INITIAL FIRE SAFETY ASSESSMENT

Factory Name:	**Refat Garments Ltd.**
Address:	**144-148, East Narashinghpur, Ashulia, Savar Ashulia, Savar Dhaka Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**14 Nov 2015**

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:	Refat Garments Ltd.
Address:	144-148, East Narashinghpur, Ashulia, Savar Ashulia, Savar Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Ashulia, Savar
Zip Code:	
Audit Duration:	2 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date:	11/17/2015
Final Report Date:	11/26/2015
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex:	There are 7 buildings, two Main and five Ancillary. 1. 6-Story Main Building; 2. 8-Story Main building; 3. Utility Building; 4. Compressor Building; 5. Fire Pump Building; 6. Medical Centre and Child Care Building; 7. Sub-station Building.
Is the building(s) owned or rented by the Factory:	Owned
Number of Building Levels (Stories):	1. 6-Story Main Building: 6 stories plus basement; 2. 8-Story Main building: 8 stories.
Approximate Building Area (SF):	Total area: 534,257 SF. 1. 6-Story Main Building: 322,450 SF (Basement to 5th: 46,000 SF per floor, Roof: 450 SF); 2. 8-Story Main Building: 207,707 SF (GF to 6th: 25,481 SF per floor, 7th: 26,077 SF); 3. Utility Building: 2000 SF. 4. Compressor Building: 650 SF. 5. Fire Pump Building: 250 SF. 6. Medical Centre and Child Care Building: 700 SF. 7. Sub-station Building: 500 SF.
Date of Building Construction:	1. 6-Story Main Building: started 2005, completed 2008; 2. 8-Story Main Building: started 2013, completed 2014; 3. Utility Building: 2011; 4. Compressor Building: 2015; 5. Fire Pump Building: 2014; 6. Medical Centre and Child Care Building: 2008; 7. Sub-station Building: 2008.
Date of Last Building Renovation/Addition:	1. 6-Story Main Building: Renovation work ongoing; 2. 8-Story Main Building: Renovation work ongoing.
Ancillary Structures in Complex:	There are five ancillary buildings. 1. Utility Building, 2. Compressor Building, 3. Fire Pump Building, 4. Medical Centre and Child Care Building, 5. Sub-station Building.

Approximate Ancillary Structures Area (SF):	1. Utility Building: 2,000 SF; 2. Compressor Building: 650 SF; 3. Fire Pump Building: 250 SF; 4. Medical Centre and Child Care Building: 700 SF; 5. Sub-station Building: 500 SF.
Number of Occupants:	Total occupants: 7,350. 1. 6-Story Main Building : 5,202 (Basement: 3, GF: 550, 1st: 1,132, 2nd: 664, 3rd: 1,064, 4th: 1045, 5th: 744, Roof: 0 with capacity for 50); 2. 8-Story Main Building: 2,131 (GF: 148, 1st: 10, 2nd: 10, 3rd: 350, 4th: 150, 5th: 450, 6th: 450, 7th: 563); 3. Utility Building: 3; 4. Compressor Building: 1; 5. Fire Pump Building: 1; 6. Medical Centre and Child Care Building: 10; 7. Sub-station Building: 2.
Number of Ancillary Levels (Stories):	All Ancillary Buildings are 1 story.
Occupancy Type:	1. 6-Story Main Building: G2 (RMG), H1 (Storage), H2 (Storage), K (Pump Room, Elect Room), J2 (Chemical Storage), F1 (Office), D1 (Medical Centre), E4 (Training Room); 2. 8-Story Main Building: G2 (RMG), H1 (Storage), H2 (Storage), K (Electrical Room), F1 (Office); 3. Utility Building : K (Boiler, Generator); 4. Compressor Building : K(Compressor); 5. Fire Pump Building : K (Fire Pump); 6. Medical Centre and Child Care Building : D1 (Medical Centre), B2 (Child Care); 7. Sub-station Building : K (Sub-station).
Construction Type:	1. 6-Story main building: Type-1; 2. 8-Story main building: Type-1; 3. Utility Building: Type-1; 4. Compressor Building : Type-1; 5. Fire Pump Building: Type-1; 6. Medical Centre and Child Care Building: Type-1; 7. Sub-station Building: Type-1.
Height of Highest Occupied Floor Level Above Grade:	1. 6-Story with basement main building: 21.90 m (71.8 ft); 2. 8-Story main building: 26.6 m (87.25 ft); 3. Utility Building: At grade; 4. Compressor Building: At grade; 5. Fire Pump Building: At grade; 6. Medical Centre and Child Care Building: At grade; 7. Sub-station Building: 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:	3
Description:	6 story main building: The door separating chemical storage from washing section at ground floor and door separating storage room from sewing section at 4th floor are not fire rated. Similar non-rated openings are also available on other floors. 8 Story Main Building: The door separating warehouse from belt section at ground floor and door separating finished goods area from production area at 3rd floor are not fire rated. Similar non rated openings are also available on other floors. It was evident during the assessment that the factory was already starting the installation work of the fire rated door for the finished goods area.
Source of Findings:	Photograph: Non rated openings
Suggested Plan of Action:	Provide fire-resistive rated opening or penetration protection for rated walls and assemblies in accordance with Alliance Standard Sections 4.6 and 4.7. Consult a qualified fire protection engineer to design the required opening or penetration protection systems.
Suggested Deadline Date:	08 Mar 2016
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:	2
Description:	Floors are separated by 240 mm rcc slab at 8 story main building and 225 mm rcc slab at 6 story main building, which may ensure required fire separation. But floor penetration made for electrical cables in basement is not fire protected. Similar penetrations made in electrical room of other floors are also not completely fire protected. Other buildings are single story building.
Source of Findings:	Photograph: Slab thickness and unprotected floor penetration.
Suggested Plan of Action:	Unprotected penetrations at noted locations shall be sealed following the requirements of Alliance Standard Section 4.7.
Suggested Deadline Date:	08 Mar 2016
Standard:	Reference Alliance Standards Part 4 Section 4.5 Separation



