

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : Sincere Garments Ltd.
Address of the Factory : 62 Siddeshwary, Circular Road, Shantinagar, Dhaka-1217
Present Status of the Factory : Under Operation
Structural Assessment Conducted by : BUET
Date of Structural Inspection : 2nd November 2014

BASIC INFORMATION:

The garment factory building is a four-storied RC beam column frame structure. The following information was noted:

- i. Building Usage Type : As Garments Factory building
- ii. Structural System : RC Frame structure
- iii. Floor System : Edge supported RCC slabs; thickness= 4.5”
- iv. Floor Area : Approximately 325 sq. meter (3500 sft) per floor
- v. No. of Stories : Four stories, also designed as a 4-storied factory building
- vi. Construction Year : First phase: 1985-86, up to 1st floor; the rest of the building in 2013-2014
- vii. Foundation Type : Isolated individual footing (6’x6’ for all the columns, as per design drawing)
- viii. Design Drawings : Drawing available (Approved by MoI; Designer: STAAD Engineers Ltd., Ayesha Shopping Center, 85 New Circular Road, Malibagh, Dhaka-1217)
- ix. Soil Investigation Report : Available, done in 2013 by STAAD Engineers Ltd., Ayesha Shopping Center, 85 New Circular Road, Malibagh, Dhaka-1217
- x. Construction Materials : Reinforced Concrete with Brick Chips (verified) and reinforcing steel (fy=40 ksi)
- xi. Generator : Ground floor (100 kVA)

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 been instructed to prepare and submit a load plan for vetting. A thorough structural adequacy check will also be needed in future for vertical extension of the building.

Mid Term (6-weeks) : None

Long Term (6-months) : None

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

Name of the Factory : Sincere Garments Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 4th November 2014

(A): Recommendations for Fire Safety corrective actions:

Fire Safety Issues	
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 all temporary obstructions from all escape routes, aisles and passageways. Ensure minimum width of corridors, passageways and aisles. Ensure adequate numbers of fire drills. Provide proper directional sign and exit sign in Bangla and English as per guidelines.</p>
<p>Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i></p>	<p>Remove temporary structure from roof top. Produce proper drawing and plans to create horizontal and vertical fire-rated separation for stairways of appropriate specifications, grills, storage, offices and work areas. Also design to ensure proper separation of high risk areas (e.g., generator rooms) as per guidelines. Prepare plans to ensure all exit access doors are side- swinging type and open to the direction of traffic flow. Produce drawings to demonstrate how stairways are to be made of adequate dimensions and appropriate specifications and to be converted into continuous fire-rated enclosures equipped with fire-rated doors. Provide design to install proper detection and alarm system.</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. Ensure all exit access doors are side-swinging type and open to the direction of traffic flow. Install stairways of adequate dimensions and appropriate specifications and convert into continuous fire-rated enclosures equipped with fire-rated doors. Ensure proper separation of high risk areas (e.g., generator rooms) as per the Guidelines. Install proper detection and alarm system.</p>

(B): Recommendations for Electrical Safety corrective actions:

<p style="text-align: center;">Electrical Safety Issues</p>	
<p>Immediate <i>(the factory should not continue to be occupied until these non-conformities have been rectified):</i></p>	<p style="text-align: center;">N/A</p>
<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. Provide cover on the cable trench and rubber mat in front of the panel. Ensure well-dressed cabling with lugs. Ensure earthing of panel body & door with fitted condition. Provide distribution board as per guideline and put identification mark on distribution panel. Remove burn/broken/loose MCB/MCCB box/socket.</p>

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Mid Term <i>(The remedial works indicated must be carried out within a period of 6 weeks)</i>	Provide insulated conduits for electrical cables. Provide new Emergency Lighting system. Provide appropriate Lightning Protection System as per guidelines.
Long Term <i>(The remedial works indicated must be carried out within a period of 6 months)</i>	N/A