

INITIAL FIRE SAFETY INSPECTION REPORT

Pioneer Denim Limited (Garments Division)

RSC ID: 24833

Horitola, Shahpur Bazar, Madhabpur, Habiganj

Geographical Coordinates: 24.226058, 91.365355

Other Factories: None



Inspected By: Mohammad Anayet Hossain and Md. Najmul Huda

Date: 04-Jan-2024

Fire Safety Inspection Report

Pioneer Denim Limited (Garments Division)

Introduction:

Pioneer Denim Limited (Garments Division) complex was surveyed for fire safety on **04-Jan-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

Factory Building Name(s):

B#1	Building-6, R&D Building (6-Storied)	Type of construction: RCC Year of construction May-2022 to Jul-2023 Construction period: New Building Building approval from: Union Parishad Building approval date: 12-Nov-2023
B#2	Gate Building-01	Type of construction: RCC Year of construction April-2019 to April-2022 Construction period: Interim Building Building approval from: Union Parishad Building approval date: 12-Nov-2023
B#3	Gate Building-02	Type of construction: RCC Year of construction April-2019 to April-2022 Construction period: Interim Building Building approval from: Union Parishad Building approval date: 12-Nov-2023
B#4	Fire Hydrant Shed	Type of construction: Steel Year of construction Jun-2023 to Dec-2023 Construction period: New Building Building approval from: Union Parishad Building approval date: 12-Nov-2023
B#5	Boiler & Compressor Shed	Type of construction: Steel Year of construction June-2023 to Dec-2023 Construction period: New Building Building approval from: Union Parishad Building approval date: 12-Nov-2023

Findings & Recommendations :

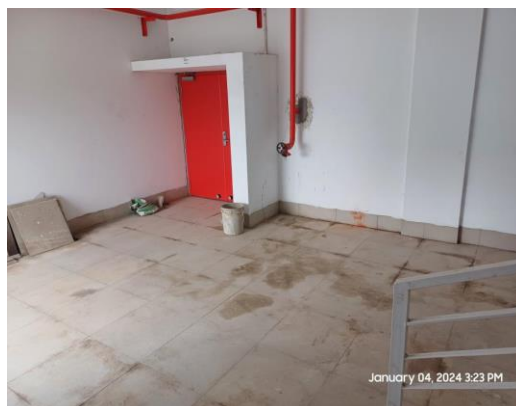
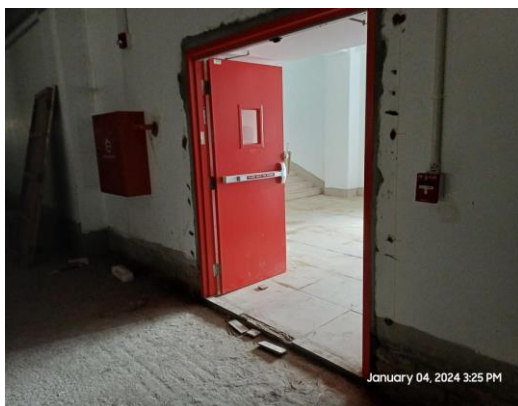
Table 1 summarize the fire safety non-compliant issues identified during the inspection. Recommendations have been provided to address each issue with specific remediation timeline. An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for review.

Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction. Location: B#1: Building-6, R&D Building (6-Storied)	Provide minimum 2-hr fire rated construction for buildings 4 storied or more and 1-hr for up to 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. If fire rated doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.	Within 3 months



