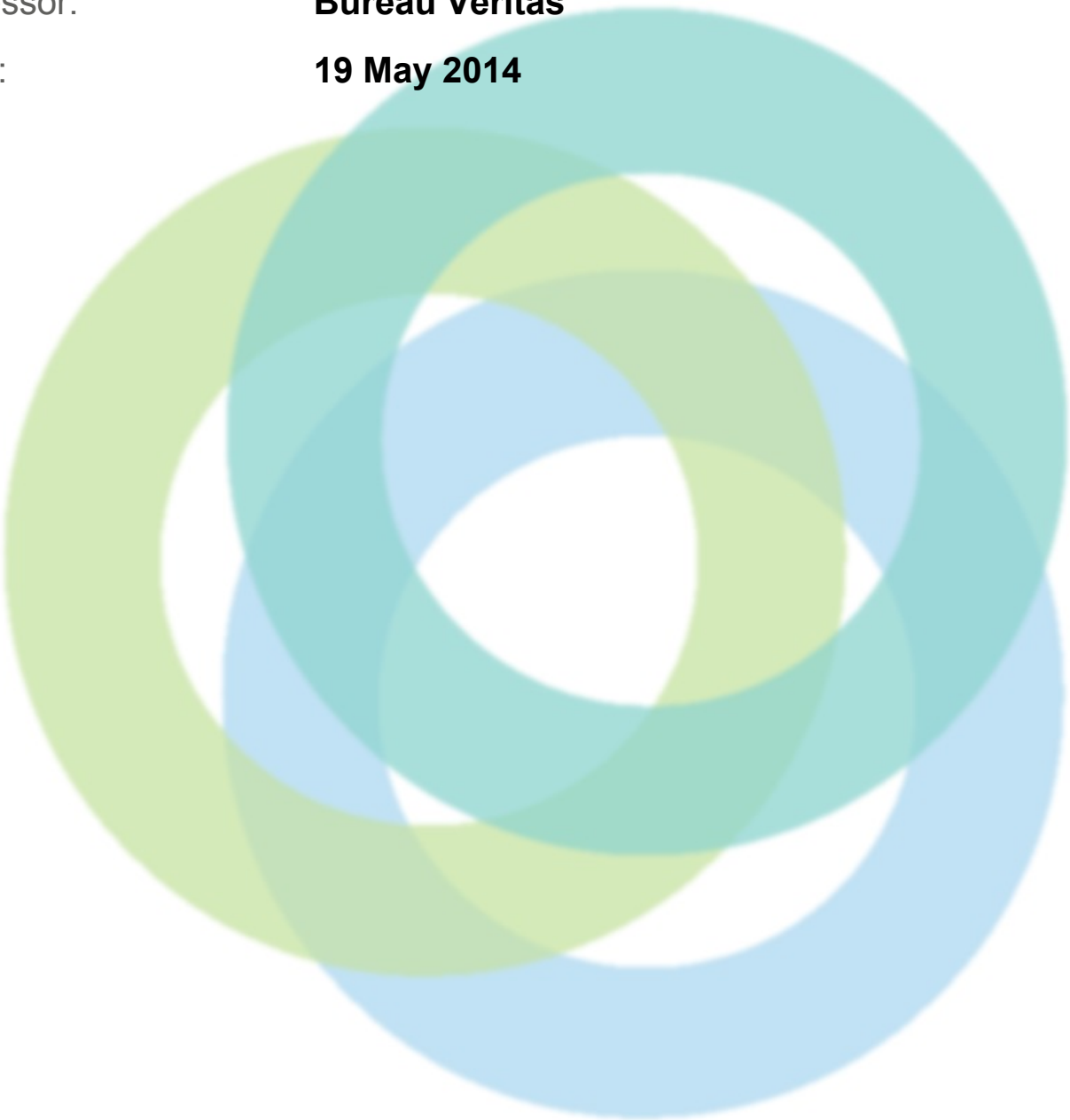


INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name: **Zaber & Zubair Fabrics Ltd**
Address: **Pagar, Tongi, Gazipur Tongi, Gazipur Dhaka
Bangladesh**
Assessor: **Bureau Veritas**
Date: **19 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.



Factory Name: **Zaber & Zubair Fabrics Ltd**

Assessor: **Bureau Veritas**

Address: **Pagar, Tongi, Gazipur Tongi, Gazipur Dhaka Bangladesh**

Date: **19 May 2014**



ALLIANCE
FOR BANGLADESH WORKER SAFETY

GENERAL INFORMATION

General Information

Factory Name:	Zaber & Zubair Fabrics Ltd
Address:	Pagar, Tongi, Gazipur Tongi, Gazipur Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Tongi, Gazipur
Zip Code:	1710
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	06-13-2014
Final Report Date:	06-28-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 20 buildings in the factory premises out of which eight are main production buildings and twelve are ancillary buildings. The buildings are named as: 1) Five Story RCC Stitching Building-1, 2) Seven Story RCC Stitching Building-2, 3) Six Story NFL Garments & Folding, 4) Single Story Prefab Home Dyeing- 1 Shed, 5) Single Story Prefab Home Dyeing- 2 Shed, 6) Single Story Prefab Home Dyeing- 3 Shed, 7) Single Story Prefab Fashion Dyeing -1 Shed, 8) Single Story Prefab Fashion Dyeing -2 Shed, 9) Four Story RCC Marketing Building, 10) Four Story RCC Admin Building, 11) Single Story Prefab Chemical Store- 1, 12) Single Story Prefab Chemical Store -2, 13) Single Story Prefab Generator & Substation Shed, 14) Single Story Prefab Boiler Shed, 15) Single Story Prefab Mechanical Workshop, 16) Two Story RCC Medical Building, 17) Single Story RCC Egli ETP, 18) Single Story RCC Panta Rei ETP, 19) Single Story RCC Simem ETP, 20) Single Story Prefab Finished goods godown,
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	1) Five story RCC stitching building-1: Building height (Highest occupied floor level): 14.79 m or 48.5 ft [Height up to roof: 17.99 m or 59 ft], Stories above grade: 5, Stories below grade: 0, Occupied levels: 5, 2) Seven story RCC stitching building-2: Building height (Highest occupied floor level): 17.78 m or 58.35 ft [Height up to roof: 24.6 m or 80.69 ft], Stories above grade: 7, Stories below grade: 0, Occupied levels: 6 (6th floor is in under construction process), 3) Six story NFL garments & folding building: Building height (Highest occupied floor level): 18.14 m or 42 ft [Height up to roof: 21.65 m or 71 ft], Stories above grade: 6, Stories below grade: 0, Occupied levels: 6, 4) Single story prefab home dyeing shed-1: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 9.15 m or 30 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1 and see the description.



