INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**Safaa Sweaters Ltd(Saafa Sewing Ltd)**
Address:	**Taj Mension, Jamgara, Ashulia, Savar. Ashulia, Savar Dhaka Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**25 Sep 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.

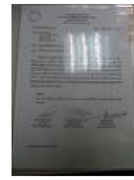
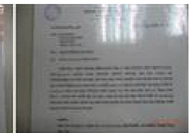
GENERAL INFORMATION

General Information	
Factory Name:	Safaa Sweaters Ltd(Saafa Sewing Ltd)
Address:	Taj Mension, Jamgara, Ashulia, Savar. Ashulia, Savar Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Ashulia, Savar
Zip Code:	1349
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	9-28-2014
Final Report Date:	10-16-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There is only one main production building in the factory premises. There is no ancillary structure in factory premises.
Is the building(s) owned or rented by the Factory:	Rented
Number of Building Levels (Stories):	The total number of levels from grade is 7 (G+6). But another one mezzanine floor is available at level-8. Highest occupied floor level: 24.39 m or 80 ft [Height up to roof: 27.43 m or 90 ft], Stories below grade:0, Occupied levels: 8.
Approximate Building Area (SF):	Total area of building in the factory premises: 120,475 sq ft. Breakdown of floor areas is as follows: 1) Main production building: [Ground Floor: 17,800 sq ft, 1st Floor: 17,800 sq ft, 2nd Floor: 17,800 sq ft. 3rd Floor: 15,500 sq ft, 4th Floor: 15,500 sq ft, 5th Floor: 15,500 sq ft. 6th Floor: 15,500 sq ft, 7th Floor (Mezzanine): 5,075 sq ft]
Date of Building Construction:	Factory personnel informed the date of construction as follows: 1) Main production building: 2007 to 2009.
Date of Last Building Renovation/Addition:	No renovation/addition has been done in the structure.
Ancillary Structures in Complex:	There is no ancillary structure in factory premises.

Approximate Ancillary Structures Area (SF):	There is no ancillary structure in factory premises.
Number of Occupants:	Total number of occupants: 925. 1) Main production building: 925 [Ground floor: 43, 1st floor: 259, 2nd floor: 194, 3rd floor: 3, 4th floor: 201, 5th floor: 223, 6th floor: 2, 7th Floor (Mezzanine): 0]
Number of Ancillary Levels (Stories):	There is no ancillary structure in factory premises.
Occupancy Type:	1) Main production building: [Ground floor: H2 (Fabric store), B2 (Child care), K1 (Boiler, Generator), F1 (Office, maintenance room), 1st floor: G2 (Sewing, cutting), H2 (Accessories store), F1 (Office), 2nd floor: H2 (Store), G2 (Finishing), F1 (Office), J1 (Spot removing room), 3rd floor: H2 (Fabric store), 4th floor: H2 (Store), J1 (Spot removing room), G2 (Finishing), 5th floor: G2 (Sewing, cutting), 6th floor: H2 (Store), 7th floor (Mezzanine): E4 (Dining, prayer room), H1 (Miscellaneous store).
Construction Type:	1) Main production building: [Ground floor to 7th floor (Mezzanine): Type 1].
Height of Highest Occupied Floor Level Above Grade:	1) Main production building: 24.39 m or 80 ft.

ASSESSMENT FINDINGS

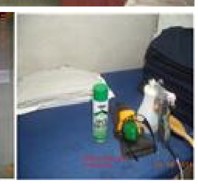
Fire Protection Construction

Question:	Certificates of Occupancy for each building have been issued and are on file.	 
Priority Level:	Low	
Non-Compliance Level:		
Description:	Certificates of Occupancy for building has been issued and is on file, but it does not have any validity date.	
Source of Findings:	Document Review: Occupancy certificate found during document review.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Question:	Is the fire resistance materials of structural members in good condition and free of damage?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	There was no damage found in the fire resistance materials of the structural members in the RCC building. Structural members of the building seems to be in good condition.	
Source of Findings:	Visual Assessment: No damage or distress was noticed in the structural members of the building.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	BNBC Part 3 Chapter 3	

Question:	Are openings and penetrations through rated walls and/or assemblies protected?
Priority Level:	High
Non-Compliance Level:	2
Description:	No penetrations were noted through rated walls in the building but unprotected openings exist in some rated walls. There was one spot removing room and one store both in 4th floor and 2nd floor. Each store has two door openings to the production floor and each spot removing room (using flammable spot lifter) has one door to the production floor. The doors of spot removing rooms were fire doors but were not certified by the appropriate authority. The doors of stores were steel sliding doors. A non-rated glass door was found in accessories store near production at 1st floor. In the ground floor, non- rated openings (High Windows) found in the wall of the store within 10 ft from the fire pump room (enclosed by grill). There are non-rated windows of office within 10 ft of generator room in ground floor; a fire door was installed at the generator room but was not certified by a credible authority. Such unprotected openings are not allowed according to Alliance Standard.
Source of Findings:	Visual Assessment: During site tour, unprotected opening found in some rated wall as noted above.
Suggested Plan of Action:	Provide opening protectives at all windows and other openings on all the fire rated wall across the entire premises. If these openings are not required, close these.
Suggested Deadline Date:	20 Jan 2015
Standard:	Includes doors, windows, ducts, piping, etc. Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations



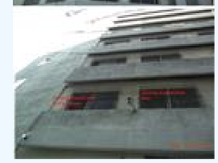





Question:	Is each floor separated with a fire-resistive rated construction barrier?
Priority Level:	High
Non-Compliance Level:	1
Description:	From physical measurement, slab thickness of main building was found 7.5 inch with finishing which is capable of providing approximately 3.13 hour fire resistance. According to Alliance Standard Section 4.4 or BNBC Table 3.3.1 (pg-10383), slab for a Type 1 building needs to have 3 hour fire rating. Hence the slab may be considered to have required fire rating to separate the floors. But due to presence of penetration (Approx. 6 in by 5 in) for electric cable passing through slab from ground to top floor of main production building, those slab may not be considered as a floor separated by fire resistive constriction barrier.


