INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**Wear Mag,Tip Top Fashions,Adhunik Poshak Shilpa,CrazyFashion,Kazipur Fashion ltd**
Address:	**Civil Engineer's tower, ind. Plot 1, BLOCK-E, AVENUE-1, section11, Mirpur, Dhaka Dhaka Dhaka Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**26 May 2014**

Introduction to the Report

The following report contains a site profile and summary of non-conformities identified during an onsite assessment commissioned by the Alliance for Bangladesh Worker Safety (Alliance) and conducted by a third-party Qualified Assessment Firm (QAF). The assessment was conducted against the Alliance for Bangladesh Worker Safety Assessment Protocols (APs) and Fire Safety and Structural Integrity Standard, which is harmonized with the factory assessment guidelines developed by Bangladesh University of Engineering and Technology (BUET) for the Bangladesh National Tripartite Plan of Action (NTPA). The goal of the Alliance process is to provide clear and practical technical requirements by which Bangladeshi Ready Made Garment (RMG) Factories producing for Alliance members may be consistently and fairly evaluated for fire, structural, and electrical safety in a non-duplicative manner. Each assessment will prompt action plans that will be used by RMG factories to systematically and sustainably improve safety conditions for garment workers. Beyond tracking and reporting on action steps taken in a transparent manner, the Alliance organization and its members will seek to further support factory improvements through technical assistance, training, implementation support for functional Worker Committees, and in some cases financial assistance and wage support for workers if factories are closed for remediation.

The contents of the report do not constitute a guarantee of compliance with the applicable laws, the Alliance Standard or the absolute or continued safety against fire, electrical and/or structural integrity issues that may lead to injury or loss of life. The report is designed to provide a non-exhaustive summary of risk issues, based on a limited sampling and duration of time onsite by the named QAF. Neither the QAF nor the Alliance can certify or guarantee the quality, outcome, or effectiveness of actions taken in response to the report.

For more information and report feedback please go to: www.bangladeshworkersafety.org.

GENERAL INFORMATION

General Information	
Factory Name:	Wear Mag,Tip Top Fashions,Adhunik Poshak Shilpa,CrazyFashion,Kazipur Fashion ltd
Address:	Civil Engineer's tower, ind. Plot 1, BLOCK-E, AVENUE-1, section11, Mirpur, Dhaka Dhaka Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Dhaka
Zip Code:	1216
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	05-27-2014
Final Report Date:	06-26-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 3 buildings on the factory premises out of which one is the main building and two are ancillary buildings. Names of Buildings: 1) Nineteen story main production building, 2) Single story masonry construction with tin roof (Ancillary-01), 3) Single story masonry construction utility shed with tin roof (Ancillary-02).
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	1) Nineteen story main production building: Building height (Highest occupied floor level): 61.74 m or 202.50 ft [Height up to roof: 64.79 m or 212.50 ft], Stories above grade: 19 (18 floors and occupied roof), Stories below grade: 1, Occupied levels: 20. 2) Single story masonry construction with tin roof (Ancillary-01): Building height (Highest occupied floor level): 76 cm or 2.5 ft above grade [Height up to roof: 4.6 m or 15.00 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1. 3) Single story masonry construction utility shed with tin roof (Ancillary-02): Building height (Highest occupied floor level): 76 cm or 2.5 ft above grade [Height up to roof: 4.6 m or 15.00 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1.
Approximate Building Area (SF):	Total area of all buildings on the factory premises: 220297 sft. Building wise breakdown as follows: 1) Nineteen story main production building: 214997 sft (Basement: 9188 sft, Ground floor: 8532 sft, 1st floor: 10178 sft, 2nd to 18th floor: 11006 x 17=187099 sft), 2) Single story masonry construction with tin roof (Ancillary-01): 2500 sft, 3) Single story masonry construction utility shed with tin roof (Ancillary-02): 2800 sft.
Date of Building Construction:	Factory personnel informed the date of construction as follows: 1) Nineteen story main production building: Finished in 1999, 2) Single story masonry construction with tin roof (Ancillary-01): Finished in 1999, 3) Single story masonry construction utility shed with tin roof (Ancillary-02): Finished in 1999.