Approximate Building Area (SF):	Total area of all buildings in the factory premises: 1694263 sft. Building wise breakdown as follows: 1) Five story RCC stitching building-1: 138240 sft (Ground floor: 27648 sft, 1st floor: 27648 sft, 2nd floor: 27648 sft, 3rd floor: 27648 sft, 4th floor: 27648 sft), 2) Seven story RCC stitching building-2: 486000 sft (Ground floor: 69429 sft, 1st floor: 69429 sft, 2nd floor: 69429 sft, 3rd floor: 69429 sft, 4th floor: 69429 sft, 5th floor: 69429 sft, 6th floor: 69429 sft), 3) Six story NFL garments & folding building: 75360 sft (Ground floor: 12560 sft, 1st floor: 12560 sft, 2nd floor: 12560 sft, 3rd floor: 12560 sft, 4th floor: 12560 sft, 5th floor: 12560 sft) and see the description.
Date of Building Construction:	Factory personnel informed the date of construction as follows: 1) Five story RCC stitching building-1: Finished in 1995, 2) Seven story RCC stitching building-2: Finished in 2002, 3) Six story NFL garments & folding building: Finished in 2003, 4) Single story prefab home dyeing shed-1: Finished in 1998, 5) Single story prefab home dyeing shed-2: Finished in 2003, 6) Single story prefab home dyeing shed-3: Finished in 2000, 7) Single story prefab fashion dyeing shed-1: Finished in 2008, 8) Single story prefab fashion dyeing shed-2: Finished in 2008, 9) Four story RCC marketing building: Finished in 1998, 10) Four story RCC admin building: Finished in 2000, 11) Single story prefab chemical store-1: Finished in 2011, 12) Single story prefab chemical store-2: Finished in 2011, 13) Single story prefab generator & substation shed: Finished in 2008 and see the description.
Date of Last Building Renovation/Addition:	1) Seven story RCC stitching building-2: Additional work is going on.
Ancillary Structures in Complex:	1) Four story RCC marketing building, 2) Four story RCC admin building, 3) Single story prefab chemical store-1, 4) Single story prefab chemical store-2, 5) Single story prefab generator & substation shed, 6) Single story prefab boiler shed, 7) Single story prefab mechanical workshop, 8) Two story RCC medical building, 9) Single story RCC egli ETP building, 10) Single story RCC panta rei ETP building, 11) Single story RCC simem ETP building, 12) Single story prefab finished goods godown.
Approximate Ancillary Structures Area (SF):	1) Four story RCC marketing building: 35200 sft (Ground floor: 8800 sft, 1st floor: 8800 sft, 2nd floor: 8800 sft, 3rd floor: 8800 sft), 2) Four story RCC admin building: 35200 sft (Ground floor: 8800 sft, 1st floor: 8800 sft, 2nd floor: 8800 sft, 3rd floor: 8800 sft), 3) Single story prefab chemical store-1: 9480 sft, 4) Single story prefab chemical store-2: 31497 sft, 5) Single story prefab generator & substation shed: 14306 sft, 6) Single story prefab boiler shed: 9880 sft, 7) Single story prefab mechanical workshop: 20000 sft and see the description.
Number of Occupants:	Total number of occupants: 8963. 1) Five story RCC stitching building-1: 1017 (Ground floor: 142, 1st floor: 437, 2nd floor: 438, 3rd floor: 0, 4th floor: 0), 2) Seven story RCC stitching building-2: 2979 (Ground floor: 218, 1st floor: 609, 2nd floor: 641, 3rd floor: 661, 4th floor: 528, 5th floor: 322, 6th floor: 0), 3) Six story NFL garments & folding building: 1680 (Ground floor: 354, 1st floor: 58, 2nd floor: 244, 3rd floor: 448, 4th floor: 127, 5th floor: 449), 4) Single story prefab home dyeing shed-1: 1082, 5) Single story prefab home dyeing shed-2: 506, 6) Single story prefab home dyeing shed-3: 97, 7) Single story prefab fashion dyeing shed-1: 386, 8) Single story prefab fashion dyeing shed-2: 756 and see the description.
Number of Ancillary Levels (Stories):	1) Four story RCC marketing building: Building height (Highest occupied floor level): 12.8m or 42 ft [Height up to roof: 15.85 m or 52 ft], Stories above grade: 4, Stories below grade: 0, Occupied levels: 4, 2) Four story RCC admin building: Building height (Highest occupied floor level): 13.10 m or 43 ft [Height up to roof: 16.16 m or 53 ft], Stories above grade: 4, Stories below grade: 0, Occupied levels: 4, 3) Single story prefab chemical store-1: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 9.15 m or 30 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 4) Single story prefab chemical store-2: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 4.88 m or 16 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1 and see the description.
Occupancy Type:	1) Five Story RCC Stitching Building-1: [Ground Floor: H2 (General Store), F1 (Office), B2 (Childcare), 1st Floor: F1 (Office), G2 (Cutting, sewing), 2nd Floor: F1 (Office), G2 (Cutting, sewing), 3rd Floor: H2 (Store), 4th Floor: E4 (Prayer room, Dining, Training section)], 2) Seven Story RCC Stitching Building-2: [Ground Floor: H2 (Fabric Store), F1 (Office), G2 (Inspection section), 1st Floor: F1 (Office), H2 (general Store), G2 (Cutting, sewing, Packing, Iron), 2nd Floor: F1 (Office), G2 (Cutting, sewing, Packing, Iron), 3rd Floor: F1 (Office), G2 (Cutting, sewing, Packing, Iron), 4th Floor: F1 (Office), G2 (Cutting, sewing, Packing, Iron), 5th Floor: F1 (Office), G2 (Cutting, sewing, Packing, Iron), 6th Floor: Under construction], For remaining structures, see the description.



Construction Type:	1) Five story RCC stitching building-1: Type 1, 2) Seven story RCC stitching building-2: Type 1, 3) Six story NFL garments & folding building: Type 1, 4) Single story prefab home dyeing shed-1: Non-rated, 5) Single story prefab home dyeing shed-2: Non-rated, 6) Single story prefab home dyeing shed-3: Non-rated, 7) Single story prefab fashion dyeing shed-1: Non-rated, 8) Single story prefab fashion dyeing shed-2: Non-rated, 9) Four story RCC marketing building: [Ground floor to 2nd floor: Type 1, 3rd floor: Non-rated (Only ceiling)], 10) Four story RCC admin building: [Ground floor to 2nd floor: Type 1, 3rd floor: Non-rated (Only ceiling)], 11) Single story prefab chemical store-1: Non-rated, 12) Single story prefab chemical store-2: Non-rated and see the description.
Height of Highest Occupied Floor Level Above Grade:	1) Five story RCC stitching building-1: 14.79 m or 48.5 ft, 2) Seven story RCC stitching building-2: 17.78 m or 58.35 ft, 3) Six story NFL garments & folding building: 18.14 m or 42 ft, 4) Single story prefab home dyeing shed-1: 30 cm or 1 ft above grade, 5) Single story prefab home dyeing shed-2: 30 cm or 1 ft above grade, 6) Single story prefab home dyeing shed-3: 30 cm or 1 ft above grade, 7) Single story prefab fashion dyeing shed-1: 30 cm or 1 ft above grade, 8) Single story prefab fashion dyeing shed-2: 30 cm or 1 ft above grade, 9) Four story RCC marketing building: 12.8 m or 42 ft, 10) Four story RCC admin building: 13.10 m or 43 ft, 11) Single story prefab chemical store-1: 30 cm or 1 ft above grade, 12) Single story prefab chemical store-2: 30 cm or 1 ft above grade, 13) Single story prefab generator & substation shed: 30 cm or 1 ft above grade,