Source of Findings:	Photograph: (1) Electrical cable penetration at 4th floor; (2) Pipe penetration through floor; (3) Cable penetration through floor, Visual Assessment: During site tour thickness of slab was measured on sample basis and penetration found for electrical cable through floors.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between floors following Section 4.7 and Table 4.4.1 of Alliance Standard or Table 3.3.1 (page 10383) and Table 4.1.1 (page 10409) from BNBC Part 4. Consult a qualified fire protection engineer to design the rated construction barriers.	
Suggested Deadline Date:	20 Jan 2015	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	 
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	In-process goods are kept haphazardly in various floors such as 2nd floor, 4th floor that does not maintaining the dimensions of the requirement for miscellaneous store (area 250 sq ft, height 8 ft, separation from adjacent storage area 10 ft) as per Alliance Standard 3.4.2.1.6. Non-rated glass wall found between accessories store and production floor at 1st floor. No penetration were found through rated wall in the building but unprotected openings were noted in rated walls. There was one spot removing room and one store both on the 4th floor and 2nd floor. Each store has two doors to the production floor and each spot removing room (using flammable spot lifter) has one door to the production floor. The doors of spot removing rooms were fire doors but were not certified by an appropriate authority. The doors of stores were steel sliding doors. In the ground floor, non-rated openings (High Windows) were found in the wall of the store within 10 ft from the fire pump room (enclosed by grill). There are non-rated windows of the office within 10 ft of generator room in ground floor; a fire door was installed at the generator room but was not certified by a credible authority. Such unprotected openings are not allowed according to Alliance Standard.	
Source of Findings:	Photograph: In-process goods kept haphazardly on 4th floor and non-rated wall between store and production floor., Visual Assessment: It was observed that proper separation was not provided at different locations of different floor of main building.	
Suggested Plan of Action:	Keep the in-process goods on floors such that storage is maintained with a maximum area of storage of 250 sq ft, a height of 8 ft, and separation from adjacent storage areas of 10 ft. Provide fire-resistive rated construction barriers between hazard types in accordance with Alliance Standard Sections 3.4 and 4.5. Consult a qualified fire protection engineer to design the required rated construction barrier.	
Suggested Deadline Date:	14 Apr 2015	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?
Priority Level:	High
Non-Compliance Level:	2
Description:	There are 2 stairs in the seven story main building with one mezzanine floor at level 8. There is one stair at the south east side and another one at the south west side. Most of the doors of south east side exits are UL certified fire rated doors. However, some exit doors in south east side stair enclosures are not fire rated, such as in 1st floor and 5th floor where there are two openings and only one has fire doors. Also, the exit of the mezzanine floor at south east exit enclosure is not fire rated. Exits of south west stair also have fire doors at all floors. These doors appear to be fire doors, but are not certified by an approved organization and no marking was found. There are also unprotected window openings that create an angular exposure to the production floor within 10 ft from the both stair enclosures. The stair construction itself is provided with fire resistive construction barriers.
Source of Findings:	Photograph: (1) Angular exposure from stair to production; (2) Windows that have angular exposure to stair enclosure; (3) Double-opening to exit enclosure with one protected opening and one unprotected opening; (4) Protected opening to stair enclosure from production floor with gate in front of doors, Visual Assessment: During site tour, exit enclosure was found unprotected in noted locations.
Suggested Plan of Action:	Provide 2 hr fire-resistive rated construction barriers at exit enclosures. Install approved fire rated doors in all exits of stairwell enclosures that are listed, permanently labeled, automatic-closing, installed in compatible listed fire rated frames with latching hardware. Doors should be non-lockable from the egress side with a rating of 1.5 hr. Consult a qualified fire protection engineer to design the required rated construction barriers. Additionally, remove all existing sliding gates so that they will not obstruct the path through the new fire doors.
Suggested Deadline Date:	20 Jan 2015
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:	
Description:	No shaft except stair enclosure is available in the building.
Source of Findings:	Visual Assessment: During site tour, no shaft found in the building.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3

Question:	Fire dampers installed on air-conditioning and ventilation ducts appear to be in good condition and operational.
Priority Level:	Medium
Non-Compliance Level:	
Description:	No air-conditioning or ventilation duct available for which fire damper is required.
Source of Findings:	Visual Assessment: During site tour, no duct found.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference Alliance Standards Part 4 Section 4.6 Opening Protectives and Section 4.7 Penetrations
Question:	If the building contains a vertical opening known as an atrium, have provisions been made to comply with Alliance Standard 3.7?
Priority Level:	Medium
Non-Compliance Level:	
Description:	No atrium exists in the building.
Source of Findings:	Visual Assessment: During site tour, no atrium exists.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference Alliance Standards Section 3.7 Atrium
Fire Protection Systems	
Question:	Is the building protected by an automatic sprinkler system?
Priority Level:	High
Non-Compliance Level:	3
Description:	Height of the highest occupied level of the main building is 24.39 m (80 ft). The whole building needs to be protected by automatic sprinkler system.
Source of Findings:	Visual Assessment: Height of the highest occupied floor for of the building was measured.
Suggested Plan of	Install an automatic sprinkler system throughout the building designed by a

Action:	qualified fire protection engineer. The hydraulic design of the sprinkler system has to be pre-approved by 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 the required NFPA 13 design requirements. The installation of sprinkler protection should be conducted in phases. The first phase would be to protect all storage areas. The test and performance report of the installed system has to be submitted to Alliance for review. Final inspection and testing shall be witnessed by Alliance according to clause 5.3.
Suggested Deadline Date:	07 Jul 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:	Design criteria of sprinkler system?
Priority Level:	
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required in the main building.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Provide the criteria used in the design of the sprinkler system.
Question:	Commodity Class used for the design of the sprinkler system?
Priority Level:	
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required in the main building.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference NFPA 13 Chapter 5
Question:	Occupancy Classification used for the design of the sprinkler system?

Priority Level:	
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required in the main building.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference NFPA 13 Chapter 5
Question:	Are inspection, maintenance, and testing procedures of the sprinkler system documented and up to date?
Priority Level:	Low
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required in the main building.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference NFPA 25 Chapter 5 Sprinkler Systems Table 5.1.1.2
Question:	Are identification signs for the sprinkler system installed at the required locations?
Priority Level:	Low
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required in the main building.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference NFPA 13

Question:	Sprinkler system piping is free of mechanical damage, leakage, and corrosion.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not designed and installed in the main building.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	NFPA 25 Chapter 5 Section 5.2.2 Pipe and Fittings	
Question:	Sprinkler system piping is not subjected to external loads by materials either resting on the pipe or hung from the pipe?	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not designed and installed where required in the main building.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Reference NFPA 25 Chapter 5 Section 5.2.2.2	
Question:	Are hangers, bracing, and restraints properly installed and supporting the system piping?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not designed and installed where required in the main building.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		

Standard:	Reference NFPA 13 Chapter 9 Hanging, Bracing, and Restraint of System Piping.	
Question:	Sprinklers do not show signs of leakage, are free of corrosion, have not been painted, and are not physically damaged.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not designed and installed where required in main building.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Reference NFPA 25 Chapter 5	
Question:	All valves controlling the automatic sprinkler systems are electrically supervised by a listed fire alarm system control unit.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not designed and installed where required in main building.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Reference Alliance Standard Part 5 Section 5.3.5 Supervision and Alarms.	
Question:	Does the automatic sprinkler system have an approved audible device activated by waterflow equal to the flow of one sprinkler?	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not designed and installed where required.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of	N/A	