Date of Last Building Renovation/Addition:	Factory personnel informed the date of renovation as follows: There was a mobile tower on the roof top and that was demolished in 2013.
Ancillary Structures in Complex:	1) Single story masonry construction with tin roof (Ancillary-01), 2) Single story masonry construction utility shed with tin roof(Ancillary-02).
Approximate Ancillary Structures Area (SF):	1) Single story masonry construction with tin roof (Ancillary-01): 2500 sft, 2) Single story masonry construction utility shed with tin roof (Ancillary-02): 2800 sft.
Number of Occupants:	Total number of occupants: 3342. 1) Nineteen story main production building: 3310. (Basement: 20, Ground floor: 70, 1st floor: 190, 2nd floor: 5, 3rd floor: 25, 4th floor: 8, 5th floor: 325, 6th floor: 30, 7th floor: 325, 8th floor: 325, 9th floor: 325, 10th floor: 150, 11th floor: 325, 12th floor: 27, 13th floor: 90, 14th floor: 325, 15th floor: 325, 16th floor: 325, 17th floor: 75, 18th floor: 15, Roof top machine room: 5), 2) Single story masonry construction with tin roof (Ancillary-01): 2, 3) Single story masonry construction utility shed with tin roof(Ancillary-02): 30.
Number of Ancillary Levels (Stories):	1) Single story masonry construction with tin roof (Ancillary-01): Building height (Highest occupied floor level): 76 cm or 2.5 ft above grade [Height up to roof: 4.6 m or 15.00 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1. 2) Single story masonry construction utility shed with tin roof (Ancillary-02): Building height (Highest occupied floor level): 76 cm or 2.5 ft above grade [Height up to roof: 4.6 m or 15.00 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1.
Occupancy Type:	1) Nineteen story main production building: [Basement: G2 (Embroidery), K (Pump room, generator, workshop), F1 (Office), H2 (Store), Ground floor: K1 (Substation), H2 (Store), 1st floor: F1 (Office), G2 (Laser room, Blast room, dry process, Mechanical room), H2 (Delivery store), 2nd floor: H2 (Fabric store, accessory store), 3rd floor: D1 (Medical, Doctors room, pharmacy, pathology), F1 (Office, accounts, IT section, reception), H2 (Accounts store, Admin store), and see the description.
Construction Type:	1) Nineteen story main production building: Type 1, 2 Single story shed-1: Non-rated, 3 Single story shed-2: Non-rated.
Height of Highest Occupied Floor Level Above Grade:	1) Nineteen story main production building: 61.74 m or 202.50 ft), 2) Single story masonry construction with tin roof (Ancillary-01): 76 cm or 2.5 ft above grade. 3) Single story masonry construction utility shed with tin roof(Ancillary-02): 76 cm or 2.5 ft above grade.

ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are openings and penetrations through rated walls and/or assemblies protected?
Priority Level:	High
Non-Compliance Level:	3
Description:	Doors and windows of substation room, generator room, boiler room and childcare are not protected. Substation room is connected to washing area and ground floor passageway. Generator and transformer room is connected with wastage store, and boiler room is connected with drying area. There is an unprotected penetration at each floor inside the production area for SDB board. Such unprotected openings are not allowed according to Alliance Standards.
Source of Findings:	Photograph: Unprotected openings were found in substation, generator, boiler and child care rooms. Penetrations through floor slabs were also observed.
Suggested Plan of Action:	Install fire rated doors and windows or fill in unprotected openings with fire resistive rated assemblies.
Suggested Deadline Date:	17 Sep 2014
Standard:	Includes doors, windows, ducts, piping, etc. Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?
Priority Level:	High
Non-Compliance Level:	3
Description:	There are four stair enclosures in the main building. Two of the exit enclosures have fire rated doors with UL certification. But the other two stairs of the building are not fire rated. The exit doors in the enclosure need to be 1.5 hour rated as per the Alliance Standard. Factory personnel informed that they do not use stair-3 and stair-4 and exits remained locked all the time. They have also provided signage indicating that these exits are not for emergency evacuation. They have also removed the aisles mark leading to these stairs in all the floors and they were also designing new egress maps. The greatest number of occupants is 325 in one floor and maximum travel distance from any floor leading to stair-1 and stair-2 is 31.00 m which is less than 45m. Therefore, only two stairs are required in the main building. Regardless, since the exits of stair-3 and stair-4 are not fire rated, there is a strong chance of propagating smoke and fire through these exits from floor to floor.
Source of Findings:	Visual Assessment: Fire rated doors are provided at the exit enclosures of stair-01 and 02. Steel sliding doors are provided at stair-3 and stair-4.

