INITIAL FIRE ASSESSMENT REPORT (FAR)

Factory Name:	**Modiste (Bangladesh) Limited**
Address:	**51/C(A)BSCIC Fouzderhat Heavy Industrial Area,Sagorika Road, Chittagong Chittagong Chittagong 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.

GENERAL INFORMATION

General Information	
Factory Name:	Modiste (Bangladesh) Limited
Address:	51/C(A)BSCIC Fouzderhat Heavy Industrial Area,Sagorika Road, Chittagong Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	4100
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	05-26-2014
Final Report Date:	06-28-2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 6 buildings in the factory premises out of which two are main production buildings (connected by expansion joint) and four are ancillary buildings. The buildings are named as: 1) Three story RCC main production building, 2) Single story RCC production building with prefab shed on roof, 3) Two story RCC office building, 4) Single story RCC security building, 5) Single story generator shed, 6) Single story pump 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) Three story RCC main production building: 9.7 m or 31.83 ft [12.75 m or 41.83 ft], 3, 0, 3. 2) Single story RCC production building with prefab shed on roof: 3.96 m or 13 ft [9.65 m or 31.67 ft], 2, 0, 2. 3) Two story RCC office building: 2.69 m or 8.83 ft [5.39 m or 17.67 ft], 2, 0, 2. 4) Single story RCC security building: 15 cm or 0.5 ft above grade [2.34 m or 7.67 ft], 1, 0, 1. 5) Single story generator shed: 30 cm or 1 ft above grade [4.32 m or 14.17 ft], 1, 0, 1. 6) Single story pump shed: 30 cm or 1 ft above grade [3.66 m or 12 ft], 1, 0, 1.
Approximate Building Area (SF):	Total area of all buildings in the factory premises: 28536 sft. Building wise breakdown as follows: 1) Three story RCC main production building: 6441 sft (Ground floor: 2147 sft, 1st floor: 2147 sft, 2nd floor: 2147 sft), 2) Single story RCC production building with prefab shed on roof: 20624 sft (Ground floor: 10312 sft, 1st floor: 10312 sft), 3) Two story RCC office building: 884 sft (Ground floor: 442 sft, 1st floor: 442 sft), 4) Single story RCC security building: 97 sft, 5) Single story generator shed: 403 sft, 6) Single story pump shed: 87 sft.
Date of Building	Factory personnel informed the date of construction as follows: 1) Three story RCC main production building:

