Name of the Factory	:	**TARASIMA APPARELS LTD.**
Address of the Factory	:	P/O: Kaitta, Saturia, Manikgonj
Dhaka Present Status of the Factory	:	**Under Operation**
Structural assessment conducted by	:	Accord (Full report available at bangladeshaccord.org)
Date of Structural Inspection	:	12 August, 2014
Fire & Electrical assessment conducted by	:	Accord (Full report available at bangladeshaccord.org)
Date of Fire & Electrical Inspection	:	15 July, 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 2-way solid slab
iii.	Floor System	: Beam slab
iv.	Floor Area	: The factory has total floor area of 205,875.0sqft
v.	No. of Stories	: 5 storied
vi.	Construction Year	: 2006
vii.	Foundation Type	: Unavailable
viii.	Design Drawings	: Available (Permit drawing)
ix.	Soil investigation Report	: Unavailable
x.	Construction Materials	: Unavailable
xi.	Generator	: E-Building

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): NA

Mid Term (Within 6 Weeks): NA

Long Term (Within 6 Months):

1. Provide the tie beams along the eaves at all column joints.
2. Fire proof all steel structures in accordance with all appropriate BNBCs.
3. The roof bracing system needs to be improved / provided in longitudinal direction.
4. The factory's Structural Engineer is to survey the actual conditions and produce the drawings as early as possible.

The recommendations for Fire Safety corrective actions are:

Immediate (Within 1 month):

1. Remove locking features from all egress doors and gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.
2. Reduce occupant load to not more than available exit capacity (851, 825, 819, 831) or provide additional exits.

3. Replace all gates and 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. Regularly inspect all exit signage and replace lights as needed to illuminate signs.

Short Term (Within 3 Months):

1. Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. 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.

2. Modify the egress door to swing in the direction of egress travel.

3. Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.

4. Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.

5. 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.

6. Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level.

7. Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.

8. Modify the egress door to swing in the direction of egress travel.

9. Separate the hazardous materials and flammable liquid storage room by a minimum 2- hr fire-rated construction. Seal and protected all openings to maintain the required fire separations.

10. 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. Remove single-station smoke alarms. Provide automatic smoke detection throughout the building, tied into the fire alarm system, 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. The transformer must be installed with barrier walls (instead of grill) between transformer and other panels. The walls must be fire resistant and should have height up to the ceiling or Assign a qualified engineer to design a required transformer room according to BNBC, Section-2.6.3.

2. Install a cable tray/ladder made of noncombustible material for supporting the LT & HT cables. Ensure the cables are tightly attached with the ladder and provide covers made of non-combustible material preferably metallic sheet to protect the cables' insulation from physical damage.

3. Phase barriers between different phases must be installed to avoid arc flashing. Control panel must be cleaned as part of regular maintenance and all openings in panel must be closed.

4. All electrical panels must be connected with dedicated earth (frame). Earth contact established by installation of earth strip inside panel does not substitute the requirement.

5. Remaining holes/opening around the cables passing through walls at different floors from electrical shaft must be sealed with fire rated materials.

6. Metallic cover (checkered plate) should be provided on cable trench to prevent the damage of cable insulation.

7. Remove all the combustible materials from electrical equipment. Generator Battery must be placed on the battery stand made of noncombustible material (steel fabricated).

8. Excess length of cables must be trimmed and install cable tray with metallic cover to provide mechanical support to cables laid haphazardly on the floor to protect the cable from any physical damage due to the stepping of occupant onto these cables.

9. Make circular hole at the base plate/top plate of panels and provide cable gland according to the respective cable size for cable entry and exit so that the cables are not stressed on the sharp edges of the hole of panels. Provide covers (of noncombustible material) if any additional gap remains after installing cable glands.

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

11. BBT should be sealed properly with PVC cover (may the cover provided by manufacturer) and vermin proof.

Mid Term (Within 6 months): NA

Long Term (More than 6 months): NA