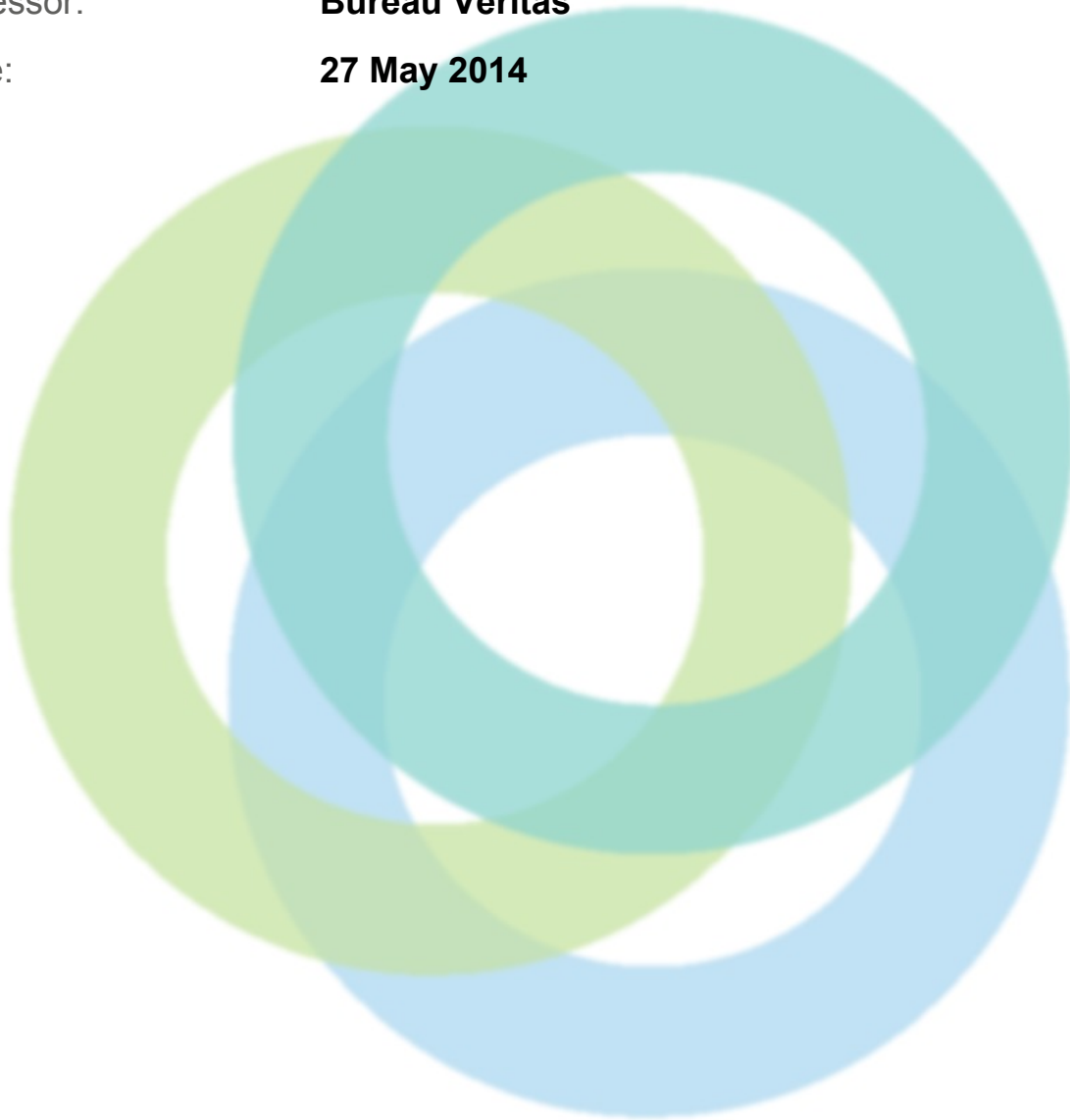


INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name: **KDS Fashion Ltd.**
Address: **253-254, Nasirabad I/A Baizid Bostami Road
Chittagong Chittagong Bangladesh**
Assessor: **Bureau Veritas**
Date: **27 May 2014**