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:	1	
Description:	No occupancy certificate is available for any building in the factory premises.	
Source of Findings:	Document Review: The factory does not have an occupancy certificate from RAJUK for any of its structures.	
Suggested Plan of Action:	Obtain Occupancy Certificates from RAJUK.	
Suggested Deadline Date:	31 Jul 2014	
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 RCC buildings. But the prefab sheds are single story without insulation.	
Source of Findings:	Visual Assessment: On visual inspection, no damage or distress was noticed in the structural members of those buildings.	
Suggested Plan of Action:		
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:	3
Description:	All the existing doors, openings, penetrations and ducts along the required fire rated barriers or assemblies in the buildings were found non-rated. Some of the findings are as follows: 1) Openings of fabric store on ground floor of stitch-2 building. 2) Openings of chemical mixing area of Home Dyeing sheds and Fashion Dyeing sheds. 3) Openings of Dyeing Lab and Chemical Sub-store in Home Dyeing-1 and 2 and at Fashion Dyeing-2 were either open or non-rated.
Source of Findings:	Photograph: Openings and penetrations were found without required fire protection at all the assessed buildings in the factory premises.
Suggested Plan of Action:	Provide fire rated doors and protections at all the required non-rated doors or openings in all the assessed buildings. If possible, close all these openings with fire rated barriers. Protect all the penetrations along the fire restrictive rated assemblies with a listed through penetration fire-stop system tested in accordance with ASTM E81. Consult a qualified fire protection engineer for required solutions.
Suggested Deadline Date:	11 Oct 2014
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:	3
Description:	In stitching building-2, penetrations were available on slabs through which electrical cables were passed in various floors. The rest are in a single story prefab shed. However, from physical measurement in RCC buildings, slab thickness was found to be 7.5 inches with finishing, which is capable of providing approximately 3.5 hours of fire resistance according to Alliance Standard.
Source of Findings:	Photograph: Slab thickness for all RCC buildings were measured on a sample basis and penetrations through slabs were observed.
Suggested Plan of Action:	Seal the penetration of slab by ensuring a proper rating, as fire-resistive rated construction barriers are required among the floors following Table 4.4.1 of Alliance Standards. Consult a qualified fire protection engineer to design the rated construction barrier.
Suggested Deadline Date:	14 Aug 2014
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:	3
Description:	Some of the major findings are as follows: 1) On ground floor of Stitching building-2, Store (H2) and Office (F1) are not properly separated, and on 1st floor, the Store(H2) and production area (G2) are not provided with fire resistive rated construction barrier. 2) On ground floor of Stitching building-1, Store (H2) and Office (F1) are not provided with fire resistive rated construction barrier. 3) On 1st, 2nd and 3rd floors of NFL building, separations between finished good stores and other occupancy areas such as the production floor were not fire separated. 4) Flammable chemicals were found placed without any fire enclosure at Home Dyeing prefab sheds-1, 2 and 3. 5) Chemical mixing areas were open to adjacent occupancies at Home Dyeing sheds-1 and 2. 6) Dyeing lab at Fashion Dyeing shed was not fire protected. 7) Screen godown room was open to production floor.





Source of Findings:	Visual Assessment: Fire-rated construction barriers were not located where required in various buildings.
Suggested Plan of Action:	Provide fire-resistive rated construction barriers and required opening protections (for doors/windows) between all the hazard types in all the assessed buildings following Table 3.2.1 of the BNBC. Consult a qualified fire protection engineer to design the required rated construction barrier.
Suggested Deadline Date:	05 Jan 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:	3	
Description:	The exit enclosures in RCC buildings have no openings in the walls except doors. Exit enclosures are of brick walls with fire doors but no credible certificate was available for the doors. Single story ancillary buildings and sheds do not have this issue since they have no stairs.	
Source of Findings:	Photograph: Exit enclosures are not provided with fire-resistive rated construction barriers.	
Suggested Plan of Action:	Fit doors that open in the direction of egress, side-swinging, self-closing, non-lockable fire doors of a 1.5 hr rating in all stairwell enclosures. 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:	A shaft for lift-core is available in Stitching building-2. The lift-core has opening without fire restrictive protections at each landing of the stair-case.	
Source of Findings:	Photograph: An unprotected shaft was found in Stitching building-2.	
Suggested Plan of Action:	Protect the shaft in accordance with Alliance standard 4.5.7.	
Suggested Deadline Date:	14 Aug 2014	
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 was available for which fire damper is required.	
Source of Findings:	Visual Assessment: During site tour no air-conditioning or ventilation duct was found.	
Suggested Plan of Action:		
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 is available in those buildings.	
Source of Findings:	Visual Assessment: During site tour, no atrium was found.	
Suggested Plan of Action:		
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:		
Description:	Maximum height of the highest occupied floor level among all RCC buildings, the seven story RCC stitching building-2, is 17.78 m or 58.35 ft. and occupied floor level height of other RCC buildings are less than this height. An automatic sprinkler system is not required for any of those buildings according to Alliance standard 3.6.3. The other available prefab sheds are single story. A sprinkler system is also not required for prefab sheds according to Alliance standard 3.5.3.1.	
Source of Findings:	Visual Assessment: During site assessment, the height of those buildings were measured and it was realized that sprinkler system is not required in the buildings.	



Suggested Plan of Action:		
Suggested Deadline Date:		
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:	Sprinkler system is not required for any available buildings in the factory premises and no sprinkler system is installed. Therefore, design criteria is not applicable in this case.	
Source of Findings:	Visual Assessment: During site tour, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore, commodity class is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	Sprinkler system is not required for available any buildings and no sprinkler	



	system is installed. Therefore, occupancy classification is not applicable in this case.
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.
Suggested Plan of Action:	
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore inspection, maintenance and testing procedure is not applicable in this case.
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.
Suggested Plan of Action:	
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore identification signs are not applicable in this case.
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.
Suggested Plan of Action:	
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	



