

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Sister Knitwear Ltd.
Address of the Factory	: 4, Suzat Mansion, Section #12, Mirpur, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 23 rd October 2014

BASIC INFORMATION:

The factory building is a 8 (eight) storied Reinforced Concrete (RC) frame building. The following information was noted:

i.	Building Usage Type	: Commercial and Garment Factory
ii.	Structural System	: Beam-Column Slab system.
iii.	Floor System	: Edge supported slab
iv.	Floor Area	: Approximately 5200 ft ² per floor (As per approval drawing)
v.	No. of Stories	: Eight
vi.	Construction Year	: 1999-2002
vii.	Foundation Type	: Individual Footing (As per approval drawing)
viii.	Design Drawings	: Not Available.
ix.	Soil Investigation Report	: Available (M/S Amin Foundation Engineering Services, 166 Middle Badda, Altunnesa School Road, Gulshan, Dhaka 1212)
x.	Construction Materials	: Reinforced Concrete (No test report on construction materials is available), Coarse aggregate: Brick chips
xi.	Generator	: 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 as-built drawing. The factory owner has to prepare and submit the load plan for all floors.

Mid Term (6-weeks) : None

Long Term (6-months) : None

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

Name of the Factory : Sister Knitwear Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 29th September 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 <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>Remove all combustible materials from transformer, substation, boiler and generator room.</p> <p>Maintain minimum effective width of corridors, passageways and aisles.</p> <p>Confirm 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, assembly areas, offices, and work areas. Also show methods to ensure proper separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per the Guidelines.</p> <p>Prepare plan to ensure all exit access doors are side- swinging type and open to the direction of traffic flow.</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>Provide design to install standard standpipe, hose and fire pump system.</p> <p>Provide design to install proper detection and alarm system. 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, assembly areas, 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, hose and fire pump system. 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 <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	<p>N/A</p>

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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>Provide instructions for first aid and artificial respiration from exposure to electrical shock.</p> <p>Provide cover on the cable trench and rubber mat in front of the panel.</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 burnt/broken/loose MCB/MCCB box/socket.</p>
<p>Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<p>Provide separate service ducts for electrical cables.</p> <p>Provide appropriate Lightening Protection System as per guidelines.</p>
<p>Long Term <i>(The remedial works indicated must be carried out within a period of 6 months)</i></p>	<p style="text-align: center;">N/A</p>