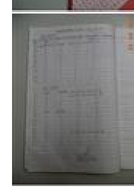
Action:	
Suggested Deadline Date:	
Standard:	Reference Alliance Standards Part 5 Section 5.3.5.2 Alarms.
Question:	Are sprinklers spaced and installed at the required heights in order to provided required coverage and protection?
Priority Level:	High
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference NFPA 13
Question:	Are storage racks and shelves compliant based on class of commodity storage?
Priority Level:	High
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Reference NFPA 13 Chapter 13, 14, 15, 16, or 17
Question:	Aisles in storage areas are free of storage based on design criteria used for the sprinkler system.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Automatic sprinkler system is not designed and installed where required.
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.

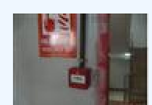
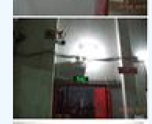
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 5 Section 5.3.6.3	
Question:	All storage is maintained with a 460 mm (18 in.) minimum clearance from the top of storage to the sprinkler deflector.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Automatic sprinkler system is not designed and installed where required.	
Source of Findings:	Visual Assessment: During site tour no sprinkler system was found installed.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Reference Alliance Standards Part 5 Section 5.3.6.1 Storage Clearance	
Question:	Does the building have a Standpipe System?	 
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Height of the highest occupied floor of the main building is 24.39 m or 80 ft above grade (i.e. above 23 m or 75 ft). Automatic sprinkler system in accordance with NFPA 13 is required, but is not provided. Therefore, a Class I standpipe system along with sprinkler system needs to be installed throughout the building. Only a Class II standpipe system is installed in the main building. There is no hydraulic design for the installed system. However, at roof hose pressure was above 4.5 bar (65 psi).	
Source of Findings:	Visual Assessment: Only class II standpipe system was observed in the building.	
Suggested Plan of Action:	Install standpipe system at required locations. Standpipe system must comply with NFPA 14.	
Suggested Deadline Date:	20 Jan 2015	
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2	

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:		
Description:	Required class I standpipe system along with sprinkler system are not installed throughout the building. However class II stand pipe system is installed in the main building. Inspection, maintenance, and testing procedures of the installed class II standpipe and hose is documented and up to date, but not comply with the requirements of NFPA 25 Chapter 6 Table 6.1.1.2.	
Source of Findings:	Document Review: No document regarding inspection, maintenance and testing procedure of standpipe and hose system as per NFPA was found among the documents shown by the factory personnel., Visual Assessment: During site tour, only class II standpipe system was noticed in the building.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
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:		
Description:	NFPA-compliant standpipe system is not installed in the building. Signage for the available class-II standpipe system is not installed as per NFPA. Once a standpipe system is installed at required locations designed by a qualified fire protection engineer, provide signage in compliance with NFPA for the new system.	
Source of Findings:	Visual Assessment: During site tour, only class II standpipe system was noticed in the building and no compliant signage found.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Reference NFPA 14 Chapter 6	
Question:	Standpipe system piping is free of mechanical damage, leakage, and corrosion?	
Priority Level:	Medium	

Non-Compliance Level:		
Description:	NFPA-compliant standpipe system is not installed in the building. However damage, leakage or corrosion was not found in the installed class-II standpipe system.	
Source of Findings:	Visual Assessment: During site tour, damage, leakage or corrosion was not found in the installed class-II standpipe system.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	NFPA 25 Chapter 6 Standpipe and Hose Systems	
Question:	Are fire department connections provided and clearly identified for the Fire Protection Systems?	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Fire department (Siamese) inlet connection and outlet connection (pillar hydrant) are not provided to allow fire department pumper equipment to supplement the fire protection systems.	
Source of Findings:	Visual Assessment: During site tour, no fire department connection was observed.	
Suggested Plan of Action:	Install fire department connections where required and in compliance with the Standard. According to Alliance Standard 5.5.4 fire department outlet connections shall be provided to allow fire department pumper vehicles to draw water from ground-level or underground water storage tanks. Connections shall match the Fire Service and Civil Defence hose thread standard.	
Suggested Deadline Date:	14 Apr 2015	
Standard:	Alliance Standard Part 5 Section 5.5.4 Fire Department Connections	
Question:	Does the building have a fire pump?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	Fire pump is installed; however, it does not comply with the requirements of the Alliance Standards and NFPA 20. Hydraulic calculation for required standpipe and sprinkler systems are also not available. Therefore, required capacity of fire pump is not known. Capacity of the installed pump is 150 gpm as per verbal information from factory personnel.	
Source of Findings:	Photograph: No dedicated fire pump was noticed in the factory premises.	

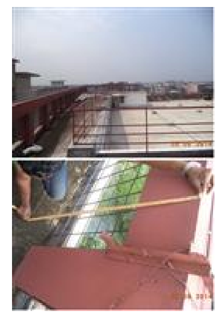
Suggested Plan of Action:	Install a dedicated fire pump for the facility in accordance with NFPA 20. Also, install a water storage tank in accordance with NFPA 22.	
Suggested Deadline Date:	25 Feb 2015	
Standard:	Alliance Standard Part 5 Fire Protection Systems	
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Inspection, maintenance, and testing procedures of the installed fire pump is documented, but not compliant with NFPA 25.	
Source of Findings:	Document Review: Relevant documents are not compliant with NFPA 25.	
Suggested Plan of Action:	Establish an inspection, testing, and maintenance program for the fire pump. Program must comply with NFPA 25.	
Suggested Deadline Date:	25 Feb 2015	
Standard:	Reference NFPA 25 Chapter 8 Fire Pumps	
Question:	Are portable fire extinguishers installed throughout the building at required locations and mounted at the correct height?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Portable extinguishers are installed within 100 ft travel distance and at 5 ft or 3.5 ft maximum height above floor.	
Source of Findings:	Visual Assessment: Spacing and height of portable extinguishers are measured on sample basis.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	BNBC Part 4 Section 4.10 and NFPA 10	