Suggested Plan of Action:	Close or fit doors that swing in the direction of egress, side-swinging, self-closing, non-lockable fire doors of 1.5 hour rating in all stairwell enclosures. Close or provide 1.5 hour fire barrier to all the opening of staircase wall facing towards production or storage. Consult a qualified fire protection engineer to design the required rated construction barriers.	
Suggested Deadline Date:	17 Sep 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are shafts provided with the minimum fire-resistance rating?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	The elevator is available in the building and doors of four elevators are not fire rated which are open to the staircase.	
Source of Findings:	Visual Assessment: Four elevator were found in the staircase.	
Suggested Plan of Action:	Provide a shaft enclosure of required rating by constructing an enclosure of required thickness and protect openings with fire-rated assemblies.	
Suggested Deadline Date:	11 Feb 2015	
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Chemical store on 18th floor is not fire separated. In-process goods are kept haphazardly on various floors and are not kept within the dimensions required for miscellaneous store of area 250 sft, height 8 ft, and separation from adjacent area of 10 ft. Occupancy separations are not fire rated and the opening protectives are not fire rated as well. Boiler room (K2) and production area (G2) on ground floor of single story shed-2 are not separated by fire-resistive rated construction barriers (fire doors not used at exits). Childcare on 6th floor is not separated from office & training area with fire rated barrier. These different occupancies need to be fire separated according to the Alliance Standard. The utility shed containing generator, compressor, boiler and oil-filled pump is within 3 m from main building but the exterior wall of main building is not 2 hr fire separated, which is required as per the BNBC. The fire pump room is also beside the stair case, which should be separated.	
Source of Findings:	Photograph: Separations between hazards are not provided with fire-resistive rated construction barriers.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types following Table 4.4.1 of Alliance Standard. Consult a qualified fire protection engineer to design the required rated construction barriers. Rooms used for	

	storage of combustible materials shall be separated from the surrounding occupancies with a minimum 1 hour construction. In-process storage open to the surrounding occupancy is not required to be separated when the floor is provided with an automatic sprinkler. Keep the in-process goods within a maximum area of storage of 250 sft, height 8 ft, and separated from adjacent area by 10 ft.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Certificates of Occupancy for each building have been issued and are on file.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	No occupancy certificates areavailable for any building on the factory premises.	
Source of Findings:	Document Review: There was no occupancy certificate for the building among the documents shown by the factory's concerned people.	
Suggested Plan of Action:	Apply to RAJUK for issuance of the occupancy certificates and expedite the matter.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Fire Protection Systems		
Question:	Is the building protected by an automatic sprinkler system?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	The building is not protected by an automatic sprinkler system. Height of the highest occupied level of the main production building is 61.74m (202.50ft). Automatic sprinkler systems are to be provided throughout buildings with occupied floors higher than 23m (75ft) above the finished grade as per NFPA 13 requirements.	
Source of Findings:	Visual Assessment: There is no sprinkler system.	
Suggested Plan of Action:	Install an automatic sprinkler system throughout the building designed by a qualified fire protection engineer. The hydraulic design of the sprinkler system must be pre-approved by CoE of the Alliance. All installation and design requirements outlined, in BNBC Part 4 Chapter 4, shall be replaced by the requirements of NFPA 13. Pipe schedules shall not be used to size pipe. All systems shall be hydraulically calculated to meet NFPA 13 design requirements. For installation of the new automatic sprinkler system, shop drawings and hydraulic calculations will be required as per NFPA 13	

