

FIRE SAFETY INSPECTION REPORT

Liz Knitting & Printing Industry

RSC ID: 24319

Google Coordinate: 24.032083, 90.270158

Holding-1, Block-C, Shaheed Mosharaf Hossain Road, Purbo Chandora, Sofipur, kaliakoir, Gazipur.

Other Factories in the premises:

10228-LIZ FASHION INDUSTRY LTD. (Shafipur Unit) and 11250-HMN Fashion Ltd



Inspected By: Md. Ferdaus Jaman and Md. Zahidul Islam

Date: 28-FEB-2022

Fire Safety Inspection Report

Liz Knitting & Printing Industry

Introduction:

Liz Knitting & Printing Industry complex was surveyed for fire safety on 28/02/2022 by The RSC Inspection Team. The purpose of the survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the Accord. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The inspection did not include identification of minor deficiencies, which will be further addressed as part of follow-up inspections.

Limitations

The information in this fire safety inspection report was obtained during a visit to the facility and during interviews with local factory management. It has not been possible to provide independent verification for all the information and data collected, and, therefore, The Accord cannot accept general responsibility for omissions or errors arising from inaccuracies in this report from the information obtained.

The findings and recommendations in this report are not intended to imply, guarantee, ensure or warrant compliance with any government regulations. Additionally, the results do not imply in any way that compliance with the findings or recommendations as stated in this report will eliminate all hazards, risks or exposures or that hazards, risks or exposures not referred to in this report do not exist. Compliance with the findings and recommendations stated in this report does not relieve the factory owner from obligation to comply with specific project requirements, industry standards, or the provisions of any local government regulations.

Findings & Recommendations :

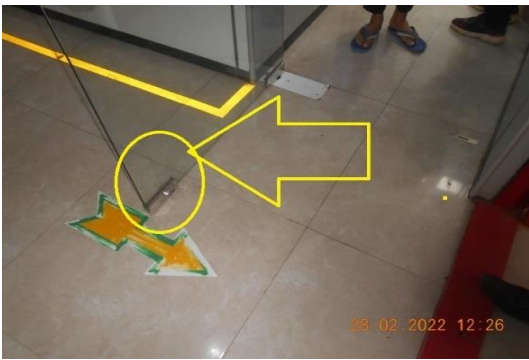
The below table summarizes the major fire safety issues identified during the inspection of all building. Recommendations have been provided to address each issue. An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for approval.

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-01	Fire Rated Construction	Building-01: The exit stairs are not separated from [work areas, other spaces] on each floor by fire-rated construction.	Provide minimum 2-hr fire rated construction for buildings 4 storied or more and 1-hr for upto 3 storied. Seal all unprotected openings to separate the exit stairs from work areas and other spaces on all floor levels by 90 minutes for 2 hr construction and 60 minutes for 1-hr construction. Ensure that the fire rated doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors and provide vestibules to avoid direct discharge from storage to exit stair enclosure. If fire rated doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system. Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets ACCORD standard 6.8.3.1 If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-02	Fire Rated Construction	Rooms used for combustible storage are not separated by fire rated construction. Location: Finished goods store on 1st floor.	Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 0.75 hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-03	Fire Rated Construction	Elevator shaft is not separated by proper fire rated construction (openings, non-rated doors, penetrations)	Provide a minimum 2-hr fire rated elevator shaft to separate it from each floor. Seal and/or protect all openings to maintain fire separations	Within 3 months
				

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-04	Fire Rated Construction	Penetrations through floor/ceiling assemblies are found unsealed on several floors.	Seal all penetrations and openings in floor/ceiling (full thickness of the floor/ceiling) assemblies by fire rated materials to maintain the fire resistance rating. Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months
				
F-05	Fire Rated Construction	Unsealed penetrations and openings are located in the exit stair enclosures. Location: Stair-1 on ground floor.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separations.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
		 		
F-06	Egress	Egress doors/gates with locking features not complying with NFPA101 are provided at building exits, exit stairs, along egress routes, exit discharge.	Remove locking features from all egress doors/gates. If locks are required for security reasons, utilize specialized door locking features complying with NFPA101.	Immediately
		  		

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-07	Egress	Exit stair door/egress door serving 50 or more occupants does not swing in the direction of egress travel.	Modify the egress door to swing in the direction of egress travel.	Within 1 month
				
F-08	Egress	Doors are swing out over the aisles or egress paths on 4th floor of building-1.	Modify the egress doors and ensure unobstructed aisles or egress paths.	Within 1 month