Introduction to the Report

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

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

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





GENERAL INFORMATION

General Information	
Factory Name:	KDS Fashion Ltd.
Address:	253-254, Nasirabad I/A Baizid Bostami Road Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	06-12-2014
Final Report Date:	06-28-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are five buildings in the factory premises out of which one is main production building and four are ancillary buildings. The buildings are named as: 1) Seven story main production building , 2) Two story RCC utility building, 3) Single story maintenance and quality shed, 4) Single story security building, 5) Single story parking prefab shed.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	Information provided below as per following format: Highest occupied floor level [Height up to roof], Stories above grade, Stories below grade, Occupied level. 1) Seven story main production building: 23.47 m or 77 ft [26.51 m or 87 ft], 7, 0, 7. 2) Two story RCC utility building: 3.05 m or 10 ft above grade [6.09 m or 20 ft], 2, 0, 2. 3) Single story maintenance and quality shed: 30 cm or 1 ft above grade [3.05 m or 10 ft], 1, 0, 1. 4) Single story security building: 30 cm or 1 ft above grade [3.05 m or 10 ft], 1, 0, 1. 5) Single story parking prefab shed: At grade [3.05 m or 10 ft], 1, 0, 1.
Approximate Building Area (SF):	Total area of all buildings in the factory premises: 194220 sft. Building wise breakdown as follows: 1) Seven story main production building: 188200 sft (Ground floor: 26360 sft, 1st floor: 28900 sft, 2nd floor: 28900 sft, 3rd floor: 28900 sft, 4th floor: 28900 sft, 5th floor: 28900 sft, 6th floor: 17340 sft), 2) Two story RCC utility building: 2000 sft (Ground floor: 1000 sft, 1st floor: 1000 sft), 3) Single story maintenance and quality shed: 3500 sft, 4) Single story security building: 100 sft, 5) Single story parking prefab shed: 420 sft.
Date of Building Construction:	Factory personnel informed the date of construction as follows: 1) Seven story main production building: Finished in 2008, 2) Two story RCC utility building: Finished in 2008, 3) Single story maintenance and quality shed: Finished in 2008, 4) Single story security building: Finished in 2008, 5) Single story parking prefab shed: No information of construction date found.
Date of Last Building Renovation/Addition:	No record for date of renovation or addition was found from factory personnel.
Ancillary Structures in	1) Two Story RCC utility building, 2) Single story maintenance and quality shed, 3) Single story security