Construction:	Started in August-2013 and construction ongoing, 2) Single story RCC production building with prefab shed on roof: Started in January-1984 and finished in December-1985, 3) Two story RCC office building: Finished in June-1997, 4) Single story RCC security building: Finished in January-1997, 5) Single story generator shed: Finished in April-2014, 6) Single story pump shed: Finished in September-2013.
Date of Last Building Renovation/Addition:	Factory personnel informed the date of last building renovation as follows: 1) Three story RCC main production building: Vertical and horizontal extension is ongoing, 2) Single story generator shed: Finished in April-2014 but brick wall construction is ongoing.
Ancillary Structures in Complex:	1) Two story RCC office building, 2) Single story RCC security building, 3) Single story generator shed, 4) Single story pump shed.
Approximate Ancillary Structures Area (SF):	1) Two story RCC office building: 884 sft (Ground floor: 442 sft, 1st floor: 442 sft), 2) Single story RCC security building: 97 sft, 3) Single story generator shed: 403 sft, 4) Single story pump shed: 87 sft.
Number of Occupants:	Total number of occupants: 728. 1) Three story RCC main production building: 6 (Ground floor: 4, 1st floor: 0, 2nd floor: 2), 2) Single story RCC production building with prefab shed on roof: 710 (Ground floor: 260, 1st floor: 450), 3) Two story RCC office building: 8 (Ground floor: 2, 1st floor: 6), 4) Single story RCC security building: 2, 5) Single story generator shed: 1, 6) Single story pump shed: 1.
Number of Ancillary Levels (Stories):	1) Two story RCC office building: Building height (Highest occupied floor level): 2.69 m or 8.83 ft [Height up to roof: 5.39 m or 17.67 ft], Stories above grade: 2, Stories below grade: 0, Occupied levels: 2, 2) Single story RCC security building: Building height (Highest occupied floor level): 15 cm or 0.5 ft above grade [Height up to roof: 2.34 m or 7.67 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 3) Single story generator shed: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 4.32 m or 14.17 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1, 4) Single story pump shed: Building height (Highest occupied floor level): 30 cm or 1 ft above grade [Height up to roof: 3.66 m or 12 ft], Stories above grade: 1, Stories below grade: 0, Occupied levels: 1.
Occupancy Type:	1) Three story RCC main production building: [Ground floor: D1 (Doctor room), B2 (Child care), K (Compressor), 1st floor: K2 (PVC water tank), 2nd floor: E3 (Dining)], 2) Single story RCC production building with prefab shed on roof: [Ground floor: H2 (Storage), G2 (Cutting, finishing), K (boiler), 1st floor: G2 (Sewing, finishing)], 3) Two story RCC office building: [Ground floor: F1 (Office), 1st floor: F1 (Office)], 4) Single story RCC security building: F1 (Guard house & Fire control room), 5) Single story generator shed: K (Generator), 6) Single story pump shed: K (Fire pump room).
Construction Type:	1) Three story RCC main production building: Type 1, 2) Single story RCC production building with prefab shed on roof: [Ground floor: Type 1, 1st floor: Non-rated (Only ceiling)], 3) Two story RCC office building: Type 1, 4) Single story RCC security building: Type 1, 5) Single story generator shed: Non-rated, 6) Single story pump shed: Non-rated.
Height of Highest Occupied Floor Level Above Grade:	1) Three story RCC main production building: 9.7 m or 31.83 ft, 2) Single story RCC production building with prefab shed on roof: 3.96 m or 13 ft, 3) Two story RCC office building: 2.69 m or 8.83 ft, 4) Single story RCC security building: 15 cm or 0.5 ft above grade, 5) Single story generator shed: 30 cm or 1 ft above grade, 6) Single story pump shed: 30 cm or 1 ft above grade.

ASSESSMENT FINDINGS

Fire Protection Construction

Question:	Are exit enclosures provided with fire-resistive rated construction barriers?	
Priority Level:	High	
Non-Compliance Level:	3	
Description:	There are two stairways in the two story RCC main production building. The fire door installed on the 1st floor of the east (middle) exit stairway seems to be a fire door, however no credible certificate is available. The northwest stair is open to the floor. Based on the occupant load, both stairways need to be fire rated. Moreover, there is one stairway (southeast) available at the three story RCC main production building, but the door is found open to floor. An exit enclosure is not required for two story office building since there are no hazardous occupancy and the building is two stories.	
Source of Findings:	Visual Assessment: Exit enclosures were found unprotected.	
Suggested Plan of Action:	Provide 1 hr fire-resistive rated exit enclosure and construction barrier at exit enclosure. Fit side-swinging, self-closing, non-lockable fire doors of 1 hr rating in stairwell enclosure that swing in the direction of egress. Consult a qualified fire protection engineer to design the required rated construction barriers.	
Suggested Deadline Date:	01 Oct 2014	
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation	
Question:	Are openings and penetrations through rated walls and/or assemblies protected?	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Doors and windows of the finished goods store and the folding area at the northeast side in ground floor, boiler room and fusing area in the ground floor of the two story main production building are not fire protected.	
Source of Findings:	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 resistance rated opening protectives at all windows and other openings on all the fire rated wall across the entire premises. Close these openings if they are not required.	
Suggested Deadline Date:	01 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 separations between hazards provided with fire-resistive rated construction barriers.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Occupancy separations are not fire rated and the opening protectives are not fire rated as well. The finished goods store and folding area at northeast side are separated by a wire mesh wall on the ground floor. The finished goods store and embroidery section at north side of ground floor are separated by a glass wall in 3 story main production building.	
Source of Findings:	Visual Assessment: Occupancy separations were found not fire rated at noted locations.	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers between hazard types following Table 4.4.1 of Alliance Standard. Consult a qualified fire protection engineer to design the required rated construction barrier. Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum 1 hour construction.	
Suggested Deadline Date:	24 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 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 development authority for issuance of occupancy certificate and pursue the matter to expedite.	
Suggested Deadline Date:	20 Aug 2014	
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Fire Protection Systems		

