

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: AZM Style Wear Ltd.
Address of the Factory	: 504, Kabirpur, Ashulia, Savar, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 21 st November 2014

BASIC INFORMATION:

The present garment factory is a commercial building with beam-column floor system. The building is constructed on individual column foundation as found in the drawings. The following information were noted:

- i. Building Usage Type : Primarily as Garments Factory
- ii. Structural System : Beam-column structure
- iii. Floor System : Two-way solid floor system
- iv. Floor Area : Approx. 7100 sft/floor (as per structural drawings)
- v. No. of Stories : Presently four (designed as 5 storied)
- vi. Construction Year : 2001, 2007, 2011 and 2013
- vii. Foundation Type : Individual footing of different sizes (6'-9" × 6'-9" with thickness 18" for interior columns C2 and 5'-3" × 5'-3" with thickness 18" for edge columns C1 and 5'-3" × 5'-3" with thickness 18" for corner column C and 5'-6" depth of foundation as per structural drawing)
- viii. Design Drawings : Approval drawing available (approval from Shimulia Union, Savar). Detail design drawings are also available.
- ix. Soil Investigation Report : Available and submitted by Global Applitech, January 1998
- x. Construction Materials : Reinforced Concrete with stone aggregate (as checked) and steel deformed rebar 60 Grade (as per drawing)
- xi. Generator : One Generator is located 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) : None

Mid Term (6-weeks) : None

Long Term (6-months) : The factory owner has been instructed to prepare and submit the load plan for all floors. The factor of safety for this building has been found high with the existing gravity load. No immediate action is needed for the building. However, the shrinkage cracks of the beams should be repaired soon.

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

Name of the Factory : AZM Style Wear Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 25th November 2014

(A): Recommendations for Fire Safety corrective actions:

Fire Safety Issues	
Immediate (the factory should not continue to be occupied until these non-conformities have been rectified):	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>Confirm adequate numbers of fire drills.</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 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>Provide fire-rated enclosures equipped with fire-rated doors.</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 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>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>Ensure all exit access doors are side-swinging type and open to the direction of traffic flow.</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 damaged MCCB box.</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>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	N/A