Complex:	building, 4) Single story parking prefab shed.
Approximate Ancillary Structures Area (SF):	1) Two story RCC utility building: 2000 sft (Ground floor: 1000 sft, 1st floor: 1000 sft), 2) Single story maintenance and quality shed: 3500 sft, 3) Single story security building: 100 sft, 4) Single story parking prefab shed: 420 sft.
Number of Occupants:	Total number of occupants: 2864. 1) Seven story main production building: 2817 (Ground floor: 105, 1st floor: 550, 2nd floor: 550, 3rd floor: 550, 4th floor: 550, 5th floor: 510, 6th floor: 2), 2) Two story RCC utility building: 15 (Ground floor: 10, 1st floor: 5, 3) Single story maintenance and quality shed: 30, 4) Single story security building: 02, 5) Single story parking prefab shed: 0.
Number of Ancillary Levels (Stories):	1) Two story RCC utility building: Building height (Highest occupied floor level): 3.05 m or 10 ft above grade [Height up to roof: 6.09 m or 20 ft], Stories above grade: 2, Stories below grade: 0, Occupied levels: 2, 2) Single story maintenance and quality shed: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 3.05 m or 10 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 3) Single story security building: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 3.05 m or 10 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 4) Single story parking prefab shed: Building height (Highest occupied floor level): At grade [Height up to roof: 3.05 m or 10 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1.
Occupancy Type:	1) Seven story main production building: [Ground floor: H2 (Main fabric & finished goods storage), F1 (office), B2 (day care), D1 (Medical room), 1st floor: G2 (Cutting, sewing, finishing), H2 (Storage), 2nd floor: G2 (Cutting, sewing, finishing), H2 (Storage), 3rd floor: G2 (Cutting, sewing, finishing), H2 (Storage), 4th floor: G2 (Cutting, sewing, finishing), H2 (Storage), 5th floor: G2 (Cutting, sewing, finishing), H2 (Storage), 6th floor: E3 (Dining), E4 (Prayer room), H2 (Paint storage), H2 (Wooden accessories storage)], 2) Two story RCC utility building: [Ground floor: K1 (Generator), K1 (Oil-filled transformer), K1 (Boiler), 1st floor: H1 (Electrical wastage materials storage), K1 (Compressor), K1 (Maintenance room), K1 (Electronic workshop), 3) Single story maintenance and quality shed: K1 (Workshop), H2 (Wastage storage), F1 (Inspection office), 4) Single story security building: F1 (Security station), 5) single story parking prefab shed: K1 (Parking).
Construction Type:	1) Seven story main production building: [Ground to 5th floor: Type 1 (RCC), 6th floor: Non-rated (Prefab roof)], 2) Two Story RCC utility building: Ground to 1st floor: Type 1 (RCC), 3) Single story maintenance and quality shed: Non-rated (Masonry construction with corrugated iron roof), 4) Single story security building: Type 1 (RCC), 5) Single story parking prefab shed: Non-rated (Prefab shed).
Height of Highest Occupied Floor Level Above Grade:	1) Seven story main production building: 23.47 m or 77 ft, 2) Two Story RCC utility building: 3.05 m or 10 ft above grade, 3) Single story maintenance and quality shed: 30 cm or 1 ft above grade, 4) Single story security building: 30 cm or 1 ft above grade, 5) Single story parking prefab shed: At grade



ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are openings and penetrations through rated walls and/or assemblies protected?	 
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Numerous unprotected openings and penetrations were found as follows: Door and windows of generator room, and door of boiler and oil-filled transformer room at ground floor of two story utility building are not protected. Door of main fabric and finished goods store near store office at ground floor, door and windows of accessories store near sewing section from 1st floor to 5th floor, door and window of dining near prayer room on 6th floor, door of wooden accessories storage near northwest stair on 6th floor, door of paint storage near east middle stair on 6th floor of 7 story main production building are not protected. Door of main fabric and finished goods store in 7 story main building near car parking shed is not protected.	
Source of Findings:	Photograph: Doors of generator, boiler and oil-filled transformer room, and windows of accessories store near sewing area are not fire separated., Visual Assessment: Doors and windows found unprotected for the occupancy at noted locations.	
Suggested Plan of Action:	Provide opening protective 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:	04 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:	Are exit enclosures provided with fire-resistive rated construction barriers?	 
Priority Level:	High	
Non-Compliance Level:	2	
Description:	There are 3 stairs in the 7 story main production building. Fire doors are installed in only south-west stair at exits of all floors. No fire doors are installed at exits of north-west and east-middle stairs in 7 story main production building. The doors located at southwest stair appear to be fire rated and a credible certificate is available for these fire doors, but no level markings are found. Exit enclosure is not required for 2 story utility building as it does not connect any hazardous occupancies and the building is 2 story only. Travel distance and occupant load also meet the requirement.	
Source of Findings:	Photograph: Unprotected exit enclosure and protected exit enclosure., Visual Assessment: Non-rated collapsible doors are found at northwest and east-middle stairs in all floors of main building. Fire door found in south-west stair.	
Suggested Plan of Action:	Provide 2 hr fire-resistive rated construction barriers at exit enclosures. Fit outward opening, side-swinging, self-closing, non-lockable fire doors of 1.5 hr rating in all stairwell enclosures. Consult a qualified fire protection engineer to design the required rated construction barriers.	