Suggested Plan of Action:		
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.
Suggested Plan of 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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.
Suggested Plan of Action:	
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.
Suggested Plan of Action:	
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	Sprinkler system is not required for any available buildings and no sprinkler system is installed. Therefore this issue is not applicable in this case.	
Source of Findings:	Visual Assessment: During site assessment, no sprinkler system was found installed.	
Suggested Plan of Action:		
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:	2	
Description:	The height of the highest occupied floor of the seven story Stitching building-2 is 17.78 m or 58.35 ft, 14.79 m or 48.5 ft for the five story RCC building, and 18.14 m or 42 ft for the six story NFL garments & folding building. All buildings with occupied floors above 10 m or 33 ft require a Class III standpipe system as per the Alliance Standard. The existing standpipe system with class I hose connections (65 mm) were available in most stairwells of Stitch-2 and Stitch-1	



	buildings, but some connections were located at the intermediate landing. There is no hydraulic design for the installed system, which is required as per the Alliance Standards.	
Source of Findings:	Photograph: Class I standpipe system hose connections were found but system is not compliant with NFPA 14 and Alliance requirements.	
Suggested Plan of Action:	Install a NFPA 14-compliant Class III 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:	19 Oct 2014	
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:	1	
Description:	No relevant document regarding inspection, maintenance, and testing procedures of the available standpipe and hose system was found as per the requirement.	
Source of Findings:	Document Review: No document regarding the inspection, maintenance and testing procedures of the standpipe and hose system was found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Establish required inspection, maintenance, and testing program for the standpipe and hose system.	
Suggested Deadline Date:	03 Jan 2015	
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:	Signage for the available standpipe system is not installed as per NFPA 14 requirements.	
Source of Findings:	Photograph: Signage for the components of the installed standpipe system was not found.	
Suggested Plan of	Install the required identification signs at the noted locations.	





Action:		
Suggested Deadline Date:	24 Aug 2014	
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:	The installed standpipe system piping is free of mechanical damage, leakage and corrosion.	
Source of Findings:	Visual Assessment: No mechanical damage, corrosion and leakage was noticed in the installed standpipe system.	
Suggested Plan of Action:		
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 is not provided to allow fire department pumper equipment to supplement the fire protection systems. However, fire department outlet connection (pillar hydrant) is provided to allow fire department pumper vehicles to draw water from ground-level or underground water storage tanks. Connections match fire service and civil defense hose thread standard. But outlet connection is not clearly identifiable for the fire protection system.	
Source of Findings:	Visual Assessment: Fire department (Siamese) inlet connection was not found which will allow fire department pumper equipment to supplement the existing standpipe system.	
Suggested Plan of Action:	Install fire department (Siamese) inlet connections to allow fire department pumper equipment to supplement the fire protection systems.	
Suggested Deadline Date:	28 Dec 2014	
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:	A fire pump is available (capacity: 100 hp). But hydraulic calculation for installed standpipe system and fire pump is not available. The hose pressure appears to be less than 4.5 bar as the throw of jet at highest accessible point is 50 ft.
Source of Findings:	Photograph: A fire pump was found in the factory premises and the throw of jet at highest accessible point was measured 50 ft.
Suggested Plan of Action:	Provide hydraulic calculation of the installed fire pump and standpipe system. If it does not meet the requirements of NFPA 14 then replace the existing fire pump. The installation is to be tested for final acceptance in presence of Alliance and a final inspection of the installation shall be conducted by the Alliance prior to final acceptance of the installation by the Alliance as per clause 5.5.5. Acceptance testing of the installation shall be in accordance with NFPA 20, 22, and 24 testing requirements. Documentation of all testing shall be submitted to the Alliance for review prior to final acceptance by the Alliance.
Suggested Deadline Date:	25 Aug 2014
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 fire pump are not documented and up to date.
Source of Findings:	Document Review: No document regarding inspection, maintenance and testing procedures of the fire pump was found in the documents shown by the factory personnel.
Suggested Plan of Action:	Establish required inspection, maintenance and testing program for the fire pump.
Suggested Deadline Date:	17 Nov 2014
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:	1
Description:	In all the prefab sheds the number of extinguishers are sufficient, but the placement of extinguishers is not appropriate because extinguishers are placed in a box together. Besides this, in some cases the mounting heights were not appropriate as the height was more than 5 ft. However, in the RCC buildings the fire extinguishers were found at the correct locations and mounted at the correct height.
Source of Findings:	Photograph: The spacing, arrangement and height of portable extinguishers was measured on a sample basis.
Suggested Plan of Action:	Fire extinguishers shall be installed in accordance with BNBC Part 4 Section 4.10 and NFPA 10.
Suggested Deadline Date:	31 Aug 2014
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:	2
Description:	The placement of extinguishers is not appropriate because extinguishers are placed together in a box.
Source of Findings:	Photograph: Fire extinguishers were not placed at appropriate locations, rather they are kept together.
Suggested Plan of Action:	Select fire extinguishers based on potential fire class and hazards following NFPA 10 requirements. A minimum of two dry chemical powder (DCP) type fire extinguishers shall be provided at both open and covered locations where combustible and flammable materials are stored. In a store of inflammable and/or fire-sensitive materials a 5 kg dry powder fire extinguisher conforming to accepted standards shall be kept at an easily accessible position.
Suggested Deadline Date:	11 Oct 2014
Standard:	NFPA 10 Chapter 5
Question:	Fire extinguishers are inspected, tested, and maintained as required.
Priority Level:	Medium
Non-Compliance Level:	1





Description:	Extinguishers are inspected monthly by the factory's staff, but no document was found in support of annual maintenance of extinguishers by a servicing agent.	
Source of Findings:	Document Review: No document regarding annual inspection, maintenance and testing procedure of fire extinguishers was found in the documents shown by the factory personnel.	
Suggested Plan of Action:	Fire extinguishers are to be inspected, tested, and maintained in accordance with NFPA 10 requirements.	
Suggested Deadline Date:	30 Nov 2014	
Standard:	NFPA 10 Chapter 7	
Question:	Are there any other fire suppression systems installed within the building?	
Priority Level:		
Non-Compliance Level:		
Description:	There is no other fire suppression system in those buildings.	
Source of Findings:	Visual Assessment: During inspection, no other fire suppression system was noticed in the factory premises.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:		
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. Moreover, nobody is assigned to contact the fire department in the event of fire alarm activation as per the Alliance Standard.	
Source of Findings:	Visual Assessment: Fire alarm and detection system is not monitored centrally.	
Suggested Plan of Action:	Arrange for the 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 a 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:	15 Aug 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:	3
Description:	There was no centrally addressable fire alarm control panel available. In the factory premises, most of the buildings were found with standalone type detection systems. However, a control panel board was found but the coverage area was very insignificant.
Source of Findings:	Photograph: A trouble or alarm indication was noticed on the control panel.
Suggested Plan of Action:	Install a centralized automatic fire alarm and smoke/heat detection system with a control panel following NFPA 72 requirements throughout all new and existing buildings and structures.
Suggested Deadline Date:	16 Aug 2014
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:	3
Description:	The number of smoke detectors and audible and visual alarms were not adequate in pre-fab sheds, marketing building and office building. Standalone detectors are available; there is no fire alarm control panel. In fact centralized system along with smoke detectors, pull stations and alarm installation work was ongoing in the day of audit.
Source of Findings:	Photograph: Pull station, smoke detector, audible alarm and visual alarms were not found as required.
Suggested Plan of Action:	Provide an automatic fire alarm and detection system per the Alliance Standards. Pull stations at egress points, smoke detectors in the air handling equipment, visual and audible devices must be spaced appropriately based on the occupancy type in accordance with NFPA 72.
Suggested Deadline Date:	11 Oct 2014





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

Means of Egress

Question: Occupant loads on each level (floor) do not exceed the capacity of the available means of egress.

