

INITIAL FIRE SAFETY INSPECTION REPORT

**JM Fabrics Ltd. (Extension)
24603**

South Nayapara, 6 No Dogri, Bhawal, Mirzapur

Other Factories: JM Fabrics Ltd. (9497)



Inspected By: Mohammad Anayet Hossain, Md. Najmul Huda & Mahbub Alam

Date: 11-Oct-2023

Fire Safety Inspection Report

JM Fabrics Ltd. (Extension)

Introduction:

JM Fabrics Ltd. (Extension) complex was surveyed for fire safety on **11-Oct-2023** 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

Factory Building name(s): Into the ID of 24603

- i) Building-3
- ii) Building-4
- iii) Building-5
- iv) Shed-1
- v) Shed-2
- vi) Shed-3
- vii) Shed-4
- viii) Shed-5
- ix) Shed-6
- x) Shed-7

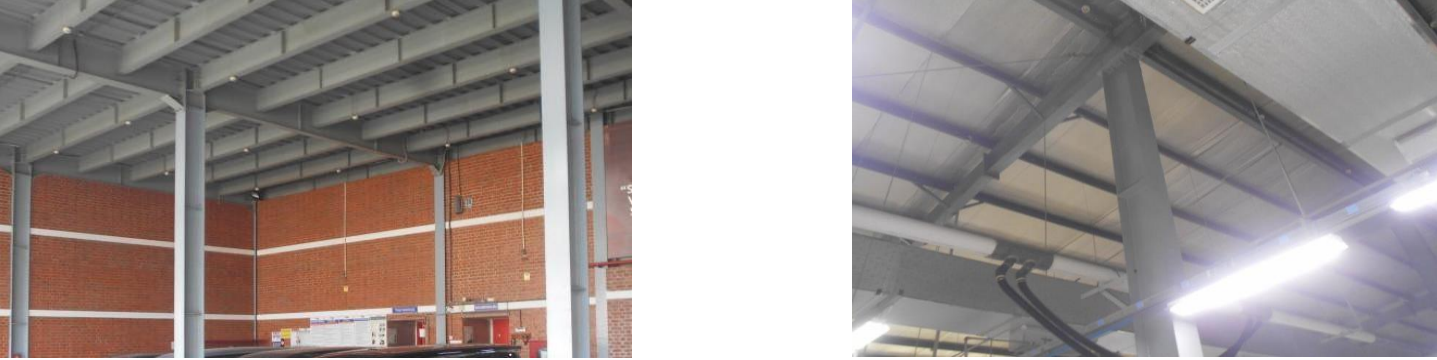
Factory Address: South Nayapara, 6 No Dogri, Bhawal, Mirzapur



Findings & Recommendations :

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

Table-1:


Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire-Rated Construction	<p>The main structural element of the building is constructed by steel element which is non-rated and were found in exposed condition without any fire protection.</p> <p>Location: Building - 03, Shed-07</p>	<p>Interim building shall be type-1 or type-2 construction. Provide required fire rating on the structural elements by following Section 4.4 and Table 4.4.1 of the RSC 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 in between two floors and in structural members.</p>	Within 6 months
				

F-2	Fire Rated Construction	<p>Penetrations through floor/ceiling assemblies are found unsealed by the electrical riser and cables.</p> <p>Location(s): Electrical Riser (BBT) of Building No-03.</p>	<p>Penetrations of fire resistive rated assemblies shall be protected with a listed through penetration fire stop system tested in accordance with ASTM E814 in accordance with RSC standard 4.7.</p>	Within 3 months
				
F-3	Fire Rated Construction	<p>Catwalk has been constructed on high rack storage and the area of the the intermediate deck creates a full floor where the size of the deck is more than 33% of the total floor area and requires fire rated separation.</p> <p>Location: Ground floor of Building-03 & Shed-07.</p>	<p>Remove all catwalk and stair from the multi-storied storage (combustible materials) rack facilities area. or Separate each floors by fire rated construction as per BNBC, Part-3, chapter-3 and Table 3.3.1.</p>	Within 6 months



F-4	Fire Rated Construction	The exit stair enclosures are not separated from [work areas, other spaces] on each floor by fire-rated construction	<p>Separate the exit stairs from work areas and other building spaces on all floor levels by minimum 2- hr fire-rated construction. Provide minimum 1.5- hr fire rated doors and seal all unprotected openings and penetrations to maintain the fire separation. Ensure that all fire doors are self-closing and positive latching, and are provided with fire exit (panic) hardware where serving production floors or assembly occupancies. If fire 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 RSC Technical Guidelines (Standard) V1- 6.8.3.1.</p>	Within 3 months
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<p>F-5</p>	<p>Fire Rated Construction</p>	<p>Chemical storage area is not separated by fire-rated construction having non rated door and unsealed penetrations and openings.</p> <p>Location: Ground Floor of Building-03</p>	<p>Separate the Chemical Storage area by a minimum 4-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations. Follow 2.13 of BNBC-2006. For the case of 4-hr fire separation no opening is permitted.</p>	<p>Within 3 month</p>
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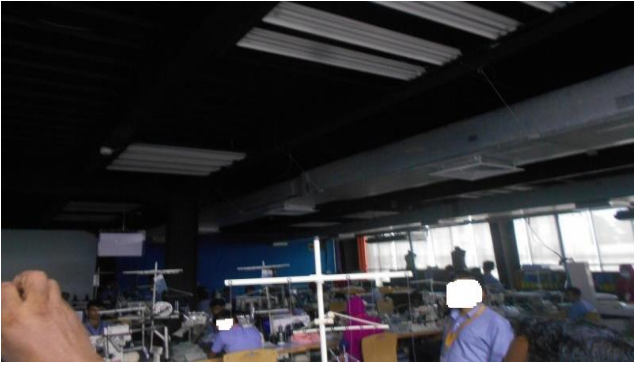
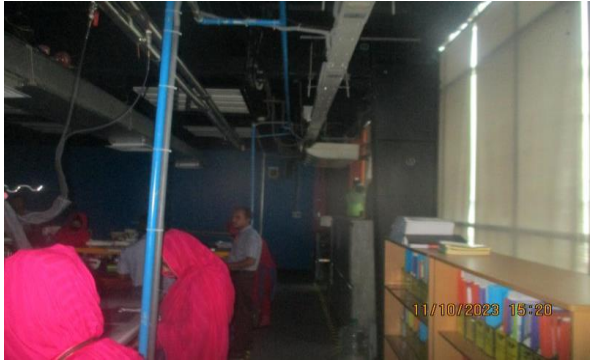
F-6	Fire-Rated Construction	<p>The dining & prayer room distance is less than 10 ft and not separated from combustible storage (left over room), shed-04 due to the unprotected opening and penetration.</p> <p>The egress paths for the medical center, daycare center, and prayer room are not separated.</p>	<p>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. Alternatively, provide a second remote discharge path to the public way.</p>	Within 3 month
				