Suggested Deadline Date:	04 Oct 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are shafts provided with the minimum fire-resistance rating?	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	The cargo lift in 7 story main building is not fire separated from cutting section from ground to 5th floors, and the door of cargo lift is collapsible (not fire rated). Door of passenger lift is not fire rated in southeast corner at all levels of main production building, but since lift core is located inside the exit enclosure (staircase), it may be waived as this shaft will be fire rated if the exit enclosure is fire rated.	
Source of Findings:	Visual Assessment: Door of cargo lift found unprotected near cutting section.	   
Suggested Plan of Action:	Provide a shaft enclosure of required rating by constructing the enclosure with rated material of required thickness. Protect the openings of shaft enclosure by providing rated opening protectives.	
Suggested Deadline Date:	04 Oct 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5.7.1 through 4.5.7.3	
Question:	Are separations between hazards provided with fire-resistive rated construction barriers.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Door and windows of generator room, and door of boiler and oil-filled transformer room at ground floor of two story utility building are not protected. Door of finished goods and fabric store (main store) near store office at ground floor, accessories store and sewing section from 1st floor to 5th floor, door of cargo lift and cutting section from ground to 5th floor, dining and prayer room on 6th floor, door of wooden accessories storage near northwest stair on 6th floor, and door of paint storage near east-middle stair on 6th floor of 7 story main production are not separated by fire-resistive rated construction barriers. Car parking shed is not separated by fire-resistive rated construction barriers from main fabric and finished goods store at ground floor of 7 story main building and exit discharge of northwest staircase. There are non-rated steel doors in finished goods and fabric store (main store) near parking shed. Also, adequate provisions for carbon monoxide detection or removal are not provided in car parking shed.	
Source of Findings:	Photograph: Cargo lift and cutting section, car parking and main store, office & main store are not fire separated., Visual Assessment: Occupancy separations are not fire rated and the opening protectives are not fire rated as well at noted locations.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types following Table 4.4.1 of Alliance Standard or Table 4.1.1 from BNBC Part 4. Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum of 1 hour construction. Consult a qualified fire protection engineer to design the required rated construction barrier.	



Suggested Deadline Date:	27 Dec 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Certificates of Occupancy for each building have been issued and are on file.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	No occupancy certificate is available for any building in the factory premises.	
Source of Findings:	Document Review: There was no occupancy certificate for any of the buildings among the documents shown by the factory concerned people.	
Suggested Plan of Action:	Apply to Chittagong Cantonment Board for issuance of occupancy certificate and pursue the matter to expedite.	
Suggested Deadline Date:	23 Aug 2014	
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Fire Protection Systems		
Question:	Is the building protected by an automatic sprinkler system?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	The highest occupied level of the main building is 23.47 m (77 ft). The whole building needs to be protected by an automatic sprinkler system, but a sprinkler system is not provided. Automatic sprinkler systems are to be provided throughout the buildings with an occupied floor greater than 23 m (75 ft) above the finished grade. Other buildings and sheds are lower in height than 75 ft and do not require a sprinkler system.	
Source of Findings:	Visual Assessment: The height of the buildings were measured and it was realized that sprinkler system is required in the main building and no sprinkler system was found installed.	
Suggested Plan of Action:	Install an automatic sprinkler system throughout the building designed by a qualified fire protection engineer. The hydraulic design of the sprinkler system has to be pre-approved by CoE of 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 design requirements. Provide shop drawings and hydraulic calculations as outlined by NFPA. The test and performance report of the installed system must be submitted to Alliance for review. Final inspection and testing shall be witnessed by Alliance.	
Suggested Deadline Date:	27 Dec 2014	
Standard:	Reference Alliance Standards Part 3 Section 3.5.3 Existing Buildings, Part 5 Section 5.3 Automatic Sprinkler Systems and Section 6.13 Travel Distance	