Priority Level: High

Non-Compliance Level: 3

Description: Building (Multi story and High Occupancy) wise means of egress capacity calculation provided as below: 1) Five story Stitch Building-1: On 2nd floor occupant load was 438 which is maximum of all floors, the floor area 2569.9 sq.m. So, space per occupant is 5.86 sq. m. Required aisles, exits and stairs widths are 2.185 m, 1.75 m and 3.504 m respectively whereas the available total widths of these means of egress 6.31 m, 3.66 m and 2.62 m. On 1st floor occupant load was 437 which is maximum of all floors, the floor area 2569.9 sq.m. So, space per occupant is 5.88 sq. m. Required aisles, exits and stairs widths are 2.19 m, 1.752 m and 3.496 m respectively whereas the available total widths of these means of egress 6.31 m, 3.66 m and 2.62 m. 2) Seven story Stitch Building-2: On 2nd floor occupant load was 661 which is maximum of all floors, the floor area 6453.47 sq.m. So, space per occupant is 9.76 sq. m. Required aisles, exits and stairs widths are 3.305 m, 2.64 m and 5.29 m respectively whereas the available total widths of these means of egress 8.12 m, 7.42 m and 8.003 m. 3) Six story NFL garments & folding building: On 5th floor occupant load was 449 which is maximum of all floors, the floor area 1167.46 sq.m. So, space per occupant is 2.6 sq. m. Required aisles, exits and stairs widths are 2.245 m, 1.796 m and 3.592 m respectively whereas the available total widths of these means of egress 6.95 m, 3.47 m and 3.58 m. 4) Four Story RCC Marketing Building: On 2nd floor occupant load was 65 which is maximum of all floors, the floor area 817.97 sq.m. So, space per occupant is 12.584 sq. m. Required exits and stairs widths are 0.26 m and 0.52 m respectively whereas the available total widths of these means of egress 3.3 m, 3.58 m. 5) Four Story RCC Admin Building: On 3rd floor occupant load was 32 which is maximum of all floors, the floor area 817.97 sq.m. So, space per occupant is 25.56 sq. m. Required exits and stairs widths are 0.128 m and 0.256 m respectively whereas the available total widths of these means of egress 1.62 m, 3.58 m. 6) Single Story Prefab Home Dyeing- 1 shed: Occupant load was 1082, the floor area 19828.69 sq.m. So, space per occupant is 18.33 sq. m. Required aisles and exits widths are 5.41 m and 4.33 m respectively whereas the available total widths of these means of egress 6.06 m and 9.68 m. 7) Single Story Prefab Home Dyeing- 2 Shed: Occupant load was 506, the floor area 12366.15 sq.m. So, space per occupant is 24.43 sq. m. Required aisles and exits widths are 2.53 m and 2.02 m respectively whereas the available total widths of these means of egress 4.83 m and 6.64 m. 8) Single Story Prefab Fashion Dyeing -1 Shed: Occupant load was 386, the floor area 8731.13 sq.m. So, space per occupant is 22.62 sq. m. Required aisles and exits widths are 1.93 m and 1.554 m respectively whereas the available total widths of these means of egress 5.77 m and 16.88 m. 9) Single Story Prefab Fashion Dyeing -2 Shed: Occupant load was 756, the floor area 19056.92 sq.m. So, space per occupant is 25.21 sq. m. Required aisles and exits widths are 3.78 m and 3.024 m respectively whereas the available total widths of these means of egress 7.12 m and 10.12 m. From above calculation we can conclude that Stitch building-1 and NFL garments & folding building does not satisfy the requirement for stair width considering the occupant load



	and other element of means of egress like aisles and exits are satisfactory for all building.	
Source of Findings:	Visual Assessment: Number of occupants was obtained from register. Width of exits, aisles and stairs of the concerned floor were also measured.	
Suggested Plan of Action:	Immediately reduce 111 occupants from 2nd floor and 110 occupants from 1st floor of 5 Story Stitch building-1 to satisfy the available means of egress (stair) capacity or provide an additional stair with minimum width 0.9 m or provide automatic sprinkler system throughout the building. If additional stair or sprinkler system not provided then occupant load shall not be exceeded 327 in any floor (except ground floor) under any condition. Immediately reduce 2 occupants from 5th floor of NFL garments & folding building to satisfy the available means of egress capacity (Stair). At present scenario maximum allowable occupant load at any floor is 447.	
Suggested Deadline Date:	04 Dec 2014	
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:	2	
Description:	The roof of a four story RCC marketing building is occupied by a prefab shed (used as kitchen and dining area) and only one exit is available, which does not satisfy the requirements of occupied roofs according to Alliance Standards.	
Source of Findings:	Visual Assessment: Only one exit is available on occupied roof.	
Suggested Plan of Action:	Occupied roofs shall be provided with at least two exits or more depending on the occupant load as per the Alliance Standards.	
Suggested Deadline Date:	17 Sep 2014	
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:	Parapet height of occupied roof in the four story marketing building is 42 inch which satisfy the Alliance standards.	
Source of Findings:	Photograph: During site assessment, parapet height of occupied roof was measured on sample basis.	
Suggested Plan of		





