

INITIAL FIRE SAFETY INSPECTION REPORT

Sterling Denims Ltd. Unit-2

RSC ID: 24673

Factory Address: Dhania, Nayerhat, Ashulia, Savar, Dhaka- 1350

Geographical Coordinates of factory building: 23.915256, 90.236811

Other Factories: ID-9621 (Sterling Denims Ltd)



Inspected By: Dilip Kumar Mondal and Shahina Imam

Date: 5 June 2023

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:

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The exit stairs are separated from work areas & other spaces on each floor by fire rated construction. Location: Main Building & Utility Building.	Stair shall be enclosed with a minimum 2-hr fire-rated construction. Seal all unprotected openings and provide minimum 1.5 -hr. fire rated doors to separate the exit stairs from work areas and other building spaces on all floor levels. Ensure that the fire doors are self-closing, positive latching and that they are provided with fire exit (panic) hardware where serving production floors. Provide a fire-resistive rated assembly between the exterior exit stairs and the building up to 10 ft. beyond the end of the stair to achieve the required separation. The rated assembly shall be approved and/or designed by a qualified fire protection engineer. 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



F-2	Fire Rated Construction	Penetrations through floor/ceiling assemblies are found unsealed. Location: Ground floor (Generator Room) of Main Production Building.	Seal all penetrations and openings in floor/ceiling (full thickness of the floor/ceiling: minimum 3 hr.) assemblies by third-party certified fire rated materials to maintain the fire resistance rating. or, Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 Months
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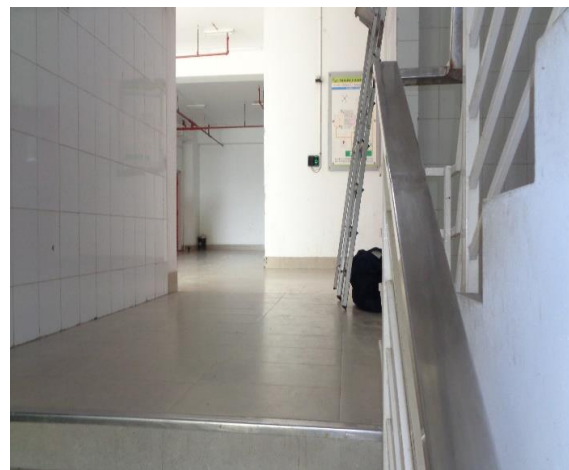
F-3	Fire Rated Construction	Room used for combustible storage are not separated by fire rated construction. Location: 6th floor at Main Production Building.	Openings from exit enclosure to storage room, generator and hazard spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the Store, generator, substation room 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-4	Fire-Rated Construction	The Exit discharge path is less than 10ft wide and is not separated from the basement exit discharge. Location: Main Production building & Basement	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 (only include this if feasible).	Within 3 Months
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F-5	Fire Rated Construction	Elevator shafts are directly open into the exit stair.	For new construction, elevators shall not open into an exit enclosure as per RSC-6.14.3. So, separate the stair enclosure from elevator shaft throughout the building.	Within 3 Months
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F-6	Fire Rated Construction	The fire pump room are not provided with adequate fire separation.	Provide fire pump room with 2 hr. rated fire separation when not sprinklered and 1 hr. rated fire separation when provided with automatic sprinklers, in accordance with NFPA 20.	Within 3 Month
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F-7	Mean of Egress	Handrails are not provided on both sides of each exit stairs at ground floor of all stair. Having handrails on one side of said staircase, may pose as a falling hazard during evacuation.	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.	Within 3 Months
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F-8	Mean of Egress	Building did not have stair designation signs at required locations. Location: Utility Building.	Provide stair designation sign 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.	Within 1 Month
F-9	Mean of Egress	Building did not have occupant load signs at the required locations. Location: Utility Building.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 Month

F-10	Mean of Egress	Changes in elevation of walking surfaces do not exceed 6.35 mm (1/4 in) unless provided with a beveled slope of 1 in 2 that does not exceed 12.7 mm (1/2 in).	Resurface the change in elevation to provide a slope that is less than 1 in 48 in.	Within 3 Months
 				
F-11	Egress 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-12	Inspection Testing and Maintenance of Emergency lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with RSC technical guidelines (standard).	Inspect, test and maintain the emergency lighting system in accordance with RSC technical guidelines (standard). Keep written records on-site.	Within 1 month
F-13	Fire Alarm & Detection system	An addressable fire alarm system has installed in the factory building premises. Fire detection system installation requires to detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (Standard) for all buildings in the factory premises.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Design Review within 2 months and installation within 4 months.



F-14	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	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. (After Installation)	Within 1 month after installation.
F-15	Fire Protection System (Standpipe)	The building with an occupiable floor greater than 10 m (33 ft) above the finished grade is protected with an standpipe system. Fire pump, water supply & standpipe system installation requires detailed review to confirm compliance with NFPA 14, 20, 22, 25 and RSC standards. Location: Utility Building	Submit as built drawings, testing records, listing information and other relevant documentation to the RSC for review and approval, modification shall have to done as per the reviewed design (if required). Class-I standpipe system is acceptable with automatic sprinkler system.	Design Review within 2 months and installation within 4 months.



F-16	Fire Protection System (Sprinkler)	The high-rise building has an occupied floor greater than 23 meter (75 feet) and is provided with automatic sprinkler protection. Location: Main Production Building.	Considering present condition minimum class-I standpipe system shall be provided along with sprinkler system for the building following NFPA-13,14,20,22 and 24. If height of the building is reduced to less than 23 m then sprinkler system is not mandatory then only class-III standpipe system can meet the standard requirement. Design & Installation of Sprinkler system should be in accordance with RSC standard and NFPA 13,20, 22 and 24. Submit all design and documents to RSC for review prior to installation/modification.	Design within 2 months, Install within 4 months
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F-17	Inspection, testing, and maintenance of the Fire Pump (ITM).	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 25.	Within 1 month after installation.
F-18	Inspection, testing, and maintenance of the automatic sprinkler system (ITM).	Inspection, testing, and maintenance of the automatic sprinkler system is not in accordance with NFPA 25.	Inspect, test and maintain the automatic sprinkler system, and keep written records on-site, in accordance with NFPA 25.	Within 1 month after installation.

F-19	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the standpipe system in accordance with NFPA 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month after installation.
F-20	Inspection Testing and Maintenance of Portable Fire 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