

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Z.M. Apparels Limited.
Address of the Factory	: 212, Baizid Bostami Road, Nasirabad I/A, Chittagong.
Present Status of the Factory	: Under operation.
Structural Assessment Conducted by	: TUV
Date of Structural Inspection	: 29 May, 2015
Fire Assessment Conducted by	:
Date of Fire Inspection	:
Electrical Assessment Conducted by	:
Date of Electrical Inspection	:
BGMEA Membership No.	: 2578

BASIC INFORMATION:

The building was a five storey RCC structure where 4th floor was PEB profile shed supporting by RCC columns. The structural system of the building was beams in both direction from ground floor to 3rd floor and RCC column supported profile shed above 3rd floor in where logical vertical and lateral stability system was observed. The following information was noted:

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| i. Building Usage Type | : Garment Factory. |
| ii. Structural System | : GF to 3rd floor – Beam slab frame
4th floor – PEB profile shed. |
| iii. Floor System | : GF to 3rd floor – Beam slab
4th floor – PEB profile shed. |
| iv. Floor Area | : Total floor area is 45,850 sq. ft. approx. |
| v. No. of Stories | : 5 Storey |
| vi. Construction Year | : Not Identified |
| vii. Foundation Type | : Not Identified |
| viii. Design Drawings | : Available (Approval from Chittagong
Cantonment Board on 25th March, 1998 for 5
storied factory building) |
| ix. Soil Investigation Report | : Not Available |
| x. Construction Materials | : Brick aggregate. |
| xi. Generator | : Ground Floor. |

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:

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| Short Term (Immediate) | : 1. Water tank of 41000L must be empty. The bay 6-7/F-G must be vacate and excluded from operations on first floor and all floors above 1st floor keep empty.
2. Factory Engineer to review design, loads and columns stresses in area identified above.
3. Verify in-situ concrete stresses either by 100mm dia. cores or existing cylinder strength data for F6, G4 & G7 or 100mm dia. cores from 4 columns. |
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	4. A Detail Engineering Assessment of Factory to be commenced, see attached scope
Mid Term (6-weeks)	: 1. Produce and actively manage a loading plan for all floor plates within the factory giving consideration to floor capacity and column capacity. 2. Reduce load on column by removing upper levels of structure. 3. Detail Engineering Assessment to be completed
Long Term (6-months)	: 1. Continue to implement load plan 2. As built engineering need to be prepared as part of Detail Engineering Assessment (DEA).

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

(A): Recommendations for Fire Safety Corrective Actions:

Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i>	
Short Term <i>(Actions that must be incorporated into a Fire Safety Management Plan immediately (1 ~ 2 weeks) and should be a regular activity</i>	
Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	
Long Term <i>(The remedial works indicated must be carried out within a period of 6 months)</i>	

(B): Recommendations for Electrical Safety Corrective Actions:

Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i>	
Short Term <i>(Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity</i>	

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Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	
Long Term <i>(The remedial works indicated must be carried out within a period of 6 months)</i>	