

INITIAL FIRE SAFETY INSPECTION REPORT

Mazib Fashions Ltd.

RSC ID: 24077

Mizmizi, Siddhirganj, Narayanganj

Geographical Coordinates of factory building: 23°41'03.5"N 90°30'52.2"E

Other Factories: None



Inspected By: Yusuf Ahmed and Tanvir Jubayer Rahman

Date: 09-September-2024

Fire Safety Inspection Report

Mazib Fashions Ltd.

Introduction:

The **Mazib Fashions Ltd.** complex was surveyed for fire safety on **09-September-2024** 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 RSC. 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 RSC 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.

General Factory Information

SI No	Building Name & Description	Construction History	Period
1	Building-1: Main Building 6 storied RCC building and roof top steel shed Total Approx Area: 51,500 Sft Note: The factory has approval for 8 storied RCC building.	Construction Start: December 2014 Construction End: December 2017 Date of first Operation: January 2018 Building Approval: December 2014 (Rajuk)	Interim Construction
2	Building-2: Warehouse Building 2 storied RCC building and roof top steel shed Total Approx Area: 14,700 Sft	Construction Start: May 2021 Construction End: June 2022 Date of first Operation: July 2022 Building Approval: April 2021 (Rajuk)	New Construction
3	Building-3: Utility Building 1 storied RCC building and roof top steel shed Total Approx Area: 14,700 Sft	Construction Start: January 2018 Construction End: December 2018 Date of first Operation: January 2019	Interim Construction

Factory Address: Mizmizi, Siddhirganj, Narayanganj

Other RSC ID in the premises: None

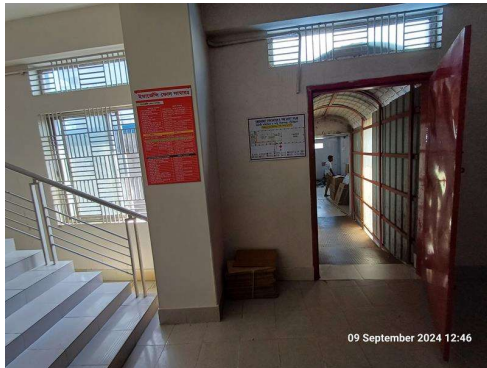
Findings & Recommendations :

Table 1 summarizes the major fire safety issues identified during the inspection of main 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.

Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-01	Fire rated Construction	Areas used for combustible storage are open to the factory floor area and are not separated by fire rated construction. Location: 5th floor of Building-1	Provide dedicated storage rooms separated by a minimum 1-hr fire-rated construction. Provide minimum 0.75 hr. fire rated doors and seal all penetrations and openings by 1 hr. fire rated barrier construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - - Maximum height of 2.45m (8ft.) , maximum area of 23m2 (250 ft2) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. - If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m2 (1000 ft2) and and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage.	Within 1 month
 				

F-02	Means of egress	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction due to unprotected openings, non rated doors and non-functional fire rated doors. Building-1 is connected with Building-2 by connecting bridge and not seperated by fire rated construction. Location: Building-1, Building-2 & Building-3	The exit stair enclosure shall be provided with a minimum 1-hr fire resistance rating for buildings with 3 or fewer stories and a minimum of 2- hr. fire resistance rating for buildings 4 or more stories. Provide a minimum 1-hr. fire rated door and seal all penetrations and openings by 1-hr. fire rated barrier construction for building with 3 or fewer stories. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated barrier construction for building with 4 or more stories. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. 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
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F-03	Fire rated Construction	Storage rooms discharges directly into exit stair enclosure without vestibules. Location: Building-1 (ground floor) Building-2 (Ground floor and First Floor) Building-3 (First floor)	Openings from the exit enclosure to the storage room, shall be provided with a vestibule with fire-rated construction and openings. Provide a minimum 1.5 hr. fire rated door on the exit stair side and a minimum 0.75- hr. fire rated door on the storage room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure. The minimum width for vestibules shall not be less than 1.1 m and length 1.8 m.	Within 3 months
				
F-04	Fire rated Construction	Unsealed penetrations and openings due to plastic sanitary pipe and electrical busbar risers are located in the fire-rated floor/ceiling assemblies in many places through out the building. Location: Building-1	Provide a minimum 2-hr fire-rated shaft to separate the sanitary pipe and electrical busbar riser from each floor level. or, Seal all penetrations and openings in floor/ceiling assemblies by 3-hr fire rated listed/certified materials. The installation of such fire-rated materials shall be following certified design.	Within 3 months
				