Question:	Are exit enclosures provided with fire-resistive rated construction barriers?
Priority Level:	High
Non-Compliance Level:	2
Description:	There are 5 stairs available in 6 story main building. Certified fire doors are installed at most exits. Unprotected penetration in stair-3 at basement floor and non-rated door from medical room in stair-1 was found in the same building. There are 3 stairs available in 8 story main building. Most of the exits are provided with non-rated door, though factory has already started the installation work of fire door.
Source of Findings:	Photograph: 1. Certified fire door 2. Non rated door from medical room 3. Non rated opening at basement 4. Non rated door at stair of 8 story building
Suggested Plan of Action:	Provide fire-resistive rated construction barriers and associated opening protection for exit enclosures in accordance with Alliance Standard Sections 4.5, 4.6, and 6.3.1.2. Consult a qualified fire protection engineer to design the required rated construction barrier and opening protection.
Suggested Deadline Date:	08 Mar 2016
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:	1	
Description:	Pump room at basement of 6 story main building is not fire separated from the adjacent storage area.	
Source of Findings:	Photograph: Non rated fire separation	
Suggested Plan of Action:	Provide fire-resistive rated construction barriers (with associated opening protection) between hazard types in accordance with Alliance Standard Sections 3.4 and 4.5. Consult a qualified fire protection engineer to design the required rated construction barrier.	
Suggested Deadline Date:	31 May 2016	
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:	3	
Description:	Occupancy certificate is not available for the buildings.	
Source of Findings:	Document Review: There was no occupancy certificate for the main building among the documents shown by the factory concerned people.	
Suggested Plan of Action:	Apply to appropriate authority in an expeditious manner for issuance of the Certificates of Occupancy for each building and ancillary structure according to building use.	
Suggested Deadline Date:	26 Jan 2016	
Standard:	Are certificates of occupancy provided for each building or ancillary structure?	
Fire Protection Systems		

Question:	Does the building have a Standpipe System?
Priority Level:	High
Non-Compliance Level:	1
Description:	No class-I hose connection is installed at stairwells of 6 story main building, but hose cabinet containing class-II hose connection along with hose reel is installed at stairwells as well as inside floors. Class-I hose connection along with hose reel is installed at stairwells and inside floors of 8 story main building. Plastic hose reels are also available in both buildings. Design documents approved by ACCORD for installed standpipe system is also available.
Source of Findings:	Photograph: 1. Class-II hose reel at stairwell in 6 story main building 2. Class-I hose connection along with hose reel in 8 story building 3. Approval drawing from ACCORD
Suggested Plan of Action:	For 6 story main building, install standpipe system at required locations in accordance with Alliance Standard Section 5.4 and NPFA 14. Standpipe system must comply with NFPA 14. The hydraulic calculations should be submitted and reviewed by Alliance prior to start of work. All standpipe system installation activities shall be submitted for reviewed by the Alliance prior to commencement of installation in accordance with Section 5.4.3.2.
Suggested Deadline Date:	08 Mar 2016
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:	Centralized addressable detection system is available in all floors except ground floor and basement of 6 story main building. Installation of detection system is currently under process in 8 story main building. Manual call point, P.A system, audible alarm and visual alarm are installed at required locations. Design of detection system is approved by ACCORD.
Source of Findings:	Photograph: 1. Smoke detectors 2. Call point and visual alarm 3. Design document
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 or modifications shall be documented with shop drawings and submitted for review by the Alliance prior to commencement of installation.
Suggested Deadline Date:	08 Mar 2016



