

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Styllent Knit Ltd.

RSC ID: 25539

ADDRESS: North Gomail, Zirabo, Ashulia, Dhaka-1341.

Other Factories: None



Inspected By: Md. Ferdaus Jaman

Date: 5th March 2024

Fire Safety Inspection Report

Factory Name: Styllent Knit Ltd.

Introduction:

Styllent Knit Ltd. complex was surveyed for fire safety on **05/03/2024** 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):

Factory Building name(s): There are total 5 structures in the factory compound under this RSC ID. The buildings are as below:

1. B-01: Main Production Building-6 Storied RCC Building (G+M+5). Approved from Yarpur Union Parishad on 03 March 2021. Construction started- Nov/2020 and ended-Feb/2022. Occupied-Mar/2022. Total Floor area: 22922.54 sqm (Approximately). Per typical floor 2888.07 sqm. (Approximately).
2. B-02: Utility Building-2 Storied RCC Building (G+1). Approved from Yarpur Union Parishad on 03 March 2021. Construction started- Nov/2020 and ended-Feb/2022. Occupied-Mar/2022. Total Floor area: 380.14 sqm (Approximately). Per typical floor 190.07 sqm.
3. B-03: Fire Pump Building-Single Storied RCC Building. Approved from Yarpur Union Parishad on 03 March 2021. Construction started-Feb/2022 and ended-Mar/2023. Occupied-Apr/2023. Total Floor area: 111.76 sqm (Approximately).
4. B-04: Guard Room-Single Storied RCC Structure. Approved from Yarpur Union Parishad on 03 March 2021. Construction started-Nov/2020 and ended-Feb/2021. Occupied-Mar/2021. Total Floor area: 39.96 sqm (Approximately).
5. Shed-01: Wastage Shed-Single Storied Wastage Shed. Approved from Yarpur Union Parishad on 03 March 2021. Construction started- Nov/2020 and ended-Feb/2022. Occupied-Mar/2022. Total Floor area: 48.77 sqm (Approximately).

Factory Address: North Gomail, Zirabo, Ashulia, Dhaka-1341.

Points of contact:

1. Name: Khandaker Muhaiminul Islam (Pavel)

Designation: Director

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2. Name: Md. Masum Mia

Designation: Ast. Manager (HR & Compliance)

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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	Main Production Building (B-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 The RSC Technical Guidelines (Standard) 6.8.3.1	Within 3 months

				
F-2	Fire Rated Construction	Main Production Building (B-01) Unsealed penetrations and openings are located in the exit stair enclosures.	Seal all penetrations and openings in exit stair enclosure walls to maintain minimum 2 hrs fire separations.	Within 3 months
				

F-3	Fire Rated Construction	Main Production Building (B-01) Elevator shafts are directly open into the inside of exit enclosure. Located: Lobby of South-east Stair.	Modify the elevator shaft as per The RSC Technical Guideline (Standard) V1-6.14.3. 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.	Within 6 months
				
F-4	Fire Rated Construction	Main Production Building (B-01) Elevator shafts are directly open into the inside of floor area on several floors.	Modify the elevator shaft as per RSC Technical Guideline (Standard) V1-6.14.3. Elevator shaft shall be 2-hr fire rated opening protection from factory floor.	Within 6 months

F-5	Fire Rated Construction	Main Production Building (B-01) Storage discharges directly into the exit stair discharge. Location: On ground floor.	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 4 months
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F-6	Fire Rated Construction	Main Production Building (B-01) Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: On ground 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
 				

F-7	Fire Rated Construction	Main Production Building (B-01) Rooms used for combustible storage are not properly separated by fire rated construction due to unprotected openings and penetrations. Location: On ground floor.	Separate or seal the unprotected openings and penetrations of the storage rooms by a minimum 1-hr fire rated construction.	Within 3 months
				

F-8	Fire Rated Construction	Main Production Building (B-01) Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies. Followings are the description of openings or penetrations indicating specific locations: 1. Plastic pipes penetrate the floor slabs in toilet block of the building. 2. Steamline/GI pipes penetrate the floor slabs of the building. 3. Plastic pipes of wastage water discharge penetrate the floor slabs of the building.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 3-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's datasheet. Or Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. 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-9	Fire Rated Construction	Main Production Building (B-01) Dining area (E-4, capacity-160) was not separated by fire rated construction with adjacent production area on 2nd floor.	The dining and prayer area shall be fire separated from production occupancy by minimum 3 hr. rated construction with minimum 3-hr opening protection. Seal and/or protect all openings to maintain the required fire separations. Required number of exits (minimum 2) for entire dining arrangement shall lead directly to safe discharge path without passing through any other occupancies.	Within 4 months
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F-10	Fire Rated Construction	CNG gas cylinders were located within the factory premises.	LPG/CNG cylinders are permitted to be stored in a separate dedicated building on the factory premises within its boundaries if the building meets the following conditions: 1. The storage building must be at least 3 meters away from any other building and boundaries. 2. The exterior walls of the building must have a fire resistance rating of 3 hours using noncombustible construction. 3. Doors and other openings in the exterior walls must be protected with suitable closing devices having a fire protection rating of 3 hours. 4. The building is to be used for no other purpose than the storage of LPG/CNG cylinders. 5. The building must be mechanically ventilated to control the accumulation of flammable vapors. 6. The installations must be approved and accepted by the requirements of the AHJ, Gas supply company regulations, manufacturers/supplier's instructions/guidance, CIOB and all other applicable agencies, codes and standards.	Within 6 months
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F-11	Means of egress	Main Production Building (B-01) Handrails/Guards are not provided as per The RSC Technical Guidelines (Standard) V1-3.4.2.1.5.	New and interim 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. 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.).	
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F-12	Means of egress	Main Production Building (B-01) Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch.).	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 3 months
				

F-13	Means of egress	Main Production Building (B-01) The SDB panel was found in the stair on ground floor of main production building.	Remove the electrical SDB panel from exit stair to a safe location.	Within 1 month
				
F-14	Means of Egress	Main Production Building (B-01) 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-15	Means of Egress	Main Production Building (B-01) Fire evacuation maps are not posted at the entrance to each exit stair.	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-16	Egress Lighting ITM	Main Production Building (B-01) 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 1 month
F-17	Fire Alarm & Detection system	Main Production Building (B-01) Automatic fire alarm and detection system installation 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 within 4 months

				
F-18	ITM of Fire Alarm & Detection system	Main Production Building (B-01) 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)
F-19	Fire Protection System (Standpipe)	Main Production Building (B-01) The existing building has an occupied floor greater than 10 meter (33 feet) and standpipe system is required for this building.	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC Technical Guideline (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-20	Fire Protection System(ITM of fire pump)	Main Production Building (B-01) 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-21	Fire Protection System(ITM of Standpipe)	Main Production Building (B-01) 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-22	Means of egress	Utility Building (B-02) Handrail missing or having handrails on one side of the staircases may pose as a falling hazard during evacuation.	New and interim 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. 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.).	
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F-23	Fire Alarm & Detection system	Building-2, 3, 4 & shed-1 Automatic fire alarm and detection system installation 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 within 4 months
F-24	ITM of Fire Alarm & Detection system	Building-2, 3, 4 & shed-1 Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72 and 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)