

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Aaa Fashions (Pvt) Ltd.
Address of the Factory	: Ka-77/1, Khilkhet, Cantonment, Dhaka.
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: TÜV SÜD Bangladesh (Pvt.) Ltd
Date of Structural Inspection	: 2015-09-07
Fire Assessment Conducted by	: TÜV SÜD Bangladesh (Pvt.) Ltd.
Date of Fire Inspection	: 2015-09-07
Electrical Assessment Conducted by	: TÜV SÜD Bangladesh (Pvt.) Ltd.
Date of Electrical Inspection	: 2015-09-07
BGMEA Membership No.	: 1144

BASIC INFORMATION:

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| i. Building Usage Type | : Garments Factory. |
| ii. Structural System | : RCC Frame Building. |
| iii. Floor System | : Edge supported RCC slab |
| iv. Floor Area | : Not measured. |
| v. No. of Stories | : GF+ 3 floors, (4 Storey), No Basement. |
| vi. Construction Year | : Not known. |
| vii. Foundation Type | : Not verified. |
| viii. Design Drawings | : Not verified. |
| ix. Soil Investigation Report | : Not verified. |
| x. construction Materials | : Not verified. |
| xi. Generator | : Not verified. |

RECOMMENDATIONS FOR CORRECTIVE ACTION: For Structural corrective actions are, Factory could not be assessed due to the unwillingness of the factory representative.

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

(A): Recommendations for Fire Safety corrective actions:

Factory could not be assessed.

It was notified that the factory was ongoing their operation but the factory management not interest to allow the safety audit. So, the level of compliance of the factory could not be determined for any of the 67 checkpoints as per the NTPA guidelines.

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(B): Recommendations for Electrical Safety corrective actions:

<p>Immediate</p> <p><i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	<ul style="list-style-type: none"> • Over current protection device (MCB/MCCB) was not installed for outgoing circuit at Main distribution board.
<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>	<ul style="list-style-type: none"> • All strands cables at exposed ends should be properly soldered / crimped and insulated. • Provide proper separate earthing/grounding to generator. Ensure that generator body frame to have two separate and distinct connections to the earth / ground.
<p>Mid Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<ul style="list-style-type: none"> • Provide adequate illumination for generator room. • All unwanted materials should be removed from Generator room. • Provide rubber mats of adequate size in front of all distribution panels. • Install smoke detection and provide firefighting equipment in the generator room. • Exit signs should be illuminated either by lamps external to the sign or by lamps contained within the sign. • Individual Fuse protection should be provided to every 15A socket. • The electrical panels to be of metal case and should be marked with “Danger 415 Volts” and identified with proper phase marking and danger signage. • Provide cable connections with properly soldered / welded lugs at (MDB). Ensure that all the electrical connections are properly secured with lug. • Select conductors and MCCB with adequate sizing without exceeding permissible current carrying capacity for insulation. • Avoid bunch of cable at MCCB, bus bar terminal, and use individual circuit and over current device for every incoming and outgoing circuit at the distribution boards.

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	<ul style="list-style-type: none"> • Provide circuit diagram /circuit list with proper current ratings and fuse size, marking for DBs identifying end use load, voltage, number of phases. • Provide cable joints of porcelain / PVC connectors with PIB tape wound around before placing the cable in the box. • Provide separate earthing connection to electrical equipment. Ensure that earth potential provided for all parts of equipment / installation (other than live parts) and that continuous earth connection is provided back to the main intake supply earth. • Provide adequate earthing to body and doors to all DB /. Ensure that all electrical panels provided with proper and separate earth potential.
<p>Long Term</p> <p><i>(The remedial works indicated must be carried out within a period of 6 months)</i></p>	<ul style="list-style-type: none"> • 1. Provide updated SLD matching the existing installation at the factory. 2. SLD to indicate exact positions of all points of switch boxes and other outlets. 3. SLD to be approved by the engineer-in-charge. • 1. Provide updated Electrical layout drawing prepared after proper locations of all outlets for lamps, fans, fixed and transportable appliances, motors etc. 2. Drawings to indicate exact positions of all points of switch boxes and other outlets to match existing installation. 3. As built drawing to be approved by the engineer-in-charge. • Provide adequate ventilation arrangements for generator room. • Modify Area of generator room to meet requirements of Table 4.4, RMG Guideline; the area should be 37m², or relocate the generator room. • Provide and maintain proper clearance in all sides of generator for ease of maintenance. • 1. Design to have proper segregation of different end used loads. 2. Wiring design to have separate and distinct sub-circuits for power and heating system. 3. All DBs to be placed conveniently. 4. Wiring to be neat, tidy and located near ceiling. • Provide calibrated Ammeter & Voltmeter at Main distribution board (MDB). • Relocate the MDB with easy access. Ensure that all MDB should

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	<p>have easy accessibility.</p> <ul style="list-style-type: none">• Energy meters should be installed at convenient height (At least 1.5 m above ground) with proper protection.• Review capacity of standby generator on basis of loads for essential lighting. Replace generator with larger capacity or install second generator if review indicates existing unit is too small.• Each circuit should have a separate neutral (use of common neutral for more than one circuit shall not be permitted).• Seal the cable entry-exit points of (DB)'s with non-flammable materials. In addition:<ol style="list-style-type: none">1. Ensure that DB panels / Switchgears to be vermin / damp proof.2. Ensure all unused holes / openings in DBs to be blocked properly.• <ol style="list-style-type: none">1. Provide the ECC to meet minimum cross-sectional area as per table 4.5.2. Ensure that connections between conductors / equipment's provided to durable electrical continuity and adequate mechanical strength and protection.3. The continuous earth connection is provided back to the main intake supply earth.• Provide adequate protection against lightning depending on the probability of a strike and acceptable risk levels at roof top of building.
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