F-05	Fire rated Construction	Elevator shafts are directly open into exit enclosure which is a violation of RSC Standard-6.14.3. Location: Building-1, Stair-2. Note: Lift core was found inside stair 1 and will require separation in future if lift is installed.	An exit stairway shall not be built around a lift shaft unless both are located in a smoke-proof enclosure and made of a material with a fire-resistance rating required for the type of construction of a smoke-proof enclosure. (As per 6.14.3 of RSC Technical Guidelines (Standard) V1.0) Ensure the lift shaft is enclosed by a minimum 2-hour fire-rated wall with a minimum 1.5-hr fire-rated protective openings. Recommended to follow RSC "SUPPLEMENTARY PAPER ON REMEDIATION GUIDANCE ELEVATOR OR LIFT SHAFT OPENING IN EXIT ENCLOSURES" for remediation.	Within 3 months
 				
F-06	Fire rated Construction	The main structural element of the Dining shed located on the roof top of Building-1, (Main production building) and the Prayer room located on the roof top of Building-3 (Utility Building) are constructed by steel which is non-rated & the steel members were found in exposed conditions without any fire protection.	For interim construction, the building shall be Type 1 or Type 2 construction as required in BNBC 2006 Part 3 Table 3.2.4. So, provide require rating for the structural elements of the building following BNBC 2006-Table 3.2.4, 3.1.9 and 3.3.1. Factory shall ensure that, all the design, data sheet, certificate, and the design-philosophy has been reviewed by the RSC prior to install the structural fire protection system.	Within 6 months
 				

F-07	Fire rated Construction	The main structural element of the Packing Shed located on the roof top of Building-2 (Warehouse Building) is steel which is non-rated & the steel members were found in exposed conditions without any fire protection.	For new construction, the building shall be Group 1 or Group 2 construction as required in BNBC 2020 Part 3 Table 3.2.4. So, provide required rating for the structural elements of the building following BNBC 2020-Table 3.2.4, 3.1.7 and 3.3.1 Factory shall ensure that, all the design, datasheet, certificate, and the design-philosophy has been reviewed from the RSC prior to install the structural fire protection system.	Within 6 months
 				
F-08	Fire rated Construction	Prayer room is not separated by fire-rated construction from combustible storage area. Location: Building-3, 1st floor.	Separate the prayer room from the storage occupancy by minimum 3 hr. fire rated construction with minimum 3-hr rated opening protection. Seal and/or protect all openings to maintain the required fire separations.	Within 3 months
 				

F-09	Fire rated Construction	The childcare room (C1) and the Medical Room (D1) is not seperated from the Gray Fabric Store (H2) by fire rated construction. Location: Building-1, ground floor.	Separate the Childcare Room and the Medical Room from the Gray Fabric Store by a minimum 4-hr fire rated construction. No opening assembly is permitted in a 4-hr fire rated wall.	Within 2 months
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F-10	Fire rated Construction	Unsealed penetrations and openings are located in exit stair enclosures from the finished goods storage area. Location: Building-1, Stair-3, ground floor.	Seal all penetrations and openings in exit stair enclosure walls to maintain minimum 2 hrs. fire separations.	Within 3 months
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F-11	Fire rated Construction	Office section (F1) is not separated from the sewing section (G2) by fire rated construction. Location: Building-1, 1st floor.	Separate the Office section from the Sewing section by a minimum 3-hr fire rated construction with 3-hr fire rated opening protective assemblies. Seal/protect all penetrations to maintain the fire separation.	Within 3 months
 				
F-12	Fire rated Construction	Rooms used for combustible storage are not separated by fire rated construction from the knitting section. Location: Building-2, ground floor.	Separate the storage room from the knitting section by a minimum 1-hr fire rated construction. Seal/protect all unprotected openings to maintain the fire separation.	Within 3 months
 				

F-13	Fire rated Construction	The substation room is not separated by fire rated construction due to unprotected openings from adjacent storage area. Location: Building-3, ground floor.	Separate the substation room by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations.	Within 3 months
				
F-14	Means of Egress	Occupiable roofs were provided with parapets, but the parapet heights were found to be less than 42 inches. Location: Building-1, Building-2 & Building-3	Provide parapets for occupiable roofs with a minimum height of 1067mm (42 inch.).	Within 1 month
				

F-15	Means of Egress	Guards were provided for the open sides of the steel stair but the guard height was found to be less than 42 inches. Location: Building-2	Provide guards with a minimum height of 1067mm (42 inch.). Open guards shall have intermediate rails or pattern such that a sphere 200 mm (8 in.) in diameter cannot pass through any opening up to a height of 865 mm (34 in.).	Within 1 month
				
F-16	Means of Egress	Due to the projections (steel rods) from the ceiling the headroom clearance was found to be less than 2.03 meter (6 ft 8 in.) Location: Building-1, stair-3 roof top.	All means of egress shall have a minimum ceiling height of 2.3 m (7 ft 6 in.) with projections from the ceiling not less than 2.03 m (6 ft 8 in.). The minimum ceiling height shall be maintained for at least 2/3 of the space or room as long as the remaining area shall be not less than 2.03 m (6 ft 8 in.). Headroom on stairs shall not be less than 2.03 m (6 ft 8 in.).	Within 1 month
				