	requirements. The test and performance report of the installed system has to be submitted to the Alliance for review. Final inspection and testing shall be witnessed by the Alliance.	
Suggested Deadline Date:	04 Mar 2015	
Standard:	Reference Alliance Standards Part 3 Section 3.5.3 Existing Buildings, Part 5 Section 5.3 Automatic Sprinkler Systems and Section 6.13 Travel Distance	
Question:	Does the building have a Standpipe System?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	The height of the highest occupiable floor of the main building is 61.74m (202.50ft) above grade. Standpipe systems must be be installed throughout all new and existing buildings and structures where the highest occupied floor is more than 10m (33ft) above grade. A class I standpipe system needs to be installed throughout the main building at required stairwells. In addition the following was noted: (i) The main building has a class II standpipe system installed; (ii) two of the class II standpipe hose connections (40mm) are installed in the stairwells; (iii) they have provisions for a class I standpipe system attached to the class II system; (iv) there is no hydraulic design for the installed system; (v) at roof, hose pressure was above 4.5 bar; (vi) hose diameter and water capacity are sufficient.	
Source of Findings:	Photograph: A class II standpipe system is installed. Class I standpipe system provisions attached with class II system. Hose pressure at roof was sufficient.	
Suggested Plan of Action:	Install a NFPA 14-compliant standpipe system at required locations designed by a qualified fire protection engineer. All standpipe system installations and hydraulic calculations shall be submitted for review by the Alliance prior to commencement of installation.	
Suggested Deadline Date:	17 Sep 2014	
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2	
Question:	Does the building have a fire pump?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	There are two (total 175 HP) electric fire pumps and one (7.5 HP) electric jockey pump. The throw of jet at the highest accessible point is over 40 feet. The pumps available are not dedicated for fire fighting. It is a dry pipe system. The pump is not connected to an alternative power source and there is no supplementary diesel pump to supply water in case of power failure. There are two underground water reservoirs with a total capacity of 1,77,000 liters. No hydraulic calculation for verifying the sufficiency of water capacity is found.	
Source of Findings:	Visual Assessment: There are two (total 175HP) electric fire pumps and one	

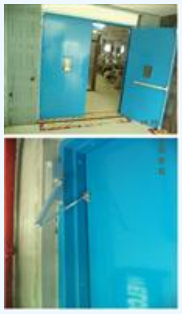
	(7.5HP) electric jockey pump. The pumps available are not dedicated for fire fighting.	
Suggested Plan of Action:	Provide hydraulic calculations for current fire pumps and if these do not meet the needs of the systems then, install a pump dedicated to fire fighting or fire protection following the requirements of NFPA 20. Fire pump is to be connected to an alternative power source, such as a diesel generator, and the generator is to be connected with an ATS (auto starter). Fire pump installation is to be tested for final acceptance in presence of the Alliance and a final inspection of the installation shall be conducted by the Alliance prior to final acceptance. Acceptance testing of the installation shall be in accordance with NFPA 20 testing requirements. Documentation of all testing shall be submitted to the Alliance for review prior to final acceptance by the Alliance.	
Suggested Deadline Date:	17 Sep 2014	
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Are fire department connections provided and clearly identified for the Fire Protection Systems?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Fire department (Siamese) inlet connection and outlet connection (pillar hydrant) are provided as per the Alliance Standard. Connections match fire service and civil defense hose thread standard. Connections are not clearly identifiable for the fire protection system.	
Source of Findings:	Photograph: Fire department (Siamese) inlet connection is provided but not clearly identified for the fire protection system.	
Suggested Plan of Action:	Install proper signage for the existing fire department connections where required and in compliance with the Standard.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections	
Question:	Fire extinguishers are inspected, tested, and maintained as required.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Extinguishers are inspected monthly by factory's staff, but no document was found in support of i) annual maintenance of extinguishers by a servicing agent and ii) annual testing of nozzle of CO2 extinguisher. These are required as per NFPA 10.	
Source of Findings:	Photograph: Extinguishers are inspected monthly by factory's concerned people.	

Suggested Plan of Action:	Inspect, test and maintain fire extinguishers in accordance with NFPA 10 requirements.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	NFPA 10 Chapter 7	
Question:	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	An automatic fire alarm and detection system is available in the factory, but currently there is no monitoring company in Bangladesh. Fire service and civil defense is not capable of monitoring fire alarm and detection systems of the factories.	
Source of Findings:	Visual Assessment: No central monitoring station is available.	
Suggested Plan of Action:	Arrange for direct connection of the fire alarm system to a central monitoring station or Fire Service and Civil Defense as per the Alliance Standard. Until that time that monitoring can be set up, arrange a monitoring system using factory's own central detection system and personnel. A person shall be assigned to contact the fire department in the event of fire alarm activation. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	
Question:	Are inspection, maintenance, and testing procedures of the standpipe and hose system documented and up to date? Including inspection and testing of hoses if provided.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Inspection, maintenance, and testing procedures of the installed standpipe and hose system are not documented and up to date.	
Source of Findings:	Document Review: Inspection, maintenance, and testing procedures of the installed standpipe and hose system were not documented and up to date.	
Suggested Plan of Action:	Establish required inspection, maintenance, and testing program for the standpipe and hose system.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2	