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:	All valves controlling the automatic sprinkler systems are electrically supervised by a listed fire alarm system control unit.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Valves controlling the automatic sprinkler systems are not electrically supervised for either building.	
Source of Findings:	Photograph: No electrical supervision of valves	
Suggested Plan of Action:	Install initiating devices as required by the Alliance Standard and NFPA 72 for 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 or modifications shall be documented with shop drawings and submitted for review by the Alliance prior to commencement of installation.	
Suggested Deadline Date:	31 May 2016	
Standard:	Reference Alliance Standard Part 5 Section 5.3.5 Supervision and Alarms.	
Question:	Are hangers, bracing, and restraints properly installed and supporting the system piping?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Sagging was observed of sprinkler system piping at 6th floor of 8 story main building. In other floors the hangers or restraints supporting the sprinkler system piping seemed sufficient.	
Source of Findings:	Photograph: Sprinkler pipe sagging	
Suggested Plan of Action:	Modify the hangers, bracing, and restraint of sprinkler piping to meet the requirements of NFPA 13 chapter 9. Consult a qualified fire protection engineer to design the proper piping supports.	
Suggested Deadline Date:	31 May 2016	
Standard:	Reference NFPA 13 Chapter 9 Hanging, Bracing, and Restraint of System Piping.	

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:	1	
Description:	Minimum clearance from sprinkler deflector was not maintained on ground floor of 8 story main building.	
Source of Findings:	Photograph: Insufficient clearance from sprinkler deflector	
Suggested Plan of Action:	Provide proper clearance between storage and sprinkler deflectors in accordance with Alliance Standard Section 5.3.6.1.	
Suggested Deadline Date:	31 May 2016	
Standard:	Reference Alliance Standards Part 5 Section 5.3.6.1 Storage Clearance	
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:	Fire extinguishers in utility building were found to be placed on floor, but in other floors fire extinguishers were found to be installed at required locations and height.	
Source of Findings:	Photograph: Fire extinguishers	
Suggested Plan of Action:	Install fire extinguishers at locations and heights in accordance with BNBC Part 4 and NFPA 10.	
Suggested Deadline Date:	08 Mar 2016	
Standard:	BNBC Part 4 Section 4.10 and NFPA 10	
Question:	Fire extinguishers are inspected, tested, and maintained as required.	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Extinguishers are inspected monthly by factory personnel, but no document was found in support of i) annual maintenance of extinguishers by a servicing agent and ii) annual testing of nozzle of CO2 extinguisher. These are required as per NFPA 10.	

Source of Findings:	Photograph: Fire extinguisher maintenance record	
Suggested Plan of Action:	Install fire extinguishers at locations and heights in accordance with BNBC Part 4 and NFPA 10.	
Suggested Deadline Date:	31 May 2016	
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:	Centralized addressable fire alarm and detection system is available in the factory, but currently there is no monitoring company in Bangladesh. Fire service and civil defence is not also capable of monitoring fire alarm and detection systems of the factories.	
Source of Findings:	Visual Assessment: Fire alarm and detection system not monitored centrally.	
Suggested Plan of Action:	Arrange for direct connection of the fire alarm and detection system to a central station monitoring service or the Fire Service and Civil Defence as per Alliance Standard Section 5.7.5. Until that time, a person trained to contact the Fire Service and Civil Defence in the event of fire alarm activation shall be provided. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.	
Suggested Deadline Date:	12 Jan 2016	
Standard:	Alliance Standard Part 5 Section 5.7.5 Monitoring	
Question:	Are inspection, maintenance, and testing procedures of the sprinkler system documented and up to date?	
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	Inspection, maintenance, and testing procedures of the sprinkler system as per NFPA 25 chapter 5 Table 5.1.1.2 is not documented and up to date.	
Source of Findings:	Document Review: No document regarding inspection, testing and maintenance procedure of sprinkler system was found.	
Suggested Plan of Action:	Establish an inspection, maintenance and testing program for the sprinkler system. Program needs to comply with the requirements of NFPA 25.	
Suggested Deadline Date:	31 May 2016	