Action:		
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:	1	
Description:	Occupant loads are not posted in any assembly or production floor as required.	
Source of Findings:	Photograph: Occupant loads were not posted on any 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:	07 Jul 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:	Aisles satisfy the minimum and total width requirement in all locations. In stitching building-2, occupant load is 661 on 3rd floor. There are thirteen aisles in this floor. Total width of aisles is 11 m. where required width is 3.3 m. In the same way, minimum and total width of aisles are sufficient in all floors of all available buildings.	
Source of Findings:	Visual Assessment: During site assessment, aisles width was measured on sample basis.	
Suggested Plan of Action:		
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 and is sufficient for the occupant load. For example, in stitching building-2, maximum occupant load is 661 on 3rd floor. There are four available exits which total width is 8.67 m where required width is 2.64 m. There are thirteen available aisles which total width is 11 m where required width is 3.3 m. There are four available stair which total width is 8.8 m where required width of stair is 5.28 m.	
Source of Findings:	Visual Assessment: During assessment, number and width of aisles, stairs and exits were measured on sample basis.	
Suggested Plan of Action:		
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:	The minimum ceiling height along the means of egress is 3.05 m or 10 ft. and the minimum height at projection is 2.14 m or 7 ft. in stitching building-2. which satisfy the requirements.	
Source of Findings:	Photograph: During site assessment, ceiling height and projection height was measured on sample basis.	
Suggested Plan of Action:		
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:	2
Description:	All the stairs do not discharge to a safe place, here all exit discharge addressed below for all multi storied building: 1)Stitch Building-2: There are four stairs available in the Stitch-2 building: Stair-1: The exit discharge from stair-1 provides a safe escape facility, but was found partially blocked by construction materials temporarily; Stair-2: The exit discharge from stair-2 provides a safe escape path to the exterior of the building; Stair-3: Exit discharges from stair-3 leads to a safe escape path to the exterior of the building; Stair-4: The discharge from stair-4 is through a passageway which is not fire rated as there is an unprotected opening with store room. 2) Stitch-1 Building: There are two stairs available in the Stitch building-1: The discharge from stair-1 is directly to a passageway where no other opening except door in production floor is available. The discharge from stair-2 is not also fire rated because there is a non rated opening available in childcare room which is adjacent with exit passageway and no compliant fire rated door available with production floor also. 3) NFL Building: There are two stairs available in the NFL building: Stair-1: This stair leads directly to outside of the building, Stair-2: This stair also leads to a passageway which is not safe because there non-rated ceiling (CI Sheet) available and loading unloading work generally occurs here. 4) Admin Building: There are two stairs available in the Admin building: Stair-1: This stair leads to a safe exit discharge; Stair-2: This stair-2 which is an external stair and leads to a place which merge with discharge with stair-2 for NFL building and not safe as the passageway with non rated ceiling (CI Sheet) and loading unloading work generally occurs here. 5) Marketing Building: In top floor there are two and from 2nd to below there are three stairs available in the building: Stair-2 is internal which discharge to a safe place, stair-1 discharge to an egress court which is in between marketing building and stitch building-2 and was partially blocked by scrap and sanitary materials; Stair-3 is external stair which discharges to an egress court was also partially blocked by scrap materials.
Source of Findings:	Photograph: All exit discharges do not lead directly to the exterior of the building.
Suggested Plan of Action:	1)Provide a rated exit passageway i.e. a protected path of egress from the exit enclosure to the public way. The rating of the exit passageway is to be equal to the fire rating requirement of the exit that is being served and shall not be less than 1 hr fire-resistance rated. Also provide fire door with required rating. Consult with a qualified fire protection engineer regarding this issue. 2) Always Keep all the exit discharges free from any kind of obstacle to ensure a safe escape path.
Suggested Deadline Date:	17 Sep 2014
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:		
Description:	In all the assessed buildings, the maximum travel distance to reach an exit was found within the limits. For example maximum travel distance in stitching building-2 for nearest exit is 38 m, in stitching building-1 which is 32 m i.e. less than 45 m which is satisfactory regarding Alliance Standard Part 6 Section 13 and BNBC Part 4 Section 3.15.1.	
Source of Findings:	Visual Assessment: During assessment, travel distance was measured on sample basis in the stitching building-1 and stitching building-2.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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:	2	
Description:	Exit access corridor serving at Home Dyeing shed-1 was found non-rated.	
Source of Findings:	Visual Assessment: Exit access corridor is non-rated.	
Suggested Plan of Action:	Provide fire-resistive rated assemblies at the required exit access corridors. The rated assembly should be approved and/or designed by a qualified fire protection engineer. Exit access corridors serving an occupant load exceeding 30 are to be separated by walls having a fire resistance rating of 1 hr in accordance with the Alliance Standard unless provided with automatic sprinkler protection throughout the story or building. Window and glass block assemblies are to be tested for fire rating following NFPA 257.	
Suggested Deadline Date:	11 Oct 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:	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 finish of the means of egress is of brick, tiles, plaster and paint. However, document regarding the rating of the interior finishing materials was	



	not available.	
Source of Findings:	Photograph: During site tour, interior finishes for means of egress are observed.	
Suggested Plan of Action:		
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 walls, collapsible or sliding doors or fire doors etc.	
Source of Findings:	Photograph: During site tour, interior materials of exits are observed.	
Suggested Plan of Action:		
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 stitching building-1, the number of means of egress from any floor is 2. Based on occupant load, required minimum number of stair is 2. In stitching building-2, the number of means of egress from any floor is 4. Based on occupant load, required minimum number of stair is 4. In NFL building, the number of means of egress from any floor is 2. Based on occupant load, required minimum number of stair is also 2. In marketing office building the number of means of egress from any floor is 2. Based on occupant load, required minimum number of stair is 2. From physical measurement it was noticed that means of egress were sufficient in prefab sheds also.	
Source of Findings:	Visual Assessment: During site tour, number of emergency exits and stairs were counted.	
Suggested Plan of Action:		
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:	In seven story RCC stitching building-2, the occupant load on 1st, 2nd, 3rd and 4th floor are exceeding 500 but less than 1000. The means of egress from any floor of that building are 4. However, occupant load on rest of the floors of all the buildings were less than 500 during assessment.	
Source of Findings:	Visual Assessment: During site tour, number of emergency exits and stairs were counted.	
Suggested Plan of Action:		
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:	3	
Description:	Illumination along the paths of egress in all the assessed prefab sheds was found inadequate.	
Source of Findings:	Photograph: Paths of egress are not sufficiently illuminated.	
Suggested Plan of Action:	Install the appropriate means of illumination at the noted locations. The means of egress paths shall be illuminated at all times the building is occupied. Illumination shall be a minimum of 10 lux for all corridors, exit doors, and stairways. Aisles shall be provided with a minimum 2.5 lux.	
Suggested Deadline Date:	03 Jan 2015	
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:	2
Description:	1) Aisles were found obstructed at several locations. For example, aisles on 4th floor of the Stitch-2 building was found obstructed, at Home Dyeing prefab. shed, etc were found obstructed. 2) Sewer line was found obstructed the exterior stair from the Marketing Building.
Source of Findings:	Photograph: Aisles, exit doors and stairways are free from all sorts of obstacles except aisles located on 4th floor of Stitch-2 building and on ground floor of the Home Dyeing prefab shed. A sewer line was observed obstructing the exterior stair of marketing building and eventually reducing the required stair width.
Suggested Plan of Action:	Keep means of egress continuously free and clear of all obstructions or impediments to full instant use in the case of fire or other emergency.
Suggested Deadline Date:	19 Jul 2014
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 as required.
Source of Findings:	Document Review: No document regarding the verification of emergency power for the 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 existing 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:	17 Aug 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:	1
Description:	Some exit doors have locking arrangements like hasps, locks and slide bolts. This violates Alliance Standards. However, some doors along the path of egress in the RCC buildings were found without locking systems and have a fire door mechanism.
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 and the occupant load does not exceed 49 persons as recommended in Alliance Standard 6.8.2.2 .
Suggested Deadline Date:	06 Aug 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:	3
Description:	Door widths are more than 0.8 m. Almost all the doors in prefab sheds are non-rated and in the RCC buildings some doors along the path of egress were found to be fire doors but most of them are without proper credible certificates.
Source of Findings:	Photograph: Doors were found without fire rating., Visual Assessment: Widths were measured on a sample basis.
Suggested Plan of Action:	Provide 1.5 hr fire rated doors on 2 hr rated exit enclosures in RCC buildings as these are more than three stories.
Suggested Deadline Date:	10 Sep 2014
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:	1
Description:	Some of the doors in the means of egress are sliding steel type. This violates the Alliance Standard.
Source of Findings:	Visual Assessment: Doors were observed and found to be sliding steel type.
Suggested Plan of Action:	Replace all sliding doors in the means of egresses with side-hinged swinging type doors of proper width and fire rating.
Suggested Deadline Date:	05 Oct 2014
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:	2
Description:	Illuminated exit signs are placed at required locations but not placed all those locations where the continuation of the path of egress is not obvious.
Source of Findings:	Photograph: During assessment, illuminated exit signs were noticed at the exit.
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:	03 Jan 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:	2
Description:	At every door the elevation was 3/4 inches higher than the normal walking surface in Stitching building-1 and -2 and the NFL building. A change in elevation of more than 3/4 inches was also found along the means of egress of Home Dyeing shed-01.
Source of Findings:	Photograph: A difference of elevation of 3/4 inch or more was found in