Question:	Is signage for the standpipe system installed at required locations and on required components?	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	There is no signage for the standpipe system.	
Source of Findings:	Visual Assessment: No signage for the standpipe system was installed at the required locations and/or on the required components.	
Suggested Plan of Action:	Install NFPA-compliant identification signs at the noted locations.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Reference NFPA 14 Chapter 6	
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Inspection, maintenance, and testing procedures of the fire pump are not documented and up to date.	
Source of Findings:	Document Review: Inspection, maintenance, and testing procedures of the fire pump are not documented and up to date.	
Suggested Plan of Action:	Establish an inspection, maintenance, and testing program for the fire pump. Program must comply with NFPA 25.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Reference NFPA 25 Chapter 8 Fire Pumps	
Means of Egress		
Question:	Aisles are provided with the minimum unobstructed clear width of 0.9 m (36 in) based on occupant loads.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	On 5th, 7th, 8th, 9th, 11th, 14th, 15th & 16th floors of main building, occupant load is 325, which is the maximum of all floors. Total width of aisles is 5.13 m, whereas required total width for aisles is 1.63 m. Aisle widths at different areas of 2nd, 3rd, 4th, 5th, 9th, 10th, 15th, 16th & 17th floors and finished goods store are less than 0.9 m (36 in) and in some areas, widths are obstructed, which violates the Alliance Standard.	

Source of Findings:	Photograph: Obstructed aisles are found on different floors.	
Suggested Plan of Action:	Remove existing aisle markings and draw new markings to fulfill the minimum aisle width requirement. Relocate the machines accordingly if necessary.	
Suggested Deadline Date:	17 Sep 2014	
Standard:	Higher occupancy loads will require a greater width to accommodate the increased load. Alliance Standard Part 6 Section 6.5 Egress Width	
Question:	Exit access corridors serving an occupant load exceeding 30 are separated by walls having a fire-resistance rating of 1 hr.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Corridors between wash area with office and dry process area, between substation and store on ground floor, office and SDB area on 1st floor, and store and office on 16th & 17th floors are not protected by 1 hour fire-resistant construction as required per the Alliance Standard.	
Source of Findings:	Photograph: Exit access corridors serving an occupant load exceeding 30 persons are not separated by walls with a fire resistance rating of 1 hr.	
Suggested Plan of Action:	Exit access corridors serving an occupant load exceeding 30 are to be separated by walls with a fire resistance rating of 1 hr unless provided with an automatic sprinkler protection throughout the story or building. Window and glass block assemblies are to be tested for fire rating following NFPA 257 requirements.	
Suggested Deadline Date:	17 Sep 2014	
Standard:	Alliance Standard Part 6 Section 6.3 and Part 4 Section 4.5. Does not apply if an automatic sprinkler system is installed throughout the building.	
Question:	Means of egress are free from impediments, obstructions, and stored materials.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Finished goods are stored in the exit access corridors on the 2nd, 7th, 9th, 11th, 13th, and 15th floors. The corridor of the stair-3 on the 6th floor is partially blocked by the electrical SDB system. On the 3rd floor, the exit corridor is partially blocked by a thai aluminum partition and other fire fighting equipment. This violates the Alliance Standard.	
Source of Findings:	Photograph: Aisles and exit access corridors are partially blocked by some temporary obstacles.	
Suggested Plan of Action:	Keep means of egress continuously free and clear of all obstructions or impediments for full instant use in the case of fire or other emergency.	