Question:	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?	 
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Pull stations at egress points are not available on the 2nd floor of the three story main building and all floors of the office building. Smoke and heat detectors are not available on the 2nd floor of the three story main building. In the generator room, no visible fire alarm is installed.	
Source of Findings:	Visual Assessment: Pull stations, smoke detectors and visual alarms were not found as required.	
Suggested Plan of Action:	Install initiating devices and notification appliances as required by the Alliance Standard and NFPA 72. This includes electrical supervision of all valves controlling fire protection systems (sprinklers, fire pumps, water supplies, etc.). Connect devices to an automatic fire alarm and detection system for the facility. All fire alarm installations shall be submitted for review by the Alliance prior to commencement of installation.	
Suggested Deadline Date:	01 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 the 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 CO_2 extinguisher. These are required as per NFPA 10.	
Source of Findings:	Document Review: Document regarding annual maintenance and testing of extinguishers was not 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 requirements. Provide and maintain proper documentation.	
Suggested Deadline Date:	24 Dec 2014	
Standard:	NFPA 10 Chapter 7	

Question:	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?
Priority Level:	Medium
Non-Compliance Level:	1
Description:	An automatic fire alarm and detection system is available in the factory, but currently there is no monitoring company in Bangladesh. Fire service and civil defense is not also capable of monitoring fire alarm and detection systems of the factories.
Source of Findings:	Visual Assessment: The 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 as per Alliance Standard. Until that time that monitoring can be set up, arrange a monitoring system using factory's own central detection system and personnel. A person shall be assigned to contact the fire department in the event of fire alarm activation. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.
Suggested Deadline Date:	06 Aug 2014
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring

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:	2
Description:	At 1st floor of two story main production building, occupant load is 450, which is the maximum of all floors. The floor area is 958.36 m2, so space per occupant is 2.13 m2, which is less than required 2.3 m2 (25 sft) according to Alliance Standard. Available means of egress except the stair does not meet the requirement of this occupant load. Total width of aisles, exit doors and stairs are 13.56 m, 1.95 m amd 2.87 m, respectively, whereas required total widths for these means of egress are 2.25 m, 1.8 m and 3.6 m, respectively.
Source of Findings:	Visual Assessment: Number of occupants was counted from site. Widths of aisles, exit doors and stairs of the concerned floor were measured.
Suggested Plan of Action:	Reduce the number of occupants in this floor to the available capacity in respect to stair width and space per person. Alternatively, provide additional exit width to meet the requirement of total stair width.
Suggested Deadline Date:	23 Jul 2014
Standard:	Alliance Standard Part 6 Section 6.4 Occupant Load

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 0.8m. A door appearing to be a fire door is installed in the 1st floor of the east (middle) exit stairway, however, no credible certificate is available. Doors of the other stairway are rolling shutter types and open to the floor, therefore they have no required rating.	
Source of Findings:	Visual Assessment: Door widths are found more than 0.8 m, but have no required ratings.	
Suggested Plan of Action:	Replace non-compliant doors and frames in the means of egress with side-swinging doors. Replacement doors shall be a minimum width of 0.8 m (32 in), and are listed, approved, self-closing, fire rated door assemblies (door and frame) with latching panic hardware.	
Suggested Deadline Date:	01 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:	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:	The interior exit stairway from the southeast stair terminates at a non-rated exit passageway where the door & window of boiler room and window of production area (2 story main building) exist at the 3 story main production building and is not protected. The interior exit stairway from the northwest stair terminates at the exits' passageway where a window of the production area exists at the 2 story main building and is not protected, which violates the Alliance Standard.	
Source of Findings:	Visual Assessment: Interior exit stairways were found terminated at non-rated passageway.	
Suggested Plan of Action:	Provide a fire resistance rated exit passageway with protective opening assemblies of required rating as per Alliance Standard for exit stairs that do not discharge directly to the exterior.	
Suggested Deadline Date:	01 Oct 2014	
Standard:	Alliance Standard Part 6 Section 6.14 Exit Enclosures	
Question:	The path of egress along the means of egress is not reduced at any point along the path of travel and is sufficient for the occupant load.	

