

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Capella Knit Limited
Address of the Factory	: 279 South Bipile, Gazirchat, Ashulia, Savar, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 4 th December 2014

BASIC INFORMATION:

Layout plan was approved by Savar Cantonment Board on 28/08/2007. On the basis of visual observations, study of design drawings of the building and discussion with personnel present, the following information was noted:

i.	Building Usage Type	: Garments factory
ii.	Structural System	: RC beam-column framing system
iii.	Floor System	: RC beam supported slab Thickness 6"
iv.	Floor Area	: Approximately 542 sqm (\approx 5,280 sqft) per floor
v.	No. of Stories	: 3 (Three)
vi.	Construction Year	: GF to 2F was constructed in 2007 with a tin roof on steel truss; In 2014 the steel structure on 2F was replaced by RCC construction.
vii.	Foundation Type	: Individual footing (1.35m \times 1.35 m), as per drawing
viii.	Design Drawings	: Available (Architect Saiful Islam, (IAB no.-I-017); Architecton (Pvt.) Ltd, House 28, Road 28, Banani Dhaka 1213)
ix.	Soil Investigation Report	: Available (By Proyash Associates, 149 Elephant Road (Hatir Pool), 3rd fl., Dhaka 1205 on April 2007)
x.	Construction Materials	: Reinforced Concrete (No test report on construction materials is available), Coarse aggregate: Brick chips
xi.	Generator	: Ground Floor (100kVA-1 no., 50 kVA-1 no.)

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) : None

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

Name of the Factory : Capella Knit Ltd.

Fire & Electrical assessment conducted by : BUET

Date of Fire & Electrical Inspection : 23rd December 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 (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>Remove all combustible materials from generator room.</p> <p>Ensure minimum width of corridors, passageways and aisles.</p> <p>Ensure adequate numbers of fire drills.</p> <p>Provide proper directional sign and 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, offices, work areas. Also design to ensure proper separation of high risk areas (e.g., generator, boiler rooms) as per guidelines.</p> <p>Remove all collapsible gates/roller shutters/sliding doors. 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 of appropriate specifications, grills, storage and assembly areas, offices, work areas.</p> <p>Ensure proper fire separation of high risk areas (e.g., generator, boiler rooms) as per approved design.</p> <p>Install fire rated enclosure and doors of appropriate dimensions 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:

Electrical Safety Issues	
<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>Provide instructions for first aid and artificial respiration from exposure to electrical shock. Provide 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 door with fitted condition.</p> <p>Provide distribution board as per guideline.</p>
<p>Mid Term (The remedial works indicated must be carried out within a period of 6 weeks)</p>	<p>Provide new Emergency Lighting system.</p> <p>Provide appropriate Lightening Protection System as per guidelines.</p>
<p>Long Term (The remedial works indicated must be carried out within a period of 6 months)</p>	N/A