	Remove all locks or other devices installed on a means of egress component that would prevent any occupant from having safe egress from the building or structure.	
Suggested Deadline Date:	25 Jun 2014	
Standard:	Alliance Standard Part 6 Section 6.3.8 Impediments to means of egress and Section 6.3.9 Reliability	
Question:	Doors are not locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices have been removed where required.	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	There are locking arrangements like hasps, locks, and slide bolts at the exit doors. This violates the Alliance Standard.	
Source of Findings:	Photograph: Locking devices were found at exit doors.	
Suggested Plan of Action:	Remove all hasps, locks, slide bolts, or other locking devices at the noted locations. Doors may be locked where the latch and lock are disengaged with one motion where the occupant load does not exceed 49 persons. Turning a door handle and disengaging a lock is considered two motions. Doors may be provided with locking hardware from the ingress side provided that a panic bar is installed on any door with an occupant load exceeding 49 persons. Re-entry provisions must be met.	
Suggested Deadline Date:	09 Jul 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Doors along the path of egress have a minimum width of 0.8 m (32 in) and have required ratings.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Doors along the path of egress of stair-1 and stair-2 are provided with fire rated doors with required rating. Sliding steel doors are provided at exits of stair-3 and stair-4 which are not fire rated.	
Source of Findings:	Photograph: Doors along the path of egress are fire door.	
Suggested Plan of Action:	Either seal the exits at stair-3 and stair-4 as these stairs are not required as per current highest occupant load on a single floor or provide 1.5 hr fire protective opening assemblies in 2 hr rated exit enclosures. Exits connecting four or more stories shall be enclosed with a minimum 2-hr fire-resistance rating.	
Suggested Deadline	15 Jan 2015	

Date:		
Standard:	Alliance Standard Part 6 Section 6.5.6 Minimum Widths. Increased occupant loads will require a door width greater than 0.8 m.	
Question:	All doors in a means of egress are of the side-hinged swinging type.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	All the doors at stair-1 and stair-2 are fire rated, side-hinged swinging type and swing in the direction of egress travel. The doors at exits of stair-3 and stair-4 are provided with steel sliding doors which are not fire rated.	
Source of Findings:	Photograph: Exit door are side-hinged swinging type.	
Suggested Plan of Action:	Either seal the exits at stair-3 and stair-4 as these stairs are not required as per current highest occupant load on a single floor or fit doors that swing in the direction of egress, side-swinging, self-closing, non-lockable fire doors of 1.5 hour rating at stair-3 and stair-4 enclosures.	
Suggested Deadline Date:	31 Jan 2015	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	The path of egress along the means of egress is not reduced at any point along the path of travel and is sufficient for the occupant load.	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	On 5th, 7th, 8th, 9th, 11th, 14th, 15th & 16th floors of main building, the occupant load is 325, which is the maximum of all floors. Total width of aisles, exit doors and stairs are 5.13 m, 4.16 m and 3.35 m, respectively, whereas required total widths for these means of egress are 1.63 m, 1.30 m and 2.60 m respectively. These comply with the Alliance Standard. The aisles on 2nd, 7th, 9th, 13th, 15th & 17th floors are partially blocked by some removable things that reduce the unobstructed aisle width to less than 0.7m. This violates the Alliance Standard.	
Source of Findings:	Photograph: The path of egress along the means of egress is reduced on the 2nd, 9th, 15th & 17th floors.	
Suggested Plan of Action:	Remove aisle markings and mark aisles again so that these are not blocked by any permanent elements like columns. Remove movable items blocking aisles.	
Suggested Deadline Date:	17 Sep 2014	
Standard:	Alliance Standard Part 6 Section 6.5 Egress Width and BNBC Table 4.3.2	

Question:	Occupant loads are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Occupant loads are not posted in any assembly or production floor as required.	
Source of Findings:	Photograph: Occupant loads are not posted in any assembly point.	
Suggested Plan of Action:	Post the occupant load for every assembly and production floor in a facility in a conspicuous space near the main exit or exit access doorway for the space.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of Occupant Load	
Question:	Means of egress have a minimum ceiling height of 2.3 m (7 ft 6 in.) with projections from the ceiling not less than 2.03 m (6 ft 8 in.).	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	The ceiling height along the means of egress is 3m, but at two exits from the roof the height with projection becomes 1.91m, which violates the Alliance Standard.	
Source of Findings:	Photograph: Means of egress at roof level had heights less than that required.	
Suggested Plan of Action:	Demolish the lintel and wall above lintel. Construct the same again fulfilling the height requirement.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.3.3 Headroom	
Question:	Emergency power for means of egress illumination is verified at least once per year. If battery operated lights are used, these lights are tested on a monthly basis. Functional testing of battery powered lights is provided for a minimum 90 min once per year.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Record of verifying emergency power for means of egress illumination was not found as required.	
Source of Findings:	Document Review: No document regarding verification of emergency power for means of egress was found among the documents shown by the factory personnel.	