Question:	Does the building have a fire pump?
Priority Level:	High
Non-Compliance Level:	3
Description:	Fire pump set is available with backup power, however it does not comply with the requirements of NFPA and Alliance Standards. Hydraulic calculation for required standpipe and sprinkler systems are not available. Therefore, required capacity of fire pump is not known. Suction lift is used whereas a suction head is required. Additionally, a detailed design of pump components and layout as per NFPA were not found.
Source of Findings:	Visual Assessment: Fire pump was found in the factory premises, but not as per NFPA.
Suggested Plan of Action:	Have a qualified engineer review the pump capacity and ensure hydraulic calculation is done which can be supported by this pump. Also, identify all other performance data and ensure conformity to NFPA standards.
Suggested Deadline Date:	09 Nov 2014
Standard:	Alliance Standard Part 5 Fire Protection Systems
Question:	Does the building have a Standpipe System?
Priority Level:	High
Non-Compliance Level:	2
Description:	Height of the highest occupied floor of the 7 story main production building is 23.47 m or 77 ft above grade. Therefore, a class I standpipe system along with automatic sprinkler system needs to be installed throughout the building. But only a class II standpipe system is installed in the main building. 4 class II standpipe hose connections (40 mm) are installed on each floor. There is no class-I standpipe hose connection (65 mm). There is no hydraulic design for the installed system. However, at roof hose pressure was sufficient.
Source of Findings:	Visual Assessment: Class II standpipe system was found in the building, but class-I hose connection not found.
Suggested Plan of Action:	Install NFPA-compliant standpipe system at required locations.
Suggested Deadline Date:	04 Oct 2014
Standard:	Does the building have a standpipe system installed where required. Alliance Standard Part 5 Section 5.4.2
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:	1
Description:	There is no pull station available on ground floor (generator room), and 1st floor (compressor room) of two story utility building. In generator room, a visible fire alarm is not installed. Pull stations, smoke detectors, visual and audible devices are placed in other locations but an approved shop drawing was not found.





Source of Findings:	Photograph: No pull station is found in compressor room., Visual Assessment: No pull stations available on ground floor (generator room) and 1st floor (compressor room) of two story utility building. Visible fire alarm is not installed in generator room.	
Suggested Plan of Action:	Provide an automatic fire alarm and detection system per the Alliance Standard. Install area smoke detectors throughout E, G2 and J occupancies per Section 5.7.3, except where sprinklers are installed throughout. 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.	
Suggested Deadline Date:	04 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	
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, both of which are required as per NFPA.	
Source of Findings:	Document Review: Document regarding monthly inspection, maintenance and testing procedure for fire extinguisher was found in the documents shown by the factory personnel but annual maintenance and testing of extinguishers record was not found. , Photograph: Inspection card of a fire extinguisher.	
Suggested Plan of Action:	Fire extinguishers are to be inspected, tested, and maintained in accordance with NFPA requirements.	
Suggested Deadline Date:	27 Dec 2014	
Standard:	NFPA 10 Chapter 7	
Question:	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Automatic fire alarm and detection system is available in the factory, but currently there is no monitoring company in Bangladesh. Fire service and civil defense is not capable of monitoring fire alarm and detection systems of the factories.	
Source of Findings:	Photograph: Automatic fire alarm and detection system., Visual Assessment: Fire alarm and detection system is not monitored centrally.	
Suggested Plan of Action:	Arrange for direct connection of the fire alarm system to a central monitoring station or Fire Service and Civil Defense. Until that time that monitoring can be set up, arrange a monitoring system using factory's own central detection	



	system and personnel. A person shall be assigned to contact the fire department in the event of fire alarm activation. An announcer shall be located in a constantly attended location (such as a fire control room) to alert this person.	
Suggested Deadline Date:	09 Aug 2014	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	
Question:	Are inspection, maintenance, and testing procedures of the standpipe and hose system documented and up to date? Including inspection and testing of hoses if provided.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	A class I standpipe system along with automatic sprinkler system is not installed in the building. Inspection, maintenance, and testing procedures for the installed class II standpipe and hose is not documented and up to date as per NFPA 14.	
Source of Findings:	Document Review: No document as per NFPA regarding inspection, maintenance and testing procedure of installed standpipe and hose system was found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Install a standpipe system at required locations designed by a qualified fire protection engineer and institute an inspection, testing and maintenance program for the system.	
Suggested Deadline Date:	27 Dec 2014	
Standard:	Reference NFPA 25 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2	
Question:	Is signage for the standpipe system installed at required locations and on required components?	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Class I standpipe system along with automatic sprinkler system is not installed in the building. Signage for the available class II standpipe system is not installed.	
Source of Findings:	Visual Assessment: No signage for the available class II standpipe system found.	
Suggested Plan of Action:	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.	
Suggested Deadline Date:	23 Aug 2014	
Standard:	Reference NFPA 14 Chapter 6	
Question:	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?	



Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Inspection, maintenance, and testing procedures for the installed fire pump are not documented and up to date as per NFPA requirements.	
Source of Findings:	Document Review: Relevant documents are not compliant with NFPA requirements.	
Suggested Plan of Action:	Once fire pump is installed, establish an inspection, testing, and maintenance program for the fire pump. Program must comply with NFPA 25.	
Suggested Deadline Date:	27 Dec 2014	
Standard:	Reference NFPA 25 Chapter 8 Fire Pumps	
Means of Egress		
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 arrangements at east-middle and northwest stairs.	
Source of Findings:	Photograph: Collapsible door with locking arrangement at northwest stair., Visual Assessment: Locking devices found at exit doors.	
Suggested Plan of Action:	Remove all hasps, locks, slide bolts, or other locking devices at the noted locations. Remove existing gates and doors in the means of egress including all locking devices. Install doors with approved panic hardware that cannot be locked in the direction of egress under any conditions.	
Suggested Deadline Date:	26 Jul 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	Doors along the path of egress have a minimum width of 0.8 m (32 in) and have required ratings.	
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Door widths are more than 0.8 m, but some doors have no required rating. Fire doors are installed in only south-west stair at exits of all floors. No fire doors are installed at exits of northwest and east-middle stairs in main production building. Visually the doors located at southwest stair are fire rated and they have a credible certificate available for these doors, but no level markings are found on these fire doors.	
Source of Findings:	Photograph: Collapsible door at east-middle stair., Visual Assessment: No fire doors found at north-west and east-middle stairs, but door widths are more than 0.8 m.	



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:	04 Oct 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:	2	
Description:	There are collapsible doors with locking arrangements at northwest and east-middle stairs.	
Source of Findings:	Photograph: Collapsible door at north-west stair., Visual Assessment: Collapsible doors found at northwest and east-middle stairs.	
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:	04 Oct 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
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:	East-middle stair and southwest stair of 7 story main production building terminate at a non-rated passageway besides which non-rated doors of main fabric and finished goods store, and non-rated walls of main fabric and finished goods store at top portion exist.	
Source of Findings:	Visual Assessment: East-middle stair and southwest stair of 7 story main production building found terminating at non-rated passageway.	
Suggested Plan of Action:	Construct rated exit passageways including walls, ceilings and floors rated equal to the exit served. Close unused openings. Install fire doors in doorways.	
Suggested Deadline Date:	04 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.14 Exit Enclosures	
Question:	Occupant loads are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Occupant loads are not posted in a conspicuous space near the main exits or	



	exit access doorways.	
Source of Findings:	Visual Assessment: Occupant loads were 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:	09 Aug 2014	
Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of Occupant Load	
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:	3	
Description:	No plan or record of conducting periodic tests of the emergency battery backup for illumination of exit signs 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. Since battery backup is used, these signs are required to be tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum of 90 minutes once per year.	
Suggested Deadline Date:	09 Aug 2014	
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.	
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:	3	
Description:	The main building has 7 stories, but doors are not provided with re-entry. Stair doors with re-entry are required in at least 2 floors. The buildings other than the main building are less than 4 story, therefore re-entry is not required for those buildings.	
Source of Findings:	Visual Assessment: No re-entry door was found in the main building.	
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, re-entry 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:	04 Oct 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	All paths of egress are provided with compliant means of illumination.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Aisles and stairways are provided with required means of illumination but emergency power is not provided for a sufficient number of bulbs. Therefore, in case of power failure or load shedding, all the paths of egress will not be illuminated as required.	
Source of Findings:	Visual Assessment: Aisles and stairways were found insufficiently illuminated while load shedding.	
Suggested Plan of Action:	Install emergency lighting for all paths of egress in accordance with Alliance Standard. Lights 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:	27 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:	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: Relevant documents regarding verification of emergency power for means of egress are not as per Alliance Standard.	
Suggested Plan of Action:	Verify emergency power for egress lights at least once per year. If battery operated lights are used, test them monthly. Perform annual functional testing of battery powered lights for at least 30 minutes. Ref. 10.12.2.3.	
Suggested Deadline Date:	09 Aug 2014	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	