Question:	Portable fire extinguishers have been selected based on potential fire class and hazards?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Portable fire extinguishers have been placed according to potential fire class and hazards.	
Source of Findings:	Visual Assessment: During site tour, extinguishers were found placed based on fire class.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	NFPA 10 Chapter 5	
Question:	Fire extinguishers are inspected, tested, and maintained as required.	 
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Extinguishers are inspected monthly by factory's concerned people. 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:	Document Review: Document regarding monthly inspection, maintenance and testing procedure of fire extinguisher was found in the documents shown by the factory personnel. Also annual maintenance & testing of extinguishers record was not found.	
Suggested Plan of Action:	Fire extinguishers are to be inspected, tested, and maintained in accordance with NFPA 10 Chapter 7 as demanded in Alliance Standard Part 13 Section 13.10.3. And also maintain the testing documentation.	
Suggested Deadline Date:	14 Apr 2015	
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:	2	
Description:	Automatic fire alarm and detection system is installed in the factory. However, there is no monitoring company in Bangladesh. Fire service and civil defense is not also capable of monitoring fire alarm and detection systems of the	

	factories.	
Source of Findings:	Photograph: Fire alarm and detection system panel installed in fire control room.	
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 Alliance Standard Part 5 Section 5.7.5 Monitoring. Until that time that monitoring can be set up, arrange a monitoring system using 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:	25 Nov 2014	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	
Question:	Trouble or alarm notifications were not indicated on the fire alarm control panel.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Trouble or alarm condition currently being not indicated on the control panel i.e. the panel is in a normal condition.	
Source of Findings:	Photograph: Trouble or alarm condition is not indicated on control panel.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 13 Section 13.10 Maintenance of Fire Protection Equipment	
Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?	  
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Pull stations, smoke detectors, visual and audible devices are placed where required but approved shop drawing was not found. Notification and initiation devices for the fire alarm system installed need to be connected to a completely automatic fire alarm system.	
Source of Findings:	Document Review: Approved shop drawing not found during document review.	
Suggested Plan of Action:	Provide an automatic fire alarm and detection system per the Alliance Standard. Pull stations at egress points, smoke detectors in air handling equipment, visual and audible devices must be spaced appropriately and	

	directly connected to the fire alarm system for automatic activation based on occupancy type in accordance with NFPA 72. However, as per Alliance standard, section 5.7.3.1, when complete sprinkler protection is provided throughout a floor with water flow devices designed to initiate the alarm notification, smoke and fire detection devices can be eliminated throughout that floor.	
Suggested Deadline Date:	20 Jan 2015	
Standard:	Pull stations at egress points, smoke detectors in air handling equipment, visual and audible devices spaced appropriately based on occupancy type. Reference NFPA 72	
Question:	Are there additional areas of non-compliance related to the Fire Protection Systems?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	No remarkable non-compliance issue other than those presented before related to the fire protection systems was found.	
Source of Findings:	Visual Assessment: During site tour, no remarkable non-compliance issue other than those presented before found.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Not Applicable	
Means of Egress		
Question:	Are there additional areas of non-compliance related to the Means of Egress?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	One new steel stair is under construction at the north east corner of the main building.	
Source of Findings:	Photograph: Steel stair that is under construction at north east corner.	
Suggested Plan of Action:	The stair should be enclosed in a rated enclosure with fire doors at each opening. Additional standpipe connections shall be provided. The exit stair shall have means of egress based on occupant load, exit sign, re-entry door, emergency light and stair designation sign after construction. Also the stair ended to a passageway. This passageway should have required rating due to existence of windows of ground floor store.	
Suggested Deadline	20 Jan 2015	

Date:		
Standard:	Not Applicable	
Question:	Occupant loads on each level (floor) do not exceed the capacity of the available means of egress.	
Priority Level:	High	
Non-Compliance Level:		
Description:	At 1st floor of main building, occupant load is 259, which is maximum of all floors. The floor area is 1654.28 m2, so space per occupant is 6.38 m2. In ground floor, occupant load is 43. Total width of aisles, exit doors in ground floor are 2.99 m and 2.44 m respectively whereas required total widths for these means of egress are 0.215 m and 0.172 m respectively. In 1st floor, occupant load is 259. Total width of aisles, exit doors and stairs in 1st floor are 4.39 m, 2.44 m and 3.44 m respectively whereas required total widths for these means of egress are 1.295 m, 1.036 m and 2.072 m respectively. In 2nd floor, occupant load is 194. Total width of aisles, exit doors and stairs in 2nd floor are 4.22 m, 2.44 m and 3.44 m respectively whereas required total widths for these means of egress are 0.970 m, 0.776 m and 1.55 m respectively. In 3rd floor, occupant load is 3. Total width of aisles, exit doors and stairs in 3rd floor are 2.99 m, 3.91 m and 3.44 m respectively whereas required total widths for these means of egress are 0.015 m, 0.012 m and 0.024 m respectively. In 4th floor, occupant load is 201. Total width of aisles, exit doors and stairs in 4th floor are 1.285 m, 2.82 m and 3.44 m respectively whereas required total widths for these means of egress are 1.005 m, 0.804 m and 1.61 m respectively. In 5th floor, occupant load is 223. Total width of aisles, exit doors and stairs in 5th floor are 6.7 m, 3.91 m and 3.44 m respectively whereas required total widths for these means of egress are 1.12 m, 0.892 m and 1.78 m respectively. In 6th floor, occupant load is 2. Total width of aisles, exit doors and stairs in 6th floor are 2.99 m, 2.82 m and 3.44 m respectively whereas required total widths for these means of egress are 0.01 m, 0.008 m and 0.016 m respectively. In mezzanine floor (7th floor), there is no fixed occupant, but dining capacity is 250 who come from lower floor for lunch. Total width of aisles, exit doors and stairs in mezzanine floor are 2.06 m, 2.82 m and 3.44 m respectively whereas required total widths for these means of egress are 1.25 m, 1.0 m and 2.0 m respectively. So occupant load do not exceed the capacity of the available means of egress in all floor.	
Source of Findings:	Visual Assessment: Number of occupants was counted during site tour. Widths of aisles, exit doors and stairs of the concerned floor were measured.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.4 Occupant Load	
Question:	Occupied roofs are provided with the minimum number of exits required as a story.	
Priority Level:	High	

Non-Compliance Level:		
Description:	Roof of the building is unoccupied. However there are dining, prayer room and miscellaneous store with two exits in mezzanine floor (7th floor). There is no fixed occupancy in this floor, but capacity of dining and prayer room is 250.	
Source of Findings:	Visual Assessment: During site tour, roof of the building is found unoccupied.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.6 Number of Means of Egress	
Question:	All occupied roofs are provided with parapets or guards with a minimum height of 1067 mm (42 in.).	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Roof of the building is unoccupied. However parapet provided in mezzanine floor (7th floor) of main building of height 47 in.	
Source of Findings:	Visual Assessment: Roof of the building is found unoccupied and height of parapet on mezzanine floor was measured.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 12 Handrails and Guards	
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:	2	
Description:	Occupant loads are not posted for any assembly in a conspicuous space near the main exits or exit access doorways.	
Source of Findings:	Visual Assessment: During site tour, occupant loads found not posted in any assembly and production floor.	
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:	25 Nov 2014	

Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of Occupant Load	
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:		
Description:	The aisles satisfy the requirement of minimum width and total width for occupant load based on occupancy type in each floor.	
Source of Findings:	Visual Assessment: No obstruction found in aisles. From measurement and calculation, minimum and total width of aisles is found sufficient.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Higher occupancy loads will require a greater width to accommodate the increased load. Alliance Standard Part 6 Section 6.5 Egress Width	
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:		
Description:	The path of egress along the means of egress is not reduced at any point along the path of travel. In ground floor, occupant load is 43. Total width of aisles, exit doors in ground floor are 2.99 m and 2.44 m respectively whereas required total widths for these means of egress are 0.215 m and 0.172 m respectively. In 1st floor, occupant load is 259. Total width of aisles, exit doors and stairs in 1st floor are 4.39 m, 2.44 m and 3.44 m respectively whereas required total widths for these means of egress are 1.295 m, 1.036 m and 2.072 m respectively. In 2nd floor, occupant load is 194. Total width of aisles, exit doors and stairs in 2nd floor are 4.22 m, 2.44 m and 3.44 m respectively whereas required total widths for these means of egress are 0.970 m, 0.776 m and 1.55 m respectively. In 3rd floor, occupant load is 3. Total width of aisles, exit doors and stairs in 3rd floor are 2.99 m, 3.91 m and 3.44 m respectively whereas required total widths for these means of egress are 0.015 m, 0.012 m and 0.024 m respectively. In 4th floor, occupant load is 201. Total width of aisles, exit doors and stairs in 4th floor are 1.285 m, 2.82 m and 3.44 m respectively whereas required total widths for these means of egress are 1.005 m, 0.804 m and 1.61 m respectively. In 5th floor, occupant load is 223. Total width of aisles, exit doors and stairs in 5th floor are 6.7 m, 3.91 m and 3.44 m respectively whereas required total widths for these means of egress are 1.12 m, 0.892 m and 1.78 m respectively. In 6th floor, occupant load is 2. Total width of aisles, exit doors and stairs in 6th floor are 2.99 m, 2.82 m and 3.44 m respectively whereas required total widths for these means of egress are 0.01 m, 0.008 m and 0.016 m respectively. In mezzanine floor (7th floor), there is no fixed occupant, but dining capacity is 250 who come from lower floor for lunch. Total width of aisles, exit doors and stairs in mezzanine floor are 2.06 m, 2.82 m and 3.44 m respectively whereas required total widths for	

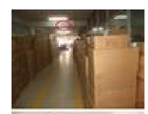
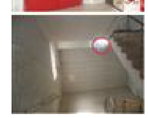
	these means of egress are 1.25 m, 1.0 m and 2.0 m respectively. Aisle, exit door and stair widths comply the requirements of Alliance Standard in all floor.	
Source of Findings:	Visual Assessment: Widths of aisles, exit doors and stairs are measured on sample basis.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.5 Egress Width and BNBC Table 4.3.2	
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:		
Description:	Means of egress of the main building are high enough to meet minimum ceiling height requirement of 2.3 m.	
Source of Findings:	Visual Assessment: Ceiling height was measured on sample basis.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.3.3 Headroom	
Question:	Exit discharge is directly to the exterior of the building, unless the requirements of 6.17.2 are met, at grade or provides direct access to grade. Exit discharge shall not reenter a building.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Exit discharges from south east stair and south west stair are directly to the exterior of the building and do not reenter the building.	
Source of Findings:	Visual Assessment: During site tour, it was observed that exit discharge meets the exterior of the building.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.17 Exit Discharge. See Section 16.7.2 and 16.7.3 for exceptions.	

Question:	Travel distance to reach an exit does not exceed the maximum distance allowed by Occupancy Type.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Maximum travel distance is 61 m found in 1st and 2nd floor of main building. In ground floor it is 45.76m, in 3rd floor 45 m, in 4th floor 48.17m, in 5th floor 44m, in 6th floor 45.6m respectively. Centralized fire alarm & detection system, portable fire extinguisher and class II (40 mm hose) stand pipe system available but automatic sprinkler and class I stand pipe system was not available as required by Alliance standard. Additionally, there is an extension of the northwest portion of the building on the Ground through 2nd Floors which not only increases the travel distance to 76 m but also creates an excessive common path of travel of 45 m. Travel distance and common path of travel requirements do not comply with the requirement.	
Source of Findings:	Visual Assessment: Travel distances are measured on sample basis.	
Suggested Plan of Action:	Install complete automatic sprinkler system, automatic fire alarm system and portable fire extinguishers covering whole area of the building in accordance with Alliance Standard. Alternately, provide an additional exit stair at the end of the lower building extension.	
Suggested Deadline Date:	20 Jan 2015	
Standard:	Alliance Standard Part 6 Section 13 Travel Distance and BNBC Part 4 Section 3.15.1	
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:		
Description:	Exit access corridors available in ground floor for boiler room but occupant load is less than 30. So this issue is not applicable.	
Source of Findings:	Visual Assessment: During site tour, exit access corridors serving an occupant load exceeding 30 was not found.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
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.	

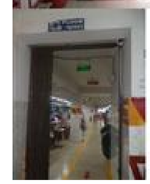
Question:	Interior finishes for means of egress meet the rating requirements for Class A, B and C materials.
Priority Level:	Medium
Non-Compliance Level:	
Description:	The interior finishes for means of egress are of brick, tiles on floor, plaster and non-combustible paint on wall satisfy the rating requirements.
Source of Findings:	Visual Assessment: During site tour, interior finishes for means of egress were observed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 6.3.2 Interior Finish

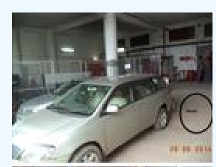
Question:	Exits are limited to Class A and Class B interior materials.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Exits are made of brick wall, glass door, collapsible gates, fire door satisfy the rating requirement.
Source of Findings:	Visual Assessment: During site tour, interior materials of exits were observed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 6.3.2 Interior Finish

Question:	The number of means of egress from any floor or story is not less than 2 except where a single exit is permitted or where a greater number is required.
Priority Level:	High
Non-Compliance Level:	
Description:	In the main building the number of means of egress from any floor is 2. Maximum number of occupant is in 1st floor of 259. Based on occupant load, required maximum number of means of egress satisfy the requirement.
Source of Findings:	Visual Assessment: During site tour, two number of emergency exit doors was counted.
Suggested Plan of Action:	N/A

