

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Associates Garments Ltd.
Address of the Factory	: 271, Tejgaon I/A, Dhaka
Present Status of the Factory	: Under Operation
Structural Assessment Conducted by	: BUET
Date of Structural Inspection	: 4 th November 2014

BASIC INFORMATION:

Associated Garments Ltd. is housed in one building with two parts - North and South. The North part (eight storied) was constructed in 1998-1999 and the South part (seven storied with tin-shed on roof) was constructed in 1984. The following information can be presented:

i.	Building Usage Type	: Garment factory building.
ii.	Structural System	: RC Frame Building
iii.	Floor System	: Edge supported RCC slabs
iv.	Floor Area	: Approximately 1500 sqft per floor for the North part and 5000 sft per floor for the South part
v.	No. of Stories	: Eight Stories for north part and Seven Stories with tin-shed on roof for the South part
vi.	Construction Year	: For the South part-1984 and for the North part-1998-1999
vii.	Foundation Type	: Pile foundation
viii.	Design Drawings	: As-built drawings prepared in 2010. Design-drawings are not Available
ix.	Soil Investigation Report	: Available (S.S.Boring and Engineering, Badda, Dhaka, October, 1997)
x.	Construction Materials	: Reinforced Concrete; Coarse Aggregate: Stone chips in the column (as reported by the owner and verified).
xi.	Generator	: One 250 KVA capacity placed in the ground floor.

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. Intensity of load does not exceed 42 psf (2.0 kN/m ²) in all floors.
Mid Term (6-weeks)	: A Detail Engineering Assessment (DEA) has to be completed.
Long Term (6-months)	: Necessary remediation's after completion of DEA.

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

Name of the Factory	: Associated Garments Ltd.
Fire & Electrical assessment conducted by	: BUET
Date of Fire & Electrical Inspection	: 21 st October 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 obstructions from all escape routes, aisles and passageways.</p> <p>Remove all combustible materials from transformer, substation, boiler and generator room, if exists.</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>Remove temporary structures from roof top.</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. 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 plans to ensure all exit access doors are side-swinging type and open to the direction of traffic flow.</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, 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 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 style="text-align: center;">N/A</p>