Question:	Illuminated exit signs are placed at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Illuminated exit signs are placed at entrances to exits, but along the path of egress additional exit signs or directional signs are not provided where there is a change in direction and where the continuation of egress is not obvious.	
Source of Findings:	Visual Assessment: Directional exit signs were not provided where this is a change in direction of egress path.	
Suggested Plan of Action:	Install illuminated exit signs at entrances to exits and along the path of egress anywhere the continuation of egress is not obvious or there is a change in the direction of the path of travel.	
Suggested Deadline Date:	27 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	
Question:	Illuminated exit signs are provided with battery backup or emergency power and are continuously illuminated.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	The backup used does not provide sufficient illumination (50 lux at surface of exit sign).	
Source of Findings:	Visual Assessment: Insufficient illumination found in illuminated exit signs with IPS backup while load shedding.	
Suggested Plan of Action:	Provide an emergency power source, either by battery back up or by connecting to the emergency power system, for compliantly illuminated exit signs.	
Suggested Deadline Date:	27 Dec 2014	
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:	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:	No stairs in main building have handrails on both sides except the external steel stair at northwest side of the main building. Handrails are mounted at 36 inches in the stairs.	
Source of Findings:	Visual Assessment: Handrails are found provided on only one side of each stairway.	



Suggested Plan of Action:	Provide handrails on both sides of each stairway. Provide intermediate handrail when the stair width exceeds 2.2m (87 inch). Provide handrail of height between the range 865 mm (34 in.) and 965 mm (38 in.).	
Suggested Deadline Date:	27 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards	
Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Most of the exit signs do not have appropriate illumination levels and contrasting graphics.	
Source of Findings:	Visual Assessment: Exit signs found without appropriate illumination levels in some areas.	
Suggested Plan of Action:	Make sure all required exit signs are illuminated continuously at all times. Exit signs may be illuminated either by lamps external to the sign or by lamps contained within the sign. The source of illumination shall provide not less than 50 lux at the illuminated surface with a contrast of not less than 0.5. Approved self-luminous signs which provide evenly illuminated letters having a minimum luminance of 0.2cd/m2 may also be used.	
Suggested Deadline Date:	27 Dec 2014	
Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs	
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:	2	
Description:	Floor levels are posted but stair names or designations are not mentioned. Floor levels are not mentioned in Bengali as well.	
Source of Findings:	Visual Assessment: Stair designation was not found mentioned at each floor entrance from the stair to the floor.	
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level at the noted locations.	
Suggested Deadline Date:	09 Aug 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Fire Safety Programs		