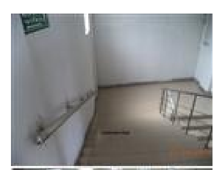
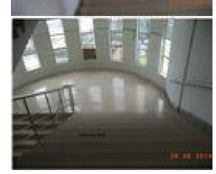
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.6 Number of Means of Egress	
Question:	The number of means of egress from any floor or story is not less than 3 when the occupant load exceeds 500 per story and not less than 4 when the occupant load exceeds 1000 per story.	
Priority Level:	High	
Non-Compliance Level:		
Description:	There is no floor or story with over 500 occupants. Maximum number of occupant is in 1st floor of 259. Based on occupant load, required maximum number of means of egress satisfy the requirement.	
Source of Findings:	Visual Assessment: During site tour, two number of emergency exit doors were counted and occupant load was checked.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.6 Number of Means of Egress	
Question:	All paths of egress are provided with compliant means of illumination.	  
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Aisles, exit and staircases are provided with compliant means of illumination supplied by a battery powered supply. However, lighting on the production floors is only over the larger main aisles. No emergency lighting is provided on storage floors.	
Source of Findings:	Photograph: Aisles, exit door and stairway illumination., Visual Assessment: Aisles, exit doors and stairways were found sufficiently illuminated while auditing.	
Suggested Plan of Action:	Provide additional emergency lighting fixtures to provide a minimum lighting level of 2.5 lux for all aisles in production an storage areas.	
Suggested Deadline Date:	31 Dec 2014	
Standard:	Alliance Standards Part 6 Section 6.7 Egress Illumination and Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape	
Question:	Means of egress are free from impediments, obstructions, and stored materials.	
Priority Level:	High	

Non-Compliance Level:		
Description:	Aisles, exit access corridors, staircases are not blocked at any location.	
Source of Findings:	Visual Assessment: Aisles, corridor, exit door, stairway free from any sort of obstacles.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.3.8 Impediments to means of egress and Section 6.3.9 Reliability	
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 which is required as per Alliance Standard.	
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., Uploaded Document: Record of emergency light check list.	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power of all egress lighting is verified at least once per year. If battery-operated lights are used, these lights shall be tested on a monthly basis. Functional testing of battery powered lights shall be provided for a minimum 90 min once per year.	
Suggested Deadline Date:	25 Nov 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	
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:	2	
Description:	There are collapsible doors with locking arrangement along with fire doors at all egress point. Also all the fire doors of the east side stairs have locking arrangements.	

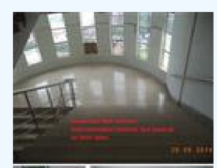
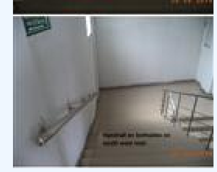
Source of Findings:	Visual Assessment: During site tour, locking devices were noticed at exit doors.	
Suggested Plan of Action:	Remove all hasps, locks and slide bolts from exit doors in compliance with the Alliance Standard.	
Suggested Deadline Date:	11 Nov 2014	
Standard:	Alliance Standards Part 6 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:	All the exit doors have width more than 0.8 m but all the doors do not have the required rating. Some exit doors in south east side stair enclosures are not fire rated, such as in 1st floor and 5th floor it has two exits and only one is fire rated. Also the exit of the mezzanine floor at south east exit enclosure is not fire rated. Exits of south west stair also have fire doors at all floors, these doors seems to be fire door, but not certified by approved organization and no level marking found.	
Source of Findings:	Visual Assessment: During site tour, door width are found more than 0.8 m, but some doors do not have required ratings.	
Suggested Plan of Action:	Provide 1.5 hr fire protective opening assemblies in 2 hr rated exit enclosure. Exits connecting four or more stories shall be enclosed with a minimum 2-hr fire-resistance rating.	
Suggested Deadline Date:	20 Jan 2015	
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:	Some of the doors in the means of egress are provided with collapsible sliding gates. There is a large sliding gate that has to be opened by the guards to get out from the building at the bottom of the Main Stair discharge.	

Source of Findings:	Photograph: (1) Collapsible gate; (2) Collapsible gate in front of new fire doors; (3) Main Stair discharge - main gate	 
Suggested Plan of Action:	Replace all non-compliant doors and frames in the means of egress with doors that are listed, approved, automatic-closing, side-swinging, fire rated doors in compatible fire rated frames with latching panic hardware.	
Suggested Deadline Date:	20 Jan 2015	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
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:	1	
Description:	Illuminated exit signs are placed at entrances to exits, but along the path of egress additional exit sign or directional signs are not provided where there is a change in direction and where the continuation of egress is not obvious.	
Source of Findings:	Visual Assessment: During site tour additional exit sign along the change of direction was not found.	
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:	14 Apr 2015	
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	
Question:	Changes in elevation of walking surfaces do not exceed 6.35 mm (1/4 in) unless provided with a beveled slope of 1 in 2 that does not exceed 12.7 mm (1/2 in).	 
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Changes in elevation of walking surfaces found in ground floor, but it has a beveled slope 1 in 2. There are multiple trip hazards from sliding gate frames	

	throughout the building.
Source of Findings:	Photograph: (1) Sloped walking surface from parking to main store at Ground Floor ; (2) Sliding gate frame
Suggested Plan of Action:	Remove all gate frames and repair flooring to provide an even flooring surface.
Suggested Deadline Date:	31 Oct 2014
Standard:	Alliance Standard Part 6 Section 6.3.4 Walking Surfaces
Question:	Illuminated exit signs are provided with battery backup or emergency power and are continuously illuminated.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Illuminated exit signs are provided with IPS backup for continuous illumination.
Source of Findings:	Visual Assessment: During inspection IPS backup of illuminated exit sign observed.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standards Part 6 Section 6.11 Exit Signs and Part 10 Section 10.12 Illumination of Exit Signs and Means of Escape
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 test for the emergency battery back up of illumination of exit sign was found.
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 lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.
Suggested Deadline Date:	25 Nov 2014

Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.	
Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	All the exit signs of the building have appropriate illumination levels and contrasting graphics.	
Source of Findings:	Visual Assessment: Exit signs have appropriate illumination levels and contrasting graphics.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs	
Question:	Walking surfaces along the path of egress are uniformly slip resistant.	 
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Walking surfaces along the horizontal paths of egress are of homogenous tiles that are not slippery and will not cause slip during quick evacuation under emergency situation. However, stairs are covered in glazed tiles with no slip resistance surfacing.	
Source of Findings:	Photograph: (1) Tile flooring in aisles; (2) Glazed tiles on stair	
Suggested Plan of Action:	Provide slip resistant surfacing on top of glazed tiles on stairs.	
Suggested Deadline Date:	31 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.3.6 Slip Resistance	
Question:	Stairs are constructed of noncombustible materials.	 
Priority Level:	Low	
Non-Compliance Level:		
Description:	All the stairs of main building are made of concrete.	
Source of Findings:	Photograph: stairs that made of concrete.	
Suggested Plan of Action:	N/A	

Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Question:	Stairs have a minimum width of 0.9 m (35 in.).	
Priority Level:	High	
Non-Compliance Level:		
Description:	All the stairs are wider than 0.9m.	
Source of Findings:	Visual Assessment: Stairs width measured during audit.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.5 Egress Width. Applies to existing construction.	
Question:	Stair treads are of nominal uniformity.	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	Stair treads and risers are of nominal uniformity.	
Source of Findings:	Visual Assessment: During site tour, stair treads and risers are found of nominal uniformity.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standards Part 6 Section 6.9 Stairs. Any tread height exceeding more than 50% of the adjacent tread heights or 75 mm (3 in.), whichever is less, shall be modified to be within this tolerance	
Question:	Landings are provided on both sides of doors used along the path of egress. Doors do not swing out over stairs.	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	The steps up from the daycare to the main stair enter the door without a landing that does not comply the requirement.	

Source of Findings:	Photograph: No landing on both sides of door of day care center.	
Suggested Plan of Action:	Rework at exit points so that there is a landing on both sides of the exit door with door swinging in the direction of exit travel. New swinging door location will need to be revised from current door location, proper fire rating will need to be extended to new door location.	
Suggested Deadline Date:	20 Jan 2015	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Landings are provided with the same width in the direction of egress travel as the stair clear width provided at each level and at intermediate landings. Existing landings that are less than the stair width, shall reduce the overall available capacity of the stair.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Landings in the direction of egress are of same width or more width than stair width.	
Source of Findings:	Visual Assessment: Landings width measured during inspection.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and Section 6.5	
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:	1	
Description:	Handrails are provided on both sides of each stair. But intermediate handrail required for south east stair as its width is 2.77 m which exceed 2.2 m.	
Source of Findings:	Photograph: South east stair width is found 2.77m.	
Suggested Plan of Action:	Provide intermediate handrail when the stair width exceeds 2.2m (87 inch).	
Suggested Deadline Date:	14 Apr 2015	
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:	2
Description:	All the doors (except mezzanine floor at level 8) of south east stair in main building are fire door with re entry provision. Main building is 8 story (including mezzanine floor at level 8). But door in south west stair enclosure and stair under construction in north east corner is not provided with re-entry provision.
Source of Findings:	Photograph: Re entry fire rated doors at south east stair and door without re-entry provision in south west stair.
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:	20 Jan 2015
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates

Question:	Exterior exit stairs are separated from the building with the required rating. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure.
Priority Level:	High
Non-Compliance Level:	
Description:	No exterior exit stair available in the building.
Source of Findings:	Visual Assessment: Exterior stair was not found during audit
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 6.3.1.2. Three stories or less 1-hr rating. Four stories of more 2-hr rating

Question:	Interior exit stairways and ramps terminate at an exit discharge except where terminating at a rated exit passageway.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Interior exit stairways from south east and south west stairs terminate at exit discharge.	
Source of Findings:	Visual Assessment: It is found that both south east and south west stairs terminate at exit discharge.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 6.14 Exit Enclosures	
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 level mentioned but stair name or designation is not mentioned in main building.	
Source of Findings:	Visual Assessment: Floor level mentioned but stair name was not mentioned.	
Suggested Plan of Action:	Install signage at each floor entrance from the stair to the floor in English and Bengali indicating the stair name.	
Suggested Deadline Date:	25 Nov 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Question:	Stairwells are not utilized as storage spaces.	
Priority Level:	High	
Non-Compliance Level:		
Description:	Stairwells are free from storage.	
Source of Findings:	Visual Assessment: It was observed that stairwells were free of any sort of storage.	
Suggested Plan of Action:	N/A	

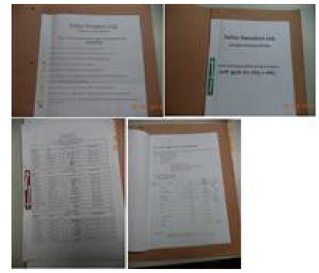
Suggested Deadline Date:	
Standard:	Alliance Standard Part 13 Section 13.9 Safety Inspections
Question:	Ramps used in a means of egress do not reduce the overall means of egress width. The minimum width shall be 1.1 m (44 in.).
Priority Level:	High
Non-Compliance Level:	
Description:	No such ramp in the means of egress is available.
Source of Findings:	Visual Assessment: Ramp not found in a means of egress.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standards Part 6 Section 10 Ramps
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:	
Description:	No ramp is available.
Source of Findings:	Visual Assessment: Ramp is not found in the building.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standard Part 6 Section 10 Ramps
Question:	Are there additional areas of non-compliance related to the Means of Egress?
Priority Level:	Medium
Non-Compliance Level:	
Description:	There are no additional areas of non-compliance related to the means of egress.
Source of Findings:	Visual Assessment: No remarkable non-compliance issues other than those presented before was found.
Suggested Plan of	N/A

Action:		
Suggested Deadline Date:		
Standard:	Not Applicable	

Fire Safety Programs

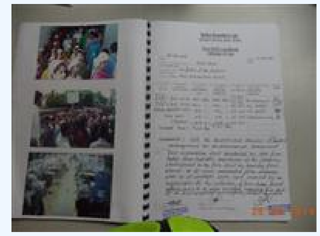
Question:	Are there additional areas of non-compliance to report?	
Priority Level:	Medium	
Non-Compliance Level:		
Description:	There are no additional areas of non-compliance to report.	
Source of Findings:	Visual Assessment: No remarkable non-compliance issues other than those presented before was found.	
Suggested Plan of Action:	N/A	
Suggested Deadline Date:		
Standard:	Not Applicable	
Question:	A Fire Safety Director position has been filled.	 
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	A fire safety officer was introduced and physically present in the opening meeting. Appointment letter of fire safety officer found also, but there is no evidence/document found during audit that the fire safety director completes the duties according to Alliance Standard.	
Source of Findings:	Document Review: Relevant document shows only appointment letter of fire safety director, but no document showing compliance is reviewed.	
Suggested Plan of Action:	Create a Fire Safety Director position and fill the position with an individual that has had sufficient training to be able to carry the required duties. The duties of the Fire Safety Director shall include the following: (1) Establish internal and external rally points and communicate to all employees in the building. (2) Fire department pre-planning. (3) Conduct safety inspections as outlined in Alliance standard 13.9. (4) Ensure all testing of fire protection equipment is conducted in accordance with Alliance standard 13.10.	
Suggested Deadline Date:	14 Apr 2015	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	