F-7	Fire-Rated Construction	<p>The exit discharge path/egress court was not fire separated with the vehicle parking area and surrounding occupancies. The egress court from stair-1 were not properly fire rated.</p> <p>Location: Ground Floor (Stair-01) north side of Building-03</p>	<p>Ensure that the passageway is fire rated by 2-hour including protection of unprotected opening by minimum 1.5 hour. An egress court serving as a portion of the exit discharge shall be open to the sky or provided with a fire resistance rated enclosure the same as the exit enclosure. Egress courts less than 3050 mm (10 ft) in width (as measured from the building and the adjacent property line) shall be provided with walls having a 1-hr fire resistance rated construction for a distance of 3050 mm (10 ft) above the floor of the court.</p>	Within 3 months



F-8	Means of Egress	<p>A single means of exit has been provided at 1st floor-mazzanine of building-03, where are occupant load and common path of travel has been exceed the allowable limit.</p>	<p>For Basement/Ground floor 1. Maintain maximum 50 occupants having a travel distance of 23m (75 ft). Or Provide additional exit. For First Floor 1. Maintain maximum 30 occupants having a travel distance of 23m (75 ft).</p>	Within 3 month
F-9	Fire Rated Construction	<p>The machine room are not properly separated by fire rated construction with other Occupancies/Areas/Production floor.</p> <p>Location: Building-03, 1st Floor</p>	<p>Separate the compressor room by a minimum 2-hr fire rated construction. Seal and/or protected all openings to maintain fire separations. Or Relocate all to exterior of the building and maintain a minimum 3m (10 ft.) spatial separation distance from the building.</p>	Within 3 months

				
<p>F-10</p>	<p>Fire Rated Construction</p>	<p>Elevator shafts are directly open into exit enclosure and production floor without proper fire separation which is a violation of RSC Standard-6.14.3.</p> <p>Location: Building-03, Stair-02 (Middle Stair)</p>	<p>Rearrange the facility to provide separate enclosure for lifts. If not possible anyway provide a minimum 2-hr fire- rated elevator shaft with listed fire rated lift landing door to separate from each floor level.</p> <p>RSC-6.14.3: In new and interim construction, an exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material with fire resistance rating required for the type of construction of smoke proof enclosure.</p>	<p>Within 3 months</p>
				

F-11	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy which are not separated by fire rated construction.	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Or, Where separate storage rooms are not feasible, Provide defined storage areas and limit the storage arrangement as follows:-</p> <p>1. General Condition: Maximum height of 2.4m (8 ft) and maximum area of 23 m² (250 sft). Separate areas of unenclosed combustible storage by a minimum clear distance of 3 m (10 ft).</p> <p>2. If sprinkler protected: Maximum height of 3.66 m (12 ft) and maximum area of 93 m² (1000 sft). Separate areas of unenclosed combustible storage by a minimum clear distance of 3 m (10 ft).</p> <p>Note: Do not exceed 10 percent of the building area of the story in which they occur.</p>	Within 3 months
F-12	Means of Egress	Collapsible and sliding doors are provided at building exits, exit stair and along egress routes	Replace all collapsible and sliding doors along the means of egress with side-hinged, swinging egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101	Within 1 month
F-13	Emergency Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.	Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.	Within 1 month

				
F-14	Emergency Lighting	<p>Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The RSC standard.</p>	<p>Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC standard. Keep written records on-site.</p>	<p>Within 3 months</p>

F-15	Fire Alarm & Detection System (FADS)	The factory has installed an addressable fire alarm & detection system which is required to be reviewed and verified.	<p>Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval. Modification (if required) shall have to done as per the reviewed design and NFPA- 72.</p> <p>Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.</p>	Design within 2 months, installation/modification within 3 months
F-16	Fire Detection ITM	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 3 months

F-17	Fire Protection System	The highest occupied floor of building-3 is more than 10 m (33 ft.) and less than 23 m above grade where standpipe system is mandatory and the factory has installed a class III standpipe system which is required to be reviewed and verified.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review. Once reviewed, install or modify the sprinkler, standpipe system and pump (where required) throughout the building in accordance with RSC Technical Guideline (Standard) and NFPA 14 and 20. The factory management shall contact RSC to conduct the final acceptance testing after the installation, testing & commissioning.	Design Review within 2 months and installation within 4 months
F-18	Standpipe ITM	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 14.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 14 and RSC standards.	Within 3 months
F-19	Inspection, testing, and maintenance	Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 20.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20 and RSC standards.	Within 1 month
F-20	Fire Extinguishers ITM	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 RSC standards.	Within 3 months