Question:	Are the required number of people trained and certified in fire fighting, first aid, and rescue training by the appropriate authority.
Priority Level:	High
Non-Compliance Level:	2
Description:	Record kept by the factory shows that 53 workers had been trained in fire fighting, first aid, and rescue by BGMEA but no certificate has been issued.
Source of Findings:	Document Review: No certificate regarding fire training was found among the documents shown by factory personnel.
Suggested Plan of Action:	Train and certify at least 25 percent of workers in fire fighting, first aid and rescue by the proper authority.
Suggested Deadline Date:	27 Dec 2014
Standard:	Alliance Standard Part 13 Human Element Programs
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. A flow diagram was found showing emergency evacuation plan, but duties and responsibilities of various fire fighting groups was not specific floor-wise.
Source of Findings:	Document Review: Emergency evacuation plan was not found among the documents shown by factory personnel.
Suggested Plan of Action:	Develop an emergency evacuation plan which includes duties and responsibilities of various people/groups, interfacing between groups and fire brigade, headcount and identification of trapped victims, physically disabled people and their rescue, etc. The guideline of BNBC are in the Appendix.
Suggested Deadline Date:	09 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:	2
Description:	Fire drills are conducted quarterly in all buildings but not under the direction of a Fire Safety Director. Record of drills is not kept for the last 2 years. This does not meet the requirements of the Alliance Standard.
Source of Findings:	Document Review: Relevant documents regarding fire drills are not as per Alliance Standard.
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.	
Suggested Deadline Date:	09 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.3 Fire Drills	
Question:	Storage areas underneath the cutting tables are clear of combustibles.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Fabrics are stored underneath the cutting tables of cutting sections on 5th, 4th and 2nd floors of main building.	
Source of Findings:	Visual Assessment: Combustibles were found underneath the cutting tables.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations. Establish and enforce housekeeping policy to keep these areas continuously clear.	
Suggested Deadline Date:	06 Sep 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 was found for any training program in accordance with the Alliance Safety Training Curriculum.	
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:	09 Aug 2014	
Standard:	Alliance Standards Part 13	
Question:	Fire Department pre-planning has been completed.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	Fire department pre-planning was not found.	
Source of Findings:	Document Review: There was no fire department pre-planning documentation found among the documents shown by the factory concerned people.	
Suggested Plan of Action:	Complete fire department pre-planning activities with the local Fire Service and Civil Defense.	



Suggested Deadline Date:	09 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	A hot-work permit program has been established.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	Work involving welding, grinding, etc. is taking place on the premises, yet a hot-work permit program is not established.	
Source of Findings:	Document Review: No hot-work permit could be presented by the factory personnel	
Suggested Plan of Action:	Develop a NFPA-compliant hot-work permit program. In general, this program should address process of request and approval of authorities, necessary checks prior to 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:	27 Dec 2014	
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B	
Question:	A Fire Safety Director position has been filled.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	No record of filling the position of Fire Safety Director has been found. Factory authority informed that they have appointed a Fire Safety Officer, but detailed rules and responsibilities are not specified in appointment letter.	
Source of Findings:	Document Review: No record of filling the position of Fire Safety Director has been found.	
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. (4) Ensure all testing of fire protection equipment is conducted in accordance with Alliance Standard.	
Suggested Deadline Date:	27 Dec 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	



Question:	A written housekeeping policy is established and enforced.
Priority Level:	Low
Non-Compliance Level:	2
Description:	A written housekeeping policy was found, but it is not as per Alliance Standards.
Source of Findings:	Document Review: Housekeeping policy has been found among the documents shown by factory personnel, but not as per requirement.
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:	21 Mar 2015
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping
Question:	Are all applicable permits up to date including Fire License & Boiler License.
Priority Level:	Low
Non-Compliance Level:	2
Description:	Fire license does not cover total area of the buildings and shed. The fire license available covers an area of 186,045 sft, where constructed area is 194,220 sft. Trade license, factory license, boiler license, BERC license for 800 KW capacity generator, electrician license, boiler operator license are available and up-to-date. Building permit is available from Chittagong Cantonment Board on 12.09.2007 for 7 story industrial main building and ancillary buildings. Building permits are not available for single story security building and single story parking prefab shed.
Source of Findings:	Document Review: Fire license does not cover total area of the buildings and shed. Trade license, factory license, boiler license, BERC license for 800 KW capacity generator, electrician license, boiler operator license are available. Building permit not available for single story security building and single story parking prefab shed.
Suggested Plan of Action:	Update the fire license from the fire service and civil defense. Apply to Cantonment Board for approval of the unapproved prefab parking shed and the unapproved ancillary building.
Suggested Deadline Date:	09 Aug 2014
Standard:	Alliance Standard Part 13 Human Element Programs



Factory Name: **KDS Fashion Ltd.**
Address: **253-254, Nasirabad I/A Baizid Bostami Road Chittagong Chittagong Bangladesh**

Assessor: **Bureau Veritas**
Date: **27 May 2014**