Priority Level:	High
Non-Compliance Level:	1
Description:	Total width of two stairways in the two story main production building is 2.72 m. Total width requirement for 450 occupants in the1st floor is 450X0.008=3.6 m. Available stair width does not satisfy this requirement of the Alliance Standard. The maximum number of occupants are on the 1st floor of two story main production building. Total exit door width requirement for 450 occupants in 1st floor is 450X0.004=1.8 m. Available exit door width in 1st floor is 1.95 m, which satisfies this requirement of the Alliance Standard. Total width of aisles is sufficient for the occupant load. The total unobstructed width of 13 aisles in this floor is 13.56m. The total required width of aisles is 2.25 m.
Source of Findings:	Visual Assessment: Widths of aisles, exit doors and stairs are measured on a sample basis.
Suggested Plan of Action:	Satisfy total width requirement for stairway as per BNBC and Alliance Standards. The number of occupants on the floor may need to be reduced or additional stair width provided. Required exit width per occupant for stairway is 8mm.
Suggested Deadline Date:	01 Oct 2014
Standard:	Alliance Standard Part 6 Section 6.5 Egress Width and BNBC Table 4.3.2
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:	1
Description:	On the 1st floor of the two story main production building, the highest occupant load is 450 and there are 2 means of egress satisfy the requirement. However, in the 3 story main production building there is only one staircase with one exit which does not satisfy the Alliance Standard. Two story office building satisfies the occupant load and travel distance with one means of egress.
Source of Findings:	Visual Assessment: The number of emergency exit doors were counted in different buildings.
Suggested Plan of Action:	Provide an additional exit staircase to meet the minimum requirement of exit at least 2 in the three story main production building.
Suggested Deadline Date:	01 Oct 2014
Standard:	Alliance Standard Part 6 Section 6.6 Number of 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:	1	
Description:	There are rolling shutter doors with locking arrangements at the ground floor of the two story main production building. This violates the Alliance Standard.	
Source of Findings:	Visual Assessment: Door were found with locking arrangements.	
Suggested Plan of Action:	Remove all locking devices from all egress doors and means of egress components in accordance with Alliance Standard Section 6.8. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	
Suggested Deadline Date:	23 Jul 2014	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
Question:	All doors in a means of egress are of the side-hinged swinging type.	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Doors in the means of egress at the ground floor of the two story main production building are steel rolling shutter and sliding type.	
Source of Findings:	Visual Assessment: All exit doors of ground floor were not of the side-hinged swinging type.	
Suggested Plan of Action:	Replace all sliding, roll-down gates and shutters in means of egresses with side-hinged swinging type doors of proper width and rating.	
Suggested Deadline Date:	01 Oct 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:	1	
Description:	The external steel staircase of the 2 story main building does not have a fire separation from the building beyond 10 feet of its span as required.	
Source of Findings:	Visual Assessment: No fire separation was found for the external staircase.	

