

Summary of Preliminary Assessment on Structural, Fire and Electrical Safety

Name of the Factory	: Alpha Knit Apparels Ltd.
Address of the Factory	: Sayed Ali Mansion, North Gazir Chat, Ashulia, Dhaka
Present Status of the Factory	: Under Operation
Structural assessment conducted by	: Accord
Date of Structural Inspection	: 23.August.2014
Fire & Electrical assessment conducted by:	Accord
Date of Fire & Electrical Inspection	: 19 February, 2014

Basic Information: The present garment factory is a commercial building with beam-column frame system. The following general information was noted:

i.	Building Usage Type	: Garments Factory
ii.	Structural System	: RCC beam slab(2 way)
iii.	Floor System	: Beam slab
iv.	Floor Area	: Unavailable
v.	No. of Stories	: Part 6 stories part 7 stories.
vi.	Construction Year	: 2007
vii.	Foundation Type	: Not Applicable
viii.	Design Drawings	: Available
ix.	Soil investigation Report	: Unavailable
x.	Construction Materials	: Unavailable
xi.	Generator	: Ground floor

Recommendations for Corrective Action: The recommendations of corrective action for both Structural and Fire & Electrical Safety are as follows:

The recommendations for Structural Safety corrective actions are:

Immediate: Not Needed

Short Term (Within 6 Weeks):

1. Ensure loading on upper floors does not exceed 2.0kPa (40psf).
2. Building Engineer to survey the beams, removing plaster, to establish the extent of the cracks in the beams.
3. Remove stored materials from the cantilevers.

Mid Term (Within 6 Months):

1. Produce loading plans for all levels of the building; ensure these are displayed active managed.
2. Monitor the cracks over a period of no less than 6 months to determine if there is further movement.
3. Produce loading plans for all levels of the building; ensure these are displayed active managed.
4. Cover the concrete roof with a suitable waterproofing membrane, e.g. waterproof screed.

Long Term: Not Needed

The recommendations for Fire Safety corrective actions are:

Immediate:

1. Remove all lockable gates and doors at exits and along the means of egress. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.
2. Remove all storage from exit stairs.
3. Remove unnecessary exit sign.

Short Term (Within 3 Months):

1. Provide dedicated storage rooms separated by minimum 1 hr fire-rated construction on all production floors where transient storage is required for operations. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4 m and maximum area of 23m² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m² Separate areas of unenclosed combustibile storage by a minimum clear distance of 3m.
2. Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.
3. Move the boiler to a room with a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.
4. Provide minimum 1.5-hr fire rated doors and seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.
5. Provide dedicated storage rooms separated by minimum 1 hr fire-rated construction on all production floors where transient storage is required for operations.
6. Provide handrails on at least one side of the stairs.
7. Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.
8. Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.
9. Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.