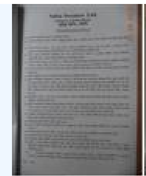
Question:	An emergency evacuation plan has been developed and communicated to all employees.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Emergency evacuation plan has been developed and communicated to employees.
Source of Findings:	Document Review: Among the documents shown by the factory personnel, proper emergency evacuation plan was found.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director



Question:	Emergency egress maps are posted at the entrance to each exit stair or main point of egress.
Priority Level:	Medium
Non-Compliance Level:	
Description:	Emergency egress maps are posted at the entrance to each exit stair or main point of egress.
Source of Findings:	Photograph: Emergency egress map posted near exit inside floor.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standards Part 13 Section 13.4 Evacuation Plan

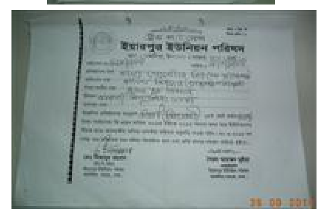
Question:	Fire Department pre-planning has been completed.
Priority Level:	Low
Non-Compliance Level:	2
Description:	Fire department pre-planning was not found.
Source of Findings:	Document Review: No document regarding fire department pre-planning was found among the documents shown by factory personnel.
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.
Suggested Deadline	25 Nov 2014

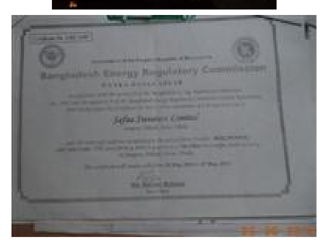
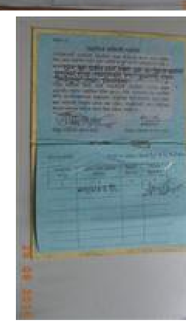
Date:		
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Fire Drills are conducted at required intervals based on building use type.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Fire drills are conducted monthly in main building. No details check list and plan found for fire drill. Record of drill is kept for the last 1.5 year. This does not meet the requirement.	
Source of Findings:	Uploaded Document: Fire drill record.	
Suggested Plan of Action:	Conduct fire drills on a quarterly basis as outlined in BNBC Part 4 Appendix A for all garment facilities. Fire drills shall be conducted under the direction of a Fire Safety Director. All other requirements for fire drills shall be conducted in accordance with BNBC Part 4 Appendix A.	
Suggested Deadline Date:	25 Nov 2014	
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills	
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:	Forty (40) people are trained and certified in fire fighting, first aid and rescue training by Bangladesh Fire Service and Civil Defence. Records kept by the factory show that another 40 more workers had been trained by proper authority but no certificate had been issued as of the day of audit. Total manpower is 925 and required number of trained person is 25 percent of total manpower.	
Source of Findings:	Document Review: Documents shows that total 80 people get trained in fire fighting, first aid and rescue.	
Suggested Plan of Action:	Ensure at least 25 percent of the workers are trained and certified in fire fighting, first aid and rescue training by the proper authority.	
Suggested Deadline Date:	14 Apr 2015	
Standard:	Alliance Standard Part 13 Human Element Programs	

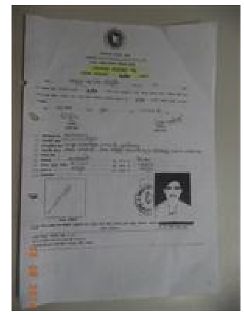
Question:	A written housekeeping policy is established and enforced.	  
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Written housekeeping policy has been established but does not comply with the requirements.	
Source of Findings:	Uploaded Document: Housekeeping policy.	
Suggested Plan of 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:	07 Jul 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:	Hot work permit program established partly named as safe work permit. But written hot work policy not found and program does not comply with the requirements of NFPA 51B.	
Source of Findings:	Document Review: Hot work permit program partly found named as safe work permit.	
Suggested Plan of Action:	Develop a hot work permit program. The program must comply with the requirements of NFPA 51B. In general, this program should address process of request and approval authorities, necessary checks prior approval, standby fire watch and fire fighting equipment, sounding of alarm procedure, duration and expiry of permit and re-approval procedure etc.	
Suggested Deadline Date:	14 Apr 2015	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	

Question:	Storage areas underneath the cutting tables are clear of combustibles.	 
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Fabrics stored underneath the cutting tables of cutting section at 5th floor and 1st floor of main building.	
Source of Findings:	Photograph: Stored fabric material underneath the cutting table at 1st and 5th floor.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations or required to comply Alliance standard, clause 13.7.2.	
Suggested Deadline Date:	25 Nov 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:	25 Nov 2014	
Standard:	Alliance Standards Part 13	
Question:	Smoking is only allowed at designated areas.	
Priority Level:	Low	
Non-Compliance Level:		
Description:	Smoking is prohibited as per verbal information of factory personnel and signs posted in Bengali and English at all building entrances. Therefore, no designated smoking area is created outside the buildings.	
Source of Findings:	Photograph: No smoking sign.	
Suggested Plan of Action:	N/A	

Suggested Deadline Date:	
Standard:	Alliance Standards Part 13 Section 13.5 Smoking
Question:	Are all applicable permits up to date including Fire License & Boiler License.
Priority Level:	Low
Non-Compliance Level:	
Description:	Factory license valid up to 31 Dec 2014, trade license valid up to 30.06.2015, fire license valid up to 30.06.2015 for an area 120575 sft, boiler license valid up to 02 Jan 2015, BERC certificate for 304 KW capacity generators valid up to 27 May 2015, boiler operator license is up to date, electrician license valid up to 17 Feb 2015. Building permit available from savar cantonment board and up to date.
Source of Findings:	Document Review: Permits and licenses found up to date., Uploaded Document: Trade, factory, boiler, electrician, BERC license, building permit uploaded.
Suggested Plan of Action:	N/A
Suggested Deadline Date:	
Standard:	Alliance Standard Part 13 Human Element Programs


Question:	Are there additional areas of non-compliance to report?	
Priority Level:		
Non-Compliance Level:		
Description:	Main factory building is 8 story (including mezzanine floor at level 8) and highest occupied floor level is 24.39 m or 80 ft, but fire lift is not installed for this high rise building. Per Alliance standard 5.9, lift is not required for existing construction.	
Source of Findings:	Visual Assessment: Main factory building is 8 story (including mezzanine floor at level 8) and fire lift is not found.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:		