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-09	Egress	Building did not have stair designation signs or occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month
F-10	Fire Alarm & Detection system	Fire detection system installation requires detailed review to confirm compliance with NFPA 72 and Accord Standard.	Submit as build drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Design within 4 months, Install within 6 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-11	ITM of Fire Alarm & Detection system	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72 and ACCORD standards.	Within 1 month (after installation)
F-12	Fire Protection System	The existing factory building with an occupiable floor greater than 10 m (33 ft) above the finished grade requires detailed review to confirm compliance with NFPA 14, 20,22 and Accord Standard.	Provide standpipe system throughout the building in accordance with NFPA 14, 20, 22 & Accord standard.	Design within 4 months, Install within 6 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-13	ITM of Fire Protection System	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 and ACCORD standards (After installation).	Within 1 month (after installation)
F-14	ITM of Fire Extinguishers	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10 and ACCORD standards.	Within 3 month
F-15	Fire Protection System	The required no smoking signs are not present in the factory	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 month

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-16	ITM of Emergency light and Exit Sign	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 3 month
F-17	Fire Rated Construction	Building-02 The exit stairs are not separated from [work areas, other spaces] on each floor by fire-rated construction.	Provide minimum 2-hr fire rated construction for buildings 4 storied or more and 1-hr for upto 3 storied. Seal all unprotected openings to separate the exit stairs from work areas and other spaces on all floor levels by 90 minutes for 2 hr construction and 60 minutes for 1-hr construction. Ensure that the fire rated doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors and provide vestibules to avoid direct discharge from storage to exit stair enclosure. If fire rated doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system. Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets ACCORD standard 6.8.3.1 If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-18	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: On 3rd and 5th floor.	Provide defined storage areas and limit the storage arrangement as follows: - 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. - or 3. Enclose the storage area from the surrounding occupancy with a minimum 1-hour construction.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
		 		
F-19	Fire Rated Construction	Penetrations through floor/ceiling assemblies are found unsealed (sanitary pipe, expansion joint).	Seal all penetrations and openings in floor/ceiling (full thickness of the floor/ceiling) assemblies by fire rated materials to maintain the fire resistance rating. Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-20	Fire Rated Construction	The exit discharge path (between building-2 and shed) serving the south-west exit stair is less than 10 ft. wide and is not separated from the building interior.	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft., to provide a minimum 1-hr fire separation. Or, Alternatively, provide a second remote discharge path to the public way .	Within 6 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-21	Fire Rated Construction	The exterior exit stair is not separated from the building. Location: Building-02	Exterior exit stairs shall be separated by minimum 2-hr fire-rated construction and The rating of the exterior wall shall extend 3.05 m (10 ft.) beyond the ends of the stair structure.	within 3 months
 				

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-22	Fire Alarm & Detection system	Fire detection system installation requires detailed review to confirm compliance with NFPA 72 and Accord Standard.	Submit as build drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Design within 4 months, Install within 6 months
				
F-23	ITM of Fire Alarm & Detection system	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72 and ACCORD standards.	Within 1 month (after installation)

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-24	Fire Protection System	The existing factory building with an occupiable floor greater than 10 m (33 ft) above the finished grade requires detailed review to confirm compliance with NFPA 14, 20,22 and Accord Standard.	Provide standpipe system throughout the building in accordance with NFPA 14, 20, 22 & Accord standard.	Design within 4 months, Install within 6 months
				
F-25	ITM of Fire Protection System	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 and ACCORD standards (After installation).	Within 1 month (after installation)
F-26	ITM of Fire Extinguishers	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10 and ACCORD standards.	Within 3 month

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-27	ITM of Emergency light and Exit Sign	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 3 month

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-28	Structural Fire Protection	Building-03 Since the structure is steel-composite type and all the RCC panels are resting on the steel columns and the guarders. Hence, each floor of the building is not separated by a fire resistive rated construction barriers.	Provide fire resistive construction barriers between floors following section 4.4 and table 4.4.1 of the ACCORD standard or table 3.3.1 and table 4.1.1 from BNBC part 4. Consult a qualified fire protection engineer to design the rated construction barriers.	Design within 4 months, implementation within next 6 months
				
F-29	Egress	Egress doors/gates with locking features not complying with NFPA101 are provided at building exits, exit stairs, along egress routes, exit discharge.	Remove locking features from all egress doors/gates. If locks are required for security reasons, utilize specialized door locking features complying with NFPA101.	Immediately
F-30	Egress Lighting (ITM)	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 1 month

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-31	Fire Alarm & Detection System (FADS)	Fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review. Modification (if required) shall have to be done as per the reviewed design and NFPA-72. Upon review & modification (if required) the owner shall verify the system by himself and apply RSC for final acceptance testing.	Design within 4 months, Install within 6 months
 The first photograph shows a Simplex 4100 fire alarm control panel with a digital display and various buttons. The second photograph shows a red manual fire alarm pull station with a 'PULL DOWN' label. The third photograph shows a manual fire call point with a label 'LS-SP-117'.				
F-32	ITM of Fire Alarm & Detection System (FADS)	Inspection, testing, and maintenance for the fire detection system is not in accordance with NFPA 72.	Inspect, test and maintain the fire detection system, and keep written records on-site, in accordance with NFPA 72.	Within 1 month (After installation)