Suggested Plan of Action:	Develop a testing and maintenance program that ensures the operation of all exit signs is verified at least once per year. If battery-operated signs are used, these signs shall be tested on a monthly basis. Functional testing of battery powered signs shall be provided for a minimum 90 min once per year.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	
Question:	Illuminated exit signs are placed at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Illuminated exit signs are placed at entrances to exits, but along the path of egress additional exit signs or directional signs are not provided where there is a change in direction and where the continuation of egress is not obvious. This condition fails to satisfy requirements of the Alliance Standard.	
Source of Findings:	Photograph: No exit sign at change in direction of egress path.	
Suggested Plan of Action:	Install illuminated exit signs at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	
Question:	Emergency power for exit signs is tested at least once per year. If battery operated, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	No plan or record of conducting periodic tests of the emergency battery backup for illumination of exit signs was found as required.	
Source of Findings:	Document Review: No document regarding testing of emergency power for exit signs was found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for exit signs is tested at least once per year. If battery operated signs are used, these signs shall be tested on a monthly basis. Functional testing of battery powered signs shall be provided for a minimum 90 min once per year.	
Suggested Deadline Date:	23 Jul 2014	

Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.	
Question:	Handrails are provided on both sides of each stairway. Intermediate handrails are provided when the stair width exceeds 2.2 m (87 in.). Handrails are not mounted lower than 760 mm (30 in.) or higher than 1100 mm (44 in.).	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	All the stairs have handrails on only one side.	
Source of Findings:	Visual Assessment: Handrail is provided on one side of stairs.	
Suggested Plan of Action:	Provide handrails on both side of each stairway in accordance with Alliance Standard. Provide handrail of height between the range 865 mm (34 in.) and 965 mm (38 in.).	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	
Question:	Every door in a stair enclosure serving more than 5 stories is provided with re-entry unless it meets the requirements of Alliance Standards Part 6 Section 6.8.3.1.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	The main production building has a basement and 21 stories and all the exit doors of the used 2 stairs are provided with fire doors with lockable devices and re-entry provisions. No door is found locked. But, re-entry signs were not provided.	
Source of Findings:	Visual Assessment: Fire doors with re-entry options and lockable devices were found. Re-entry signage is not provided.	
Suggested Plan of Action:	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets the following requirements. Stair doors may be permitted to be locked from the stair (ingress) side that prevents re-entry to the floor provided at least two floors allowing re-entry to access another exit are provided, there are not more than 4 stories intervening between re-entry floors, re-entry is allowed on the top or next to top level, reentry doors are identified as such on the stair side, and locked doors shall be identified as to the nearest re-entry floors. When the discharge floor is determined to be a required re-entry floor using the above requirements, re-entry does not have to be provided back into the building on this level.	
Suggested Deadline Date:	17 Sep 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	

Question:	Ramps do not have a running slope greater than 1 in 8 (12.5 percent) and have handrails on both sides of the ramp.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	The slope of the ramp is not greater than 1 in 8 but handrail is not provided on any side which violates clause 6.10.3 of Alliance standard.	
Source of Findings:	Visual Assessment: Slope of ramp is more than 1 in 8 but handrail is provided on one side.	
Suggested Plan of Action:	Provide handrail on both side of the ramp.	
Suggested Deadline Date:	31 Dec 2014	
Standard:	Alliance Standard Part 6 Section 10 Ramps	
Question:	Stair designation signs are provided at each floor entrance from the stair to the floor in English and Bengali. Signs indicate the name of the stair and the floor level. Signs are posted adjacent to the door.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Floor levels, but not stair names, are indicated on the signs in English only.	
Source of Findings:	Photograph: Floor level is mentioned but stair name is not mentioned.	
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level at the noted locations.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Fire Safety Programs		
Question:	Are the required number of people trained and certified in fire fighting, first aid, and rescue training by the appropriate authority.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Factory personnel claim that they have more than 30 people trained and certified in fire fighting, first aid and rescue, but the certificates were not provided by the proper authority.	
Source of Findings:	Document Review: Certificate of fire training were not found among the documents shown by the factory personnel.	