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:	2	
Description:	Identification signs for the sprinkler system were not found at all required locations.	
Source of Findings:	Photograph: No identification sign	
Suggested Plan of Action:	Provide identification signs with permanently marked water proof metal or rigid plastic for the required components of sprinkler system as per NFPA 13.	
Suggested Deadline Date:	26 Jan 2016	
Standard:	Reference NFPA 13	
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:	2	
Description:	Automatic sprinkler system in 6 story main building is provided with approved audible device activated by waterflow equal to the flow of one sprinkler. But no such device is available in 8 story main building since installation of automatic fire alarm and detection system is not yet complete.	
Source of Findings:	Photograph: Audible device activated by waterflow equal to the flow of one sprinkler	
Suggested Plan of Action:	Install an approved audible device connected to the automatic sprinkler system for each building. Activation of the waterflow shall activate the fire alarm system.	
Suggested Deadline Date:	31 May 2016	
Standard:	Reference Alliance Standards Part 5 Section 5.3.5.2 Alarms.	
Means of Egress		

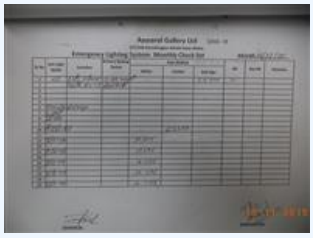
Question:	All doors in a means of egress are of the side-hinged swinging type.	 
Priority Level:	High	
Non-Compliance Level:	2	
Description:	Sliding doors are installed at ground floor of 8 story main building and also shutter type doors are installed at exits in basement of 6 story main building.	
Source of Findings:	Photograph: Sliding and shutter type doors	
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:	08 Mar 2016	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
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:	1	
Description:	Aisles were found to be obstructed in 3rd floor of 8 story main building. In other floors, aisles were found sufficiently wide and unobstructed.	
Source of Findings:	Photograph: Obstructed aisles	
Suggested Plan of Action:	Provide proper aisles marking (clear width minimum 36 in.) and keep aisles free of storage. Relocate the machines accordingly if necessary to provide proper width. The path of egress travel along a means of egress shall not be interrupted by any obstruction. The capacity of the means of egress shall not be reduced along the path of travel.	
Suggested Deadline Date:	08 Mar 2016	
Standard:	Higher occupancy loads will require a greater width to accommodate the increased load. Alliance Standard Part 6 Section 6.5 Egress Width	
Question:	Means of egress are free from impediments, obstructions, and stored materials.	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Aisles were found to be obstructed by stored materials in 3rd floor of 8 story main building.	
Source of Findings:	Photograph: Obstructed aisles	

Suggested Plan of Action:	Remove all impediments, obstructions, and stored materials from the means of egress. Keep all elements of the means of egress (exit path, aisles, stairs, corridors, etc.) continuously free and clear of all obstructions in accordance with Alliance Standard Section 6.3.9.	
Suggested Deadline Date:	08 Mar 2016	
Standard:	Alliance Standard Part 6 Section 6.3.8 Impediments to means of egress and Section 6.3.9 Reliability	
Question:	Doors are not locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices have been removed where required.	
Priority Level:	High	
Non-Compliance Level:	1	
Description:	Locking provision was found at exit doors in 5th floor of 8 story main building. Though factory authority is currently replacing non compliant doors with certified fire doors.	
Source of Findings:	Photograph: Locking provision	
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:	29 Dec 2015	
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:	1	
Description:	Doors are sufficiently wide, but not all doors have required ratings. Though factory authority is currently replacing non compliant doors with certified fire doors. UL certified and labeled fire doors have already been installed at some exits.	
Source of Findings:	Photograph: Exit doors and fire door certificate	
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:	08 Mar 2016
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:	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:	3
Description:	Handrails are available on both sides, but all stairs except stair-2 of 8 story main building are wider than 2.2 m and no intermediate handrail is available.
Source of Findings:	Photograph: No intermediate handrail
Suggested Plan of Action:	Provide intermediate handrail when the stair width exceeds 2.2m (87 inch).
Suggested Deadline Date:	31 May 2016
Standard:	Alliance Standard Part 6 Section 6.9 Stairs and 6.12 Handrails and Guards

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:	3
Description:	The slope of ramps on ground floor of 6 story building is steeper than 1:8. There is another ramp in ground floor of 8 story building, which is also steeper than 1:8 and also do not have handrail on both sides.
Source of Findings:	Photograph: Slope of ramp steeper than 1:8
Suggested Plan of Action:	Provide a new ramps with a running slope not greater than 1 in 12 (8 percent). Provided handrails on both sides of the ramp.
Suggested Deadline Date:	31 May 2016
Standard:	Alliance Standard Part 6 Section 10 Ramps

