G+5) Factory building. The following information was noted:

- i. Building Usage Type : Garments Factory Building.
- ii. Structural System : R.C. Beam-Column framed structure.
- iii. Floor System : Edge supported R.C. solid floor slab system.
- iv. Floor Area : Approx. 9000 sft per floor (as reported).
- v. No. of Stories : At present 6 (G+5).
- vi. Construction Year : Not Known.
- vii. Foundation Type : No foundation drawing was made available during site visit. It is anticipated that individual column footings have been provided.
- viii. Design Drawings : Not available during site visit.
- ix. Soil Investigation Report : Not Available.
- x. Construction Materials : Reinforced concrete for all structural members, e.g. foundation, columns, floor beams, floor slabs, stair case etc (the type of aggregate is brick chips as reported during site visit).
- xi. Generator : Located in the ground floor 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 roof top shall be kept open. The tin-shed room in the south and middle portion and existing RC room in the north shall be removed as soon as possible to satisfy the requirements of RAJUK approved plan. The roof top should be kept clean and tidy. Other than the ground floor, the intensity of loading due to storage of finished goods in carton boxes, finishing material, fabrics and accessories shall not exceed 60 psf (2.87 kN/m²). A load plan of the building shall be prepared and submitted by the garments factory for vetting as soon as possible.

Mid Term (6-weeks) : None

Long Term (6-months) : A Detail Engineering Assessment (DEA) has to be completed. Necessary remediation's after completion of DEA.

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

Name of the Factory : Sterling Fashion Wear Ltd.
Fire & Electrical assessment conducted by : BUET
Date of Fire & Electrical Inspection : 21st 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 generator and boiler rooms.</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, assembly areas, 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>Show methods to demonstrate how exit doors are to satisfy the occupancy load according to the Guideline</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., generator and boiler) 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, assembly areas, offices, and work areas.</p> <p>Relocate and distribute the exits as remote as possible with regular interval.</p> <p>Ensure all exit access doors are side-swinging type and open to the direction of traffic flow.</p> <p>Ensure proper separation of high risk areas (e.g., generator, boiler rooms) 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>

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(B): Recommendations for Electrical Safety corrective actions:

Electrical Safety Issues	
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>	Provide instructions for first aid and artificial respiration from exposure to electrical shock. 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.
Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	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