F-2	Fire Rated Construction	Storage room discharges directly into exit stair enclosure. Location: B#1: Building-6, R&D Building (6-Storeyed), Ground Floor, Stair-03.	Openings from exit enclosure to storage room, shall be provided with a vestibule with fire rated construction and openings. Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the store side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
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F-3	Fire Rated Construction	Unsealed penetrations and openings are located on the fire-rated floor/ceiling assemblies. Locations: Lift/Elevator, Toilet plumbing PVC pipe, and Electrical BBT riser of Building-6, R&D Building (6-Storied).	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 3-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months
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F-4	Fire Rated Construction	The Boiler & Compressor Shed was not separated by fire rated construction from the Building-6, R&D Building (6-Storey), which was attached from each other. Separate the utility building by a minimum 2-hr fire-rated construction with Main Factory Building. Seal and/or protected all openings to maintain the required fire separations. Or Relocate all to exterior of the building and maintain a minimum 3m (10 ft.) spatial separation distance from the building.	Within 3 months
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F-5	Fire Rated Construction	Rooms used for combustible materials were not separated by fire-rated construction from the surrounding occupancy. Location: B#1: Building-6, R&D Building (6-Storied), Ground floor.	Separate the storage room by a minimum 1- hr. fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.	Within 3 months
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F-6	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Combustible materials has kept under cutting table which is non compliant. Location: B#1: Building-6, R&D Building (6-Storeyed), Several locations.	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
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F-7	Fire Rated Construction	Exterior exit stair (North side of Gate Building-01) is not properly separated from the building and stair exit discharge The exterior stair on the North side of Gate Building-01 was not fire rated separation from the R&D Building (Building-6 (6-Storeyed) & transformer room (Ground floor of R&D Building)).	Exterior exit stairs shall be separated from the building with a rating requirement of 2 hr fire rating. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure	Within 3 months
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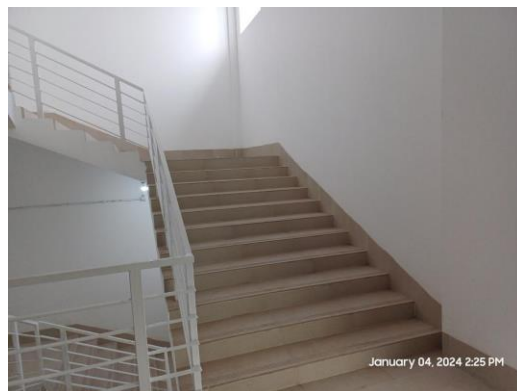
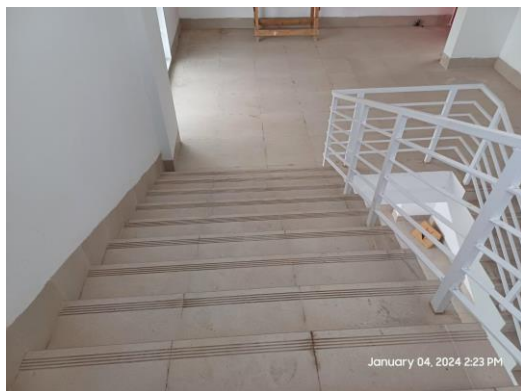


F-8	Means of Egress	Fire door hardware and accessories has been found not functional properly. Some cases gap beneath the door has been found more than 19 mm. Location : B#1: Building-6, R&D Building (6-Storied)	Factory shall ensure that the maintenance work shall be done for the door hardware and accessories on a regular basis as per NFPA 80 and manufacturer's published guideline. Repair/replace the hardware and accessories which are not functional or under unauthorized maintenance. Ensure that the clearance under the bottom of a door shall be a maximum of 3/4 in. (19 mm).	Within 3 months
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F-9	Means of Egress	Common path of egress travel exceeds 23m (75ft). Location: B#1: Building-6, R&D Building (6-Storied), Ground Floor.	Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 23m (75ft) or 30 m (100 ft) when complete sprinkler protection is provided.	Within 3 months
  				
F-10	Means of Egress	Building did not have stair designation signs, floor designation sign and occupant load signs at the required locations.	Provide stair designation signs, floor designation signs and occupant load signs at the required locations.	Within 1 month