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:	Exit signs are placed at exits but additional directions signs are not placed in all floors of 6 story main building. Exit signs are placed at all required locations in 8 story main building.	
Source of Findings:	Photograph: 1. Exit signs at exit 2. No directional sign	
Suggested Plan of Action:	Provide continuously illuminated exit signs per Alliance Standard Section 6.11. Signs shall be placed at all required exits and along egress paths, especially where there is a change in direction for the path of travel.	
Suggested Deadline Date:	31 May 2016	
Standard:	Alliance Standard Part 6 Section 6.11 Exit Signs	
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:	Designation for stair re-entry provision is available in 6 story main building, but no re-entry provision is available in 8 story main building.	
Source of Findings:	Photograph: Stair re-entry	
Suggested Plan of Action:	Provide re-entry to floor levels from the stairwells in accordance with Alliance Standard Section 6.8.3.	
Suggested Deadline Date:	08 Mar 2016	
Standard:	Alliance Standards Part 6 Section 6.8 Doors and Gates	
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:	1	
Description:	Record of verifying emergency power for means of egress illumination was found. Emergency power is provided by either battery backup or IPS. No record of functional testing of battery powered lights was found during	

	assessment.	
Source of Findings:	Photograph: Maintenance record	
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:	12 Jan 2016	
Standard:	Alliance Standards Part 10 Section 10.12 Illumination of Exit Signs and Means Of Escape Lighting	
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:	Record of conducting periodic test for the emergency power of exit sign was found. But no record of functional testing of battery powered signs was found during assessment.	
Source of Findings:	Photograph: Maintenance record	
Suggested Plan of Action:	Develop a testing and maintenance program that ensures the emergency power for exit signs is verified at least once per year. If battery-operated signs are used, these signs shall be tested on a monthly basis. Functional testing of battery powered signs shall be provided for a minimum 90 min once per year.	
Suggested Deadline Date:	12 Jan 2016	
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 is mentioned but stair designation sign is not provided in all floors.	
Source of Findings:	Photograph: Floor level	
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:	12 Jan 2016	
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:	Exit sign on 4th floor of 8 story main building was not found to be compliantly illuminated.	
Source of Findings:	Photograph: Exit sign not illuminated	
Suggested Plan of Action:	Provide continuously illuminated exit signs at all required exits and along egress paths, especially where path has a change of direction. Exit signs may be illuminated either by lamps exterior to the sign or 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 0.2 cd/m2 may also be used.	
Suggested Deadline Date:	31 May 2016	
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:	2	
Description:	For Refat Garments Ltd 80 workers are trained out of 1,950 workers and has also applied to Fire Service and Civil Defence for the training of additional 40 workers. For Express Dyeing and Washing Ltd 40 workers are trained out of 1,100 workers.	
Source of Findings:	Photograph: Training record	
Suggested Plan of Action:	Provide training and certification for the required number of people (25% of total workers) in fire fighting, first aid, and rescue training by an appropriate authority in accordance with the Alliance Safety Training Curriculum.	
Suggested Deadline Date:	31 May 2016	
Standard:	Alliance Standard Part 13 Human Element Programs	

Question:	Storage areas underneath the cutting tables are clear of combustibles.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Combustibles stored underneath the cutting tables of cutting sections in both 6 story and 8 story main building.	
Source of Findings:	Photograph: Storage under cutting table	
Suggested Plan of Action:	Remove all combustibles stored underneath the cutting tables in accordance with Alliance Standard Section 13.7.2.	
Suggested Deadline Date:	15 Dec 2015	
Standard:	Alliance Standard Part 17 Section 13.7.2 Cutting tables.	
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: No document regarding fire department pre-planning was found among the documents shown by factory personnel.	
Suggested Plan of Action:	Complete Fire Department pre-planning activities with the local Fire Service and Civil Defence in accordance with Alliance Standard Section 13.1.1(2).	
Suggested Deadline Date:	12 Jan 2016	
Standard:	Alliance Standards Part 13 Section 13.1 Fire Safety Director	
Question:	Are all applicable permits up to date including Fire License & Boiler License.	 
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	Trade license and factory license was found valid and up to date. Fire license for Refat Garments Ltd is available for 1,81,000 sft and for Express Dyeing and Washing Ltd is available for 72,270 sft. Building was initially approved by Union Parishad and applied to RAJUK for further approval. BERC license was available for 4.2 MW. Boiler operator and electrician license was also found valid. Boiler license was not found during assessment.	
Source of Findings:	Photograph: 1. BERC License 2. Fire License 3. Boiler Operator License 4. Factory License	

Suggested Plan of Action:	Get boiler license from the Chief Inspector of Boiler Department.
Suggested Deadline Date:	12 Jan 2016
Standard:	Alliance Standard Part 13 Human Element Programs