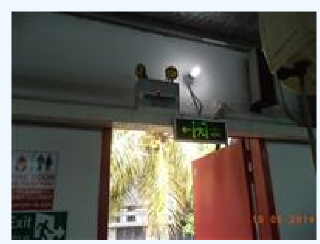
Suggested Plan of Action:	Provide a fire-resistive rated assembly between the exterior exit stairs and the building up to 10 ft beyond the end of the stair to achieve the required separation. The rated assembly should be approved and/or designed by a qualified fire protection engineer	
Suggested Deadline Date:	01 Oct 2014	
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:	Occupant loads are posted for every assembly and production floor in a conspicuous space near the main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Occupant loads are not posted in any assembly or production floor as demanded in Alliance Standard.	
Source of Findings:	Visual Assessment: No posted occupant load was found.	
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:	06 Aug 2014	
Standard:	Alliance Standards Part 6 Section 6.4.4 Posting of Occupant Load	
Question:	All paths of egress are provided with compliant means of illumination.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	All paths of egress are not provided with compliant means of illumination. Ordinary CFL bulbs are used as emergency lights, which do not provide sufficient illumination as required in accordance with Alliance Standard.	
Source of Findings:	Visual Assessment: Aisles and exit doors were found insufficiently illuminated while auditing.	
Suggested Plan of Action:	Install 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:	24 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 which is required as per Alliance Standards Part 10 Section 10.12.2.3.	
Source of Findings:	Document Review: No document regarding verification of emergency power for means of egress was found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for all egress lighting is verified at least once per year. If battery-operated lights are used, these lights shall be tested on a monthly basis. Functional testing of battery powered lights shall be provided for a minimum 90 min once per year.	
Suggested Deadline Date:	06 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 not placed at all of the entrances to exits, and along the path of egress additional exit signs or directional signs are not provided where there is a change in direction and where the continuation of egress is not obvious. This condition fails to satisfy the requirements of Alliance Standards.	
Source of Findings:	Visual Assessment: Illuminated exit signs were not found at required location.	
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:	24 Dec 2014	
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	

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:	The southeast stairway has no handrail at the ground floor and other stairs have a handrails on only one side. The minimum height of handrails are mounted is 32 inches in the southeast stairwell.
Source of Findings:	Visual Assessment: Handrails were not found on both sides of the stairs.
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:	24 Dec 2014
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards

Question:	Illuminated exit signs are provided with battery backup or emergency power and are continuously illuminated.
Priority Level:	Medium
Non-Compliance Level:	1
Description:	The backup used does not provide sufficient illumination (50 lux at surface of exit sign) required as per the Alliance Standard.
Source of Findings:	Visual Assessment: Visually it seems the backup used does not provide sufficient illumination (50 lux at surface of exit sign) required.
Suggested Plan of Action:	Provide an emergency power source, either by battery backup or by connecting to the emergency power system, for compliantly illuminated exit signs.
Suggested Deadline Date:	24 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:	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:	1
Description:	No record of testing emergency power for exit signs was found as required.

Source of Findings:	Document Review: No plan or record of conducting periodic test for the emergency battery backup of illumination of exit signs was found among the documents shown by the factory concerned people.	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for exit signs is tested at least once per year. If battery operated signs are used, these signs are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standard Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape.	
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:	3	
Description:	Floor level and stair name or designation is not posted.	
Source of Findings:	Visual Assessment: Floor level and stair designation signage was not found.	
Suggested Plan of Action:	Install signage adjacent to each stair door indicating the stair name and the floor level at the noted locations in both Bengali and English.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standard Part 6 Section 6.9 Stairs	
Question:	Exit signs have appropriate illumination levels and contrasting graphics.	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	All exit signs do not have appropriate illumination levels and contrasting graphics as required.	
Source of Findings:	Visual Assessment: Exit signs of lower illumination levels and contrasting graphics were found.	
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:	24 Dec 2014	

Standard:	Alliance Standard Part 10 Section 10.12.1 Exit Signs	
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:	3	
Description:	Document or certificate by appropriate authority for training on fire fighting, first aid and rescue is not available.	
Source of Findings:	Document Review: Document or certificate by appropriate authority for training on fire fighting, first aid and rescue was not available.	
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:	24 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:	3	
Description:	Workers are aware of the evacuation procedure upon sounding of the alarm. No procedure defining evacuation process was available.	
Source of Findings:	Document Review: Emergency evacuation plan was not found.	
Suggested Plan of Action:	Develop an emergency evacuation plan which includes all components required by the Alliance Standards and communicate the plan to all employees. The evacuation plan shall include provisions to assist physically disabled persons. A list of all employees with physical disabilities shall be kept by the Fire Service Director.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Training programs are implemented and documented in accordance with the Alliance Safety Training Curriculum.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	No document of any training program in accordance with the Alliance Safety	