F-11	Means of Egress	Handrails are not provided on both sides of both exit stairs. Location: B#1: Building-6, R&D Building (6-Storied)	Provide handrails on both sides of the exit stair. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.). Rail guards shall be such patterned so that a sphere 200 mm (8 in.) in diameter cannot pass through any opening up to a height of 865 mm (34in.).	Within 3 months
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F-12	Means of Egress	Aisles marking has not been provided on the floor properly. Location: B#1: Building-6, R&D Building (6-Storied)	Provide minimum aisle widths of 36-in.	Within 3 months
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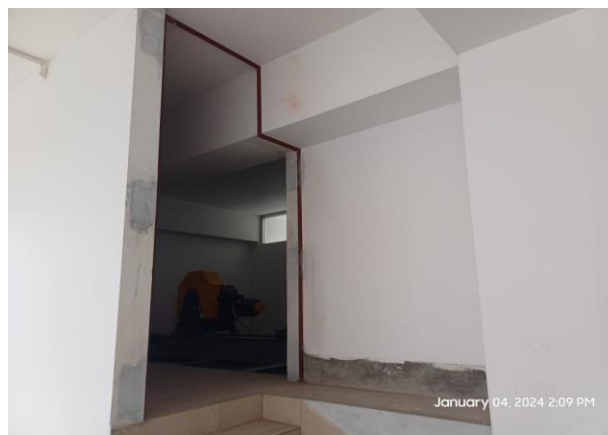


F-13	Means of Egress	Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch.). Locations: B#1: Building-6, R&D Building (6-Storied)	All occupiable roofs shall be provided with parapets or guards with a minimum height of 1067 mm (42 in.)	Within 2 months
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F-14	Means of Egress	Uneven path of travel and blockage in exit access. Locations: B#1: Building-6, R&D Building (6-Storied)	Remove unnecessary items and level exit path to the public way.	Within 1 month
 The first photograph shows an uneven concrete path leading to a building entrance. The second photograph shows a red fire door partially blocked by a red fire hose reel and other equipment. The third photograph shows a cluttered outdoor area with a large bowl, a hammer, and other debris near a concrete path.				
F-15	Means of Egress	Fire evacuation maps is not posted inside the stair enclosure.	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-16	Means of egress	Exit stairs serve more than 5 stories and do not have required re-entry provisions. Location: B#1: Building-6, R&D Building (6-Storied)	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC standard 6.8.3.1.	Within 1 month

F-17	Means of Egress	Headroom measured less than the 80 inch at lift machine room at 5th floor (R&D Building).	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 3 months
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F-18	Means of Egress	Fire Drills are not conducted at required intervals as per RSC Standard.	Fire drills shall be conducted on regular basis as per the RSC Standard 13.2	Within 1 month
F-19	Human Element Program	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
F-20	Egress 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: B#1: Building-6, R&D Building (6-Storied), 5th floor.	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-21	Egress Lighting	Exit sign and Directional Sign are not provided at and towards exit at several floors.	Lighted exit signs shall be placed at entrance to an exit. Additional exit signs shall be placed throughout the facility anywhere the continuation of the egress 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-22	Fire Alarm & Detection system	Automatic fire alarm and detection system installation has been found complete which requires detailed review to confirm compliance with NFPA 72 and The RSC Technical Guidelines (Standard).	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/modification within 4 months
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F-23	Fire Alarm & Detection system (ITM of FADS)	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 NFPA 72 and The RSC Technical Guidelines (Standard) and keep written records on-site	Within 1 month (after installation)
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F-24	Fire Protection System (Standpipe)	The height of the highest occupied floor is more than 33 ft 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 and approval. Modification (if required) shall have to be done as per the reviewed design and NFPA- 14. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design within 1 month, installation/modification on within 3 months
 				

F-25	Fire Protection System(ITM of fire pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 20, 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the fire pump in accordance with NFPA 20, 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month (after installation)
F-26	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 14, 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the standpipe system in accordance with NFPA 14, 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month (after installation)
F-27	ITM of Egress Lighting	Inspection, testing, and maintenance for the emergency lighting system were not in accordance with The RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in the accordance with The RSC Technical Guidelines (Standard) and keep written records on-site.	Within 3 months
F-28	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 The RSC Technical Guidelines (Standard).	Within 3 months