F-17	Means of Egress	The prayer room located at the roof top of Building-3 has a single exit which discharges inside the storage area.	The prayer room shall be provided with at least two means of exits leading directly to the street or leading to a corridor or open space having access to exits in two independent and different directions.	Within 2 months
  				
F-18	Means of Egress	Widths of exit stairs were found to be less than 1.5 m (60 in.). Location: All stairs of Building-1 & Building-2	In interim construction and for newly constructed stairs, stairs shall have a minimum width of 1.50 m (60 in.) for all industrial occupancies according to The RSC Technical Guidelines (Standard).	Within 3 months
  				

F-19	Means of Egress	Sliding doors are provided at building exits, exit stairs, along egress routes which includes but not limited to the following locations. Locations: Accessories store, 1st floor of Building-1; Prayer room, roof top of Building-3; Final exits to the street and exit enclosure on the ground floor of Building-1, Building-2 and Building-3.	Replace all collapsible gates/ sliding doors/ rolling shutter doors along the means of egress with side-hinged, swinging egress doors. If locks are required for security reasons, utilize specialized door locking features complying with NFPA101.	Within 1 month
				
F-20	Means of Egress	Building did not have stair designation signs and occupant load signs at required locations on all floors. Location: Building-1, Building-2, Building-3	Stair designation signs shall be provided at each floor entrance from the stair to the floor in English and Bengali. Signs shall indicate the name of the stair and the floor level. Signs shall be posted adjacent to the door. The occupant load shall be posted for every assembly and production floor in a facility in a conspicuous space near the main exit or exit access doorway for the space.	Within 1 month
F-21	Emergency Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs on all floors. Location: Building-1, Building-2 and Building-3	Test the emergency lighting system on each floor and provide additional emergency fixtures to supply adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and along exit discharge paths and a minimum 2.5 lux along exit access aisles.	Within 1 month

F-22	Emergency Lighting	The directional signs are not provided where there is a change in direction and where the continuation of the egress path is not obvious. Location: Building-1, 1st floor, office section.	Illuminated directional signs shall be provided where there is a change in the direction for the path of travel and the direction to an exit is not obvious.	Within 1 month
				
F-23	Emergency Lighting	Several exit signs were found non-illuminated (burned out, broken, etc.). Location: Building- 1, dining area and Building-2 storage area.	Provide exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious. Lighted exit signs shall be provided with either battery backup or uninterruptable power supply systems and shall be continuously illuminated.	Within 1 month
 				

F-24	Emergency Lighting	Exit signage was not provided above the door to the exit stair. Location: Building-1, 1st floor, exit stair-1	Provide exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious.	Within 1 month
				
F-25	Emergency Lighting	Manual on-off switch is provided for exit sign of roof top and emergency light on the stairs of Building-1.	Remove manual on/off switches from exit signage units to prevent them from being switched off.	Within 1 month
 				
F-26	ITM Emergency Lighting	Inspection, testing and maintenance for the emergency lighting system was not in accordance with The RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1 month

F-27	Fire Detection & Alarm System	Automatic fire alarm and detection system installation found ongoing which requires detailed review to confirm compliance with NFPA 72 and The RSC Technical Guidelines (Standard). Location: Building-1, Building-2 and Building-3. (All structures under this ID)	Submit the fire alarm system design to RSC for review. Once the design is reviewed, install and modify the fire detection and alarm system throughout the buildings in accordance with review comment, Accord/ RSC Technical Guidelines (Standard) and NFPA 72. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.	Design Review within 2 months and installation within 4 months
 				
F-28	ITM of Fire Detection & Alarm System	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72 and The RSC Technical Guidelines (Standard).	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with Table 14.3.1 of NFPA 72 and The RSC Technical Guidelines (Standard) and keep written records on-site.	Within 1 month (after installation)
F-29	Fire Protection System	The highest occupied floor level of Building-1 is more than 10 m (33 ft) but automatic standpipe system has not been installed in accordance with the RSC standard and NFPA 14. No dedicated water supply and fire pump have been installed. Location: Building-1	Provide a Class III standpipe system in accordance with RSC standard 5.4 and NFPA 14. Ensure fire pump and water supply for the standpipe system as per NFPA 20, NFPA 22 and NFPA 24. Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC standard and NFPA 14,20,22 and 24. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the standpipe system.	Design Review within 2 months and installation within 4 months
F-30	ITM of Standpipe 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.	1 month after installation.
F-31	ITM of fire pump system	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25.	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 25.	1 month after installation.

F-32	ITM extinguisher	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.	Within 1 month
F-33	Fire rated Construction	The fire panel room is not seperated from the gray fabric store by fire rated construction. Location: Ground floor of Building-1.	Separate the fire alarm control panel room from the gray fabric store by a minimum 2-hr. fire rated construction.	Within 2 months
				