Name of the Factory	:	**YOUNGONES (BD) LTD. UNIT-II**
Address of the Factory	:	1/1 East Chandona, Joydebpur, Gazipur
Dhaka Present Status of the Factory	:	**Under Operation**
Structural assessment conducted by	:	Accord (Full report available at bangladeshaccord.org)
Date of Structural Inspection	:	18 May, 2014
Fire & Electrical assessment conducted by	:	Accord (Full report available at bangladeshaccord.org)
Date of Fire & Electrical Inspection	:	4 June, 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	: Garment factory
ii.	Structural System	: R.C Beam and column frame with a 2-way solid slab
iii.	Floor System	: Beam slab
iv.	Floor Area	: Four storied building having the total area of 4,200 sq. ft.
v.	No. of Stories	: 5 storied, 10 storied (On going)
vi.	Construction Year	: 2004
vii.	Foundation Type	: Unavailable
viii.	Design Drawings	: Available (As-built drawing)
ix.	Soil investigation Report	: Unavailable
x.	Construction Materials	: Unavailable
xi.	Generator	: Separate shed buildings

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 (Now):

1. Reduce all floor loading down to 4.8kPa.
2. Restrict loading on the cantilevered portion to 2,0 kPa until the Design Engineer carries out his assessment.

Mid Term (Within 6 Weeks):

1. The Factory Engineer is to carry out an assessment of the structural steel located at the main roof to evaluate its capacity to resist uplift and lateral forces due to high winds.
2. Install horizontal bracing at the unrestrained node of the top chords of the trusses.
3. Create and actively manage loading plans for all floors.
4. Have the Design Engineer survey the actual site conditions and confirm that the structural elements have the adequate capacity for such a cantilever.
5. The As-Built drawings must be updated and completed, incorporating the missing column information.
6. The Factory Engineer is to carry out an assessment of the lightweight steel located at the roof of the elevator shaft.
7. The brick column must be replaced by an adequate steel column.

Long Term (Within 6 Months):

1. If deemed necessary by Factory Engineer, carry out any remedial works recommended.
2. Maintain loading plans for all floors.
3. If deemed necessary by the Design Engineer, carry out any remedial works recommended.
4. If deemed necessary by Factory Engineer, carry out any additional remedial works recommended.

The recommendations for Fire Safety corrective actions are:

Immediate (Within 1 month):

1. Remove locking features from all egress doors / gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.

Short Term (Within 3 Months):

1. 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.
2. Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms may not be feasible, provide defined storage areas and limit the storage arrangement as follows:

   -Maximum height of 2.4m and maximum area of 23m2

   -If sprinkler protected: maximum height of 3.66m and maximum area of 93m2.

   Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.
3. Separate the boiler, generator, transformer, and compressor rooms by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations.
4. Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.
5. Modify the egress door to swing in the direction of egress travel.
6. Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.
7. Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.
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.

Mid Term (within 6 Months):

1. Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft., to provide a minimum 1-hr fire separation. Alternatively, provide a second remote discharge path to the public way (only include this if feasible).

2. Reduce occupant load on the 3rd floor to not more than 707 occupants, and the 4th floor to not more than 698 occupants immediately. In the future, if a greater occupant load is desired, provide additional exits.

3. Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.

4. Remove single-station smoke alarms. Provide automatic smoke detection throughout the building in accordance with NFPA 72.

Long Term (More than 6 months):

1. Replace the fire alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72.

The recommendations for Electrical Safety corrective actions are:

Immediate (Within 1 month): NA

Short Term (Within 3 Months):

1. Cable terminating at Generator output terminal box must be supported on riser and protected. Existing cables laid on floor may be installed in cable trench or on trays.

2. Disconnect the electric supply to the duct and clean all the cables and other components of the duct. Provide cover made of non-combustible material preferably metallic sheet on the duct to prevent ingression of dust and lint.

Mid Term (Within 6 months):

1. Construct a separate room for the transformer by constructing barrier (brick) walls (fire rated wall) up to the ceiling; the minimum area of the transformer room should be 10-13 sq m (according to BNBC 2006, Section-2.6.3).

Long Term (More than 6 months): NA