

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

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| Name of the Factory | : Sportswear Garments Ltd. (U-3) |
| Address of the Factory | : 26/1, Shataish Road, Tongi, Gazipur |
| Present Status of the Factory | : Under Operation |
| Structural Assessment Conducted by | : BUET |
| Date of Structural Inspection | : 1 st November 2014 |

BASIC INFORMATION:

The factory building is a 7 (seven) storied Reinforced Concrete (RC) frame building. The following information was noted:

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| i. | Building Usage Type | : Garment Factory |
| ii. | Structural System | : RC beam-column framing system |
| iii. | Floor System | : RC beam supported slab |
| iv. | Floor Area | : Approximately 1206 m ² per floor |
| v. | No. of Stories | : Seven |
| vi. | Construction Year | : 1 st phase (GF to 5 th Floor) :2006-2008, 2 nd phase (6 th floor) 2014 |
| vii. | Foundation Type | : Individual Footing (3600mm x 3600mm) |
| viii. | Design Drawings | : Not available |
| ix. | Soil Investigation Report | : Available (MRITTIKA FOUNDATIONS AND ENGINEERS, Dattapara, Tongi, Gazipur) |
| x. | Construction Materials | : Reinforced Concrete (No test report on construction materials is available), Coarse aggregate: Brick chips |
| xi. | Generator | : 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) : The factory owner has to prepare and submit the load plan for all floors.

Mid Term (6-weeks) : None

Long Term (6-months) : Preparation of the details as-built drawing within six months.

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

Name of the Factory : Sportswear Garments Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 25 October 2014

(A): Recommendations for Fire Safety corrective actions:

| Fire Safety Issues | |
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| 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 transformer, substation, boiler and generator room, if exists.</p> <p>Ensure 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 <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, 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>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>Show methods to ensure proper separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per the Guidelines.</p> <p>Provide design to install standard standpipe and hose system.</p> <p>Provide design to install proper detection and alarm system.</p> <p>Establish command station as per the Guidelines.</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, offices, and work areas.</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, transformer and substation rooms) as per the Guidelines.</p> <p>Install standard standpipe and hose system. Install proper detection and alarm system.</p> <p>Provide fire rated enclosure, install self-closing fire rated door as per guidelines.</p> |

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

(B): Recommendations for Electrical Safety corrective actions:

| Electrical Safety Issues | |
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| Immediate (the factory should not continue to be occupied until these non-conformities have been rectified): | N/A |
| Short Term (Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity) | <p>Provide instructions for first aid and artificial respiration from exposure to electrical shock.</p> <p>Provide cable trench with cover and rubber mat in front of the panel.</p> <p>Ensure well-dressed cabling with lugs.</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> |
| Mid Term (The remedial works indicated must be carried out within a period of 6 weeks) | <p>Provide separate service ducts for electrical cables.</p> <p>Provide new Emergency Lighting system.</p> <p>Provide appropriate Lightning Protection System as per guidelines.</p> |
| Long Term (The remedial works indicated must be carried out within a period of 6 months) | N/A |