

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory : Bonny & Bonny Apparels (Pvt.) Ltd.
Address of the Factory : ½, Chowdhury Para, D.I.T Road, Khilgaon, Malibagh, Dhaka
Present Status of the Factory : Under Operation
Structural Assessment Conducted by : BUET
Date of Structural Inspection : 28th January 2014
Fire & Electrical Assessment Conducted by : BUET
Date of Fire & Electrical Inspection :

BASIC INFORMATION:

The currently 4-storied building has RCC beam-column structure systems in all floors. The following information was noted:

- i. Building Usage Type : Mostly garment factories (with 300 staffs) and few shops at ground floor
- ii. Structural System : RCC beam-column system
- iii. Floor System : Edge supported RCC slabs (with 138mm thickness)
- iv. Floor Area : Approximately 300sq. m per floor with typical grid mostly of 4.78 m by 6.70m
- v. No. of Stories : Four story covering about 50% planar area of the approved building
- vi. Construction Year : In phases (2005-06)
- vii. Foundation Type : Pile foundation (as per drawing)
- viii. Design Drawings : Available partly
- ix. Soil Investigation Report : Available; conducted by Geotech Engineers and Consultant in 2004
- x. Construction Materials : Reinforced Concrete; brick aggregate in slabs and beams above ground floor and stone aggregate in all columns and underground RCC elements (verified during inspection)
- xi. Generator : located in ground floor 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) : None
Mid Term (6-weeks) : None
Long Term (6-months) : None

Name of the Factory : Bonny & Bonny Apparels (Pvt.) Ltd.
Fire & Electrical assessment conducted by : BUET
Date of Fire & Electrical Inspection : 27 December 2013

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(A): Recommendations for Fire Safety corrective actions:

<p>Immediate (the factory should not continue to be occupied until these non-conformities have been rectified):</p>	N/A
<p>Short Term (Actions that must be incorporated into a Fire Safety Management Plan immediately (a week) and should be a regular activity)</p>	<p>Remove all temporary obstructions from all escape routes, aisles and passageways.</p> <p>Ensure minimum width of corridors, passageways and aisles.</p> <p>Ensure easy access to portable extinguishers and monitor and maintain the same at required interval as per guidelines.</p> <p>Provide exit sign in Bangla and English as per guidelines</p>
<p>Mid Term (The remedial works indicated must be carried out within a period of 6 weeks)</p>	<p>Produce proper drawing and plans to create horizontal and vertical fire-rated separation for stairways of appropriate specifications, grills, storage and assembly areas, basement, offices, work areas. Also design to ensure proper separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per guidelines.</p> <p>Remove all collapsible gates. Produce design 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 side swinging doors of required dimensions opening in the direction of travel at each floor.</p> <p>Provide design to install proper detection and alarm system.</p>
<p>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	<p>Install horizontal and vertical fire-rated separation for stairways, grills, storage and assembly areas, basement, offices, work areas.</p> <p>Ensure proper fire separation of high risk areas (e.g., generator, boiler, transformer and substation rooms) as per approved design</p> <p>Install fire rated enclosure and doors at exit to the stairs to prevent smoke and fire propagation as per approved design</p> <p>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:

<p>Immediate (the factory should not continue to be occupied until these non-conformities have been rectified):</p>	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>Provide instructions for first aid and artificial respiration from exposure to electrical shock.</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>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 new Emergency Lighting system</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>N/A</p>