	numerous locations.	
Suggested Plan of Action:	Repave the walking surface to make the slope of the surface 1 in 2 and keep change in elevation less than 1/2 inch.	
Suggested Deadline Date:	03 Dec 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:	The backup used provide sufficient illumination (50 lux at surface of exit sign) required as mentioned in section 10.12.1.2 of Alliance Standard.	
Source of Findings:	Photograph: The backup used provide sufficient illumination.	
Suggested Plan of Action:		
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:	The generator is used as an emergency backup, but no record of testing emergency power for 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. Functional testing of generator powered signs must be provided for a minimum of 90 min once per year.	
Suggested Deadline Date:	17 Aug 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:	Exit signs have appropriate illumination and graphics level.	
Source of Findings:	Photograph: During site assessment, it was noticed that exit signs were properly illuminated.	
Suggested Plan of Action:		
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:		
Description:	Walking surfaces along the path of egress are of net cement finish and homogenous tiles which will not cause slip during quick evacuation under emergency situation.	
Source of Findings:	Photograph: During assessment, walking surface along path of egress was noticed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
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 stairs of those buildings are made of concrete except admin building. In admin building, stairs are of steel.	
Source of Findings:	Photograph: During assessment, stair materials were observed.	
Suggested Plan of Action:		
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 stairs are wider than 0.9 m in those buildings and minimum stair width was 1.3 m.	
Source of Findings:	Photograph: During assessment, stair width was measured on sample basis.	
Suggested Plan of Action:		
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:	Photograph: During assessment, stair treads and risers were measured on sample basis.	
Suggested Plan of Action:		
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:		
Description:	Landings are provided on both sides of doors. Landings are sufficiently wide such that doors do not swing out over stairs.	
Source of Findings:	Photograph: During site assessment, landing arrangement was noticed.	



Suggested Plan of Action:	
Suggested Deadline Date:	
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 are provided with more width than stair in the direction of egress in all RCC buildings. As an example, in NFL building stair width was 70 inch where the landing width was 77 inch. This issue is not applicable in sheds as there was no stair.
Source of Findings:	Photograph: During site assessment, landings width were measured on sample basis.
Suggested Plan of Action:	
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:	2
Description:	Stitching building-1 has 2 stairs. Stair-1 has a handrail on only one side. Stair-2 has handrails on both sides. The handrails are mounted at 29 inches (i.e. lower than the required 30 inch) and 33 inches, respectively. The NFL building has 2 stairs and both have handrails on only one side. The handrails are mounted at 29 inches. The admin building has 2 stairs. Stair-1 has handrails on only one side which is mounted at 28 inches. Stair-2 has handrails on both sides. The handrails are mounted at 35 inches. Stitching building-2 has 4 stairs which have handrails on only one side. These are mounted at 28 inches, 28 inches, 29 inches, and 29 inches, respectively.
Source of Findings:	Photograph: Handrails of stairs were observed and mounting heights were measured on a sample basis.
Suggested Plan of Action:	Provide handrails on both sides of each stairway and a mounting height of the handrail should be within the range of 865 mm (34 in.) and 965 mm (38 in.).



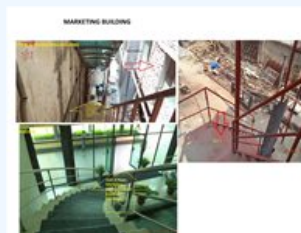


Suggested Deadline Date:	28 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	
Question:	Every door in a stair enclosure serving more than 5 stories is provided with re-entry unless it meets the requirements of Alliance Standards Part 6 Section 6.8.3.1.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	At least two re-entry doors are required in the seven story RCC Stitching building-2 and in the six story NFL Garments & Folding building, since these buildings are more than five stories. No re-entry doors were found.	
Source of Findings:	Visual Assessment: No re-entry door was found.	
Suggested Plan of Action:	Every door in a stair enclosure serving more than 5 story 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:	07 Aug 2014	
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:	Exterior exit stairs were available in marketing building and admin building but there was no opening within 3.05 m or 10 ft of these stairs.	
Source of Findings:	Photograph: During assessment, exterior stairs were noticed.	
Suggested Plan of Action:		
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:	2
Description:	All the stairs are nor directly to the exterior of the building, there some interior stairways available which discharge to the non-rated passageway. Below, all the exit discharge addressed for all multi storied building: 1)Stitch-2 Building: There are four stairs available in the Stitch-2 building: Stair-1:The exit discharge from stair-1 provides a safe escape facility but was found partially blocked by construction materials temporarily; Stair-2: The exit discharge from stair-2 provides a safe escape path to the exterior of the building; Stair-3: Exit discharges from stair-3 leads to a safe escape path to the exterior of the building; Stair-4: The passageway from Stair-4 leads to exit discharge is not safe, as there is an unprotected opening in adjacent store exposed to that passageway. The entire exit doors with production floor are provided with fire rated door but no credible certificated was found. 2)Stitch-1 Building: There are two stairs available in the Stitch building-1: The discharge from stair-1 is directly to a passageway where no other opening except door in production floor is available. The discharge from stair-2 is not also fire rated because there is a non rated opening available in childcare room which is exposed to the passageway and no compliant fire rated door available with production floor also. 3)NFL Building: There are two stairs available in the NFL building: Stair-1: This stair leads directly to outside of the building, Stair-2: This stair also leads to a passageway which is not safe because there non-rated ceiling available here and loading unloading work generally occurs here. The exit doors in production floor are provided with fire rated door but not compliant as there is no credible certificate available. 4)Admin Building: There are two stairs available in the Admin building: Stair-1: This stair leads to directly to the exterior of the building; Stair-2: This stair-2 is external stair. 5)Marketing Building: In top floor there are two and from 2nd to below there are three stairs available in the building: Stair-2 is internal which discharge to a safe place, stair-1 and Stair-3 is external stair.
Source of Findings:	Photograph: All interior exits do not terminate at a protected exit passageway.
Suggested Plan of Action:	Provide a rated exit passageway i.e. a protected path of egress from the exit enclosure to the public way. The rating of the exit passageway is to be equal to the fire rating requirement of the exit that is being served and shall not be less than 1 hr fire-resistance rated.
Suggested Deadline Date:	10 Sep 2014
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:	The floor level was posted in English but the stair name or designation is not mentioned in all buildings. The floor level is not written in Bengali as well.	
Source of Findings:	Visual Assessment: Stair designation signs were not noticed.	
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level in both English and Bengali.	
Suggested Deadline Date:	10 Aug 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:	Photograph: During assessment, stairwells were noticed as free of all storage.	
Suggested Plan of Action:		
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 was available in the factory premises.	
Source of Findings:	Visual Assessment: During site assessment, no ramp was noticed.	
Suggested Plan of Action:		
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 such ramp was available in the factory premises.	
Source of Findings:	Visual Assessment: During site assessment, no ramp was noticed.	
Suggested Plan of Action:		
Suggested Deadline Date:		
Standard:	Alliance Standard Part 6 Section 10 Ramps	
Fire Safety Programs		
Question:	A Fire Safety Director position has been filled.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	No viable documentation or physical presence of the Fire Safety Director was noted.	
Source of Findings:	Document Review: The document regarding this issue was not available during document review session.	
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. (4) Ensure all testing of fire protection equipment is conducted in accordance with Alliance Standard.	
Suggested Deadline Date:	28 Dec 2014	
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:	2	
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: Document regarding emergency evacuation was not available.	
Suggested Plan of	Develop an emergency evacuation plan which includes duties and	