Suggested Plan of Action:	Train and certify at least 836 workers (25 percent of total workers) in fire fighting, first aid and rescue by the proper authority.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	
Question:	Storage areas underneath the cutting tables are clear of combustibles.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Fabrics are stored underneath the cutting tables of cutting section on 13th floor.	
Source of Findings:	Visual Assessment: Combustibles were found underneath cutting table on 13th floor.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.	
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	No document of any training program in accordance with the Alliance Safety Training Curriculum found.	
Source of Findings:	Document Review: Alliance safety training curriculum was not found among the documents shown by factory personnel.	
Suggested Plan of Action:	Impart training in accordance with Alliance Safety Training Curriculum and keep record with proper documentation.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standards Part 13	

Question:	Are there additional areas of non-compliance to report?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Childcare room is located on 6th floor but direct access to a staircase was not available. There is only one childcare room in the factory.	
Source of Findings:	Photograph: Childcare was found on 6th floor without any direct exit access.	
Suggested Plan of Action:	Provide childcare direct access to staircase if it remains on 6th floor or shift the childcare to the ground floor and make sure it has a maximum travel distance of 9 m to the exit discharge.	
Suggested Deadline Date:	23 Sep 2014	
Standard:	Not Applicable	
Question:	An emergency evacuation plan has been developed and communicated to all employees.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Workers are aware of the evacuation procedure upon commencing of the alarm. However, no procedure defining evacuation process was available.	
Source of Findings:	Document Review: No procedure defining evacuation process was available.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes duties and responsibilities of various people/groups, interfacing between groups and fire brigade, headcount and identification of trapped victims, physically disabled people and their rescue, etc. and all components required by the Alliance Standards and communicate the plan to all employees.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Are all applicable permits up to date including Fire License & Boiler License.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Electrician license, acid license, occupancy certificate, and hot-work permit or policy are not available.	
Source of Findings:	Document Review: Electrician license, acid license, occupancy certificate, and hot-work permit or policy are not available.	
Suggested Plan of	Obtain or update all the licenses and permits required from the proper issuing	

Action:	authority from the proper issuing authority.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	
Question:	Fire Department pre-planning has been completed.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Fire department pre-planning was not found.	
Source of Findings:	Document Review: No document regarding fire department pre-planning was found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	A written housekeeping policy is established and enforced.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	A written housekeeping policy was not found, which is required as per the Alliance Standards.	
Source of Findings:	Document Review: No document regarding housekeeping policy has been found among the documents shown by factory personnel.	
Suggested Plan of Action:	Establish written corporate and plant policies on housekeeping to ensure scheduled cleaning for floor, wall, ceiling, supply and return air ventilation systems. Promptly reschedule skipped cleanings. Provide a documented line of authority for authorizing a cleaning delay and rescheduling. As a general rule the maximum tolerable deposit thickness for loose fluffy lint is 13 mm (½ in.) over a maximum of 46.5 m2 (500 ft2). Limit dense deposits to 6 mm (¼ in.) and oil saturated deposits to 3.2 mm (⅛ in.).	
Suggested Deadline Date:	04 Mar 2015	
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping	
Question:	A hot-work permit program has been established.	
Priority Level:	Low	
Non-Compliance Level:	1	

Description:	A hot-work permit program is not established. It is required as per the Alliance Standard. At this time no hot-work is going on at the factory.	
Source of Findings:	Document Review: No hot-work permit could be presented by the factory personnel.	
Suggested Plan of Action:	Develop a NFPA 51B-compliant hot-work permit program. In general, this program should address the process of request and approval of authorities, necessary checks prior to approval, standby fire watch and fire fighting equipment, sounding of alarm procedures, duration and expiry of permit and re-approval procedures, etc.	
Suggested Deadline Date:	10 Dec 2014	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	
Question:	Smoking is only allowed at designated areas.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Smoking is prohibited as per verbal information of factory personnel, but signs indicating prohibition of smoking are not posted in Bengali and English at all building entrances.	
Source of Findings:	Visual Assessment: No sign indicating prohibition of smoking was noticed at all building entrances.	
Suggested Plan of Action:	Smoking shall be prohibited in any garment factory building, separate storage building, or any building or area where the Inspector of the Factories Rules requires that smoking be prohibited. If an owner creates a designated smoking area outside the buildings, information on the location of these designated areas shall be posted on the signs.	
Suggested Deadline Date:	09 Jul 2014	
Standard:	Alliance Standards Part 13 Section 13.5 Smoking	