	Training Curriculum found.	
Source of Findings:	Document Review: There was no training program in accordance with the Alliance Safety Training Curriculum found among the documents shown by the factory concerned people.	
Suggested Plan of Action:	Impart training in accordance with Alliance Safety Training Curriculum and keep record with proper documentation.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standards Part 13	
Question:	Emergency egress maps are posted at the entrance to each exit stair or main point of egress.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Emergency egress maps are not posted at the entrance to exit stairs on the southeast side in the 3 story main building on the 2nd floor, and are also insufficient in some floors near exits.	
Source of Findings:	Visual Assessment: Emergency egress maps were not found at the 2nd floor of the 3 story main production building.	
Suggested Plan of Action:	Post emergency egress maps/fire evacuation maps at the entrance to each exit stair or main point of egress.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standards Part 13 Section 13.4 Evacuation Plan	
Question:	Fire Drills are conducted at required intervals based on building use type.	 
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Fire drills are conducted monthly in the main buildings, but not under the direction of a Fire Safety Director. No detailed check list and plan found for fire drill.	
Source of Findings:	Document Review: No document regarding fire drill check list and presence of fire safety director has been found among the documents shown by the factory personnel.	
Suggested Plan of Action:	Fire drills are to be conducted 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 requirements.	
Suggested Deadline	06 Aug 2014	

Date:		
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:	1	
Description:	Fabrics are stored underneath the cutting tables of the cutting section on the ground floor of the 2-story main production building.	
Source of Findings:	Visual Assessment: Fabrics stored underneath the cutting table were found.	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables at the noted locations.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.	
Question:	A Fire Safety Director position has been filled.	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	No viable documentation and physical presence of Fire Safety Director was noted. However, factory has informed that they have a designated person for this.	
Source of Findings:	Document Review: No record of filling the position of fire safety director was 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 as outlined in Alliance Standard. (4) Ensure all testing of fire protection equipment is conducted in accordance with Alliance Standard.	
Suggested Deadline Date:	24 Dec 2014	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
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 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:	06 Aug 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:	3
Description:	A written housekeeping policy is not found, which is required as per Alliance Standards.
Source of Findings:	Document Review: Written housekeeping policy was not found.
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:	18 Mar 2015
Standard:	Alliance Standards Part 13 Section 13.6 Housekeeping
Question:	A hot-work permit program has been established.
Priority Level:	Low
Non-Compliance Level:	3
Description:	A hot-work permit program is not established.
Source of Findings:	Document Review: No hot-work permit was presented by the factory personnel.
Suggested Plan of Action:	Develop a hot-work permit program. The program must comply with NFPA 51B requirements. In general, this program should address the process of request and approval by authorities, necessary checks prior to approval, standby fire watch and fire fighting equipment, sounding of alarm procedure, duration and expiry of permit and reapproval procedure, etc.
Suggested Deadline Date:	24 Dec 2014
Standard:	Alliance Standards Part 13 Section 13.4 Hot Work Permit and NFPA 51B

Question:	Are all applicable permits up to date including Fire License & Boiler License.	   
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Building approval is not available for 2 story office building, pump room, generator shed, and security building in the existing approved plan from CDA. Waiver certificate from BERC is not available for 2 generators of total capacity 495 KW (220 KW & 275 KW). Factory license, trade license, boiler license, boiler operator license, fire licenses, electrician license are up-to-date.	
Source of Findings:	Document Review: BERC waiver certificate was not found and building approval (noted building) was not available.	
Suggested Plan of Action:	Apply to Bangladesh Energy Regulatory Commission (BERC) for waiver certificate. Apply to CDA for approval of the unapproved structure.	
Suggested Deadline Date:	06 Aug 2014	
Standard:	Alliance Standard Part 13 Human Element Programs	