Action:	responsibilities of various people/groups, interfacing between groups and fire brigade, headcount and identification of trapped victims, physically disabled people and their rescue, etc.	
Suggested Deadline Date:	14 Aug 2014	
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 exit as demanded in Alliance Standard Part 13 Section 13.3.	
Source of Findings:	Visual Assessment: Emergency egress maps were noticed, during site assessment.	
Suggested Plan of Action:		
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:	1	
Description:	No evidence of fire department pre-planning was found.	
Source of Findings:	Document Review: No document regarding fire department pre-planning was available.	
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.	
Suggested Deadline Date:	14 Aug 2014	
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:	
Description:	Fire drills are conducted monthly in all buildings but not under the direction of a Fire Safety Director. This does not meet the requirements of the Alliance Standard.
Source of Findings:	Document Review: Document regarding fire drills was available but they were not conducted under the supervision of a Fire Safety Director.
Suggested Plan of Action:	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 requirements.
Suggested Deadline Date:	10 Sep 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:	Records kept by the factory show that 40 workers had been trained by proper authorities and certificates were available. This number is not sufficient because 25 percent of 8963 occupants is 2240, which is the required number of trained people.
Source of Findings:	Document Review: Certificates for 40 trained workers were available during the document review session, but 2240 certified workers are required.
Suggested Plan of Action:	Train and certify at least 25 percent of workers in fire fighting, first aid and rescue by the proper authorities.
Suggested Deadline Date:	03 Dec 2014
Standard:	Alliance Standard Part 13 Human Element Programs
Question:	A written housekeeping policy is established and enforced.
Priority Level:	Low
Non-Compliance Level:	
Description:	Written housekeeping policy was found, which is required as per Alliance Standards Part 13 Section 13.6.
Source of Findings:	Document Review: Written housekeeping policy was available during document review session.





Suggested Plan of Action:		
Suggested Deadline Date:		
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:	Works involving welding, grinding, etc. is going on in the premises, yet a hot-work permit program is not established as required.	
Source of Findings:	Document Review: No document regarding a hot-work permit program was found.	
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 reapproval procedure, etc.	
Suggested Deadline Date:	28 Dec 2014	
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 were stored underneath the cutting tables of the cutting sections in the NFL building & Stitching building-2.	
Source of Findings:	Visual Assessment: Fabrics were stored underneath cutting tables.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.	
Suggested Deadline Date:	07 Aug 2014	
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.	

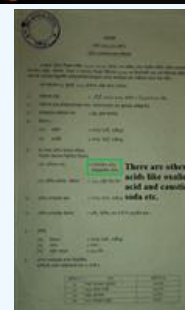




Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	No document of any training program in accordance with the Alliance Safety Training Curriculum was found.	
Source of Findings:	Document Review: Documentation regarding this issue was not available during the documentation review session.	
Suggested Plan of Action:	Impart training in accordance with the Alliance Safety Training Curriculum and keep records with proper documentation.	
Suggested Deadline Date:	07 Aug 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 are posted in Bengali and English at all building entrances. Therefore, no designated smoking area is created outside the buildings.	
Source of Findings:	Visual Assessment: Smoking signs were found posted in the factory premises.	
Suggested Plan of Action:		
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:	2
Description:	A trade license is valid up to 30/06/2014, a fire license is valid up to 30/06/2014, a factory license is valid up to 31/12/2014. A BERC license for 9.12 MW, 10 boiler licenses including 10 boiler operator and five electrician licenses are available and the acid license expired on 30-06-2014. Acid license is for two acids, they are sulfuric acid and hydrochloric acid. But in the chemical store there are other chemicals like oxalic acid, caustic soda etc. These chemicals are not mentioned in acid license which is required by Acid Control Act of 2002.
Source of Findings:	Document Review: All licenses and permits were available and valid except for the acid license.
Suggested Plan of Action:	Renew the acid licenses from DC office.
Suggested Deadline Date:	10 Dec 2014
Standard:	Alliance Standard Part 13 Human Element Programs



Factory Name: **Zaber & Zubair Fabrics Ltd**

Address: **Pagar, Tongi, Gazipur Tongi, Gazipur Dhaka Bangladesh**

Assessor: **Bureau Veritas**

Date: **19 May 2014**



ALLIANCE
FOR BANGLADESH WORKER SAFETY

Question:	Are there additional areas of non-compliance to report?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	LPG cylinder was available in kitchen on the top floor of the Marketing building. The storage or use of liquefied or compressed flammable gas cylinders is prohibited within the factory building in accordance with Alliance Standard, Section 3.4.2.1.11.
Source of Findings:	Photograph: kitchen was noticed in admin building., Visual Assessment: During assessment, kitchen was noticed in admin building.
Suggested Plan of Action:	Remove liquefied or compressed flammable gas cylinders from the factory premises and arrange cooking operation as per recommended in Alliance Standard Section 5.10.
Suggested Deadline Date:	10 Sep 2014
Standard:	Not Applicable

