

INITIAL FIRE SAFETY INSPECTION REPORT

NAYEM KNITWEAR LTD - Extension (Previously UNION KNITTING AND DYEING LTD)

RSC ID: 25766

ADDRESS: 42 & 44 BORO RANGAMATIA ZIRABO SAVAR DHAKA BANGLADESH

23.912267415073796, 90.30608616200631

Other Factories: NAYEM KNITWEAR LTD (Previously UNION KNITTING AND DYEING LTD)[11465] in the premises.



Inspected By: Md. Hasibur Rahman Abir

Date: 25-Sep-2024

Fire Safety Inspection Report

Factory Name: NAYEM KNITWEAR LTD - Extension (Previously UNION KNITTING AND DYEING LTD)

Introduction:

NAYEM KNITWEAR LTD - Extension (Previously UNION KNITTING AND DYEING LTD) complex was surveyed for fire safety on **25 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



Factory Building name(s):

Building 1	Factory Building (New)	Three (G+2) Storied RCC Building	Construction: Mar'18-Dec'20	Occupied: Sep'24	Interim
Building 2	Office Building	Single Storied RCC Building	Construction: Mar'14-Dec'15	Occupied: Oct'21	Interim
Building 3	Dinning Building	Two (G+1) Storied RCC Building	Construction: Mar'14-Apr'16	Occupied: Oct'22	Interim
Building 4	Doctor & Child Care shed	Single Storied Shed	Construction: Mar'16-Jan'17	Occupied: Oct'23	Interim
Building 5	Boiler & compressor building	Single Storied RC Building	Construction: Dec'19-May'20	Occupied: Oct'21	Interim
Building 6	Fire Control Room	Single-Story with Masonry Slab.	Construction: July'15-Apr'16	Occupied: Oct'21	Interim

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 approval.

Table-1:



SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Means of Egress	<p>The exit stairs are not separated from work areas and other spaces on each floor by fire-rated construction. During the inspection, it was noted that the fire doors were not effectively latching and door co-ordinator were not properly functional.</p> <p>Location: Factroy Building (New) and Dining Building</p>	<p>Stair shall be enclosed with a minimum 1-hr fire-rated construction. Seal all unprotected openings and provide minimum 1-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.</p> <p>Openings from exit enclosure to storage areas shall be provided with a vestibule with fire rated construction and openings. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.</p> <p>Penetrations into and through an exit enclosure shall be prohibited with the exception of required exit doors, sprinkler piping, standpipes, electrical raceway for fire alarm equipment, and electrical conduit serving the exit enclosure.</p> <p>If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.</p>	Within 3 months
<div style="display: flex; justify-content: space-around;">   </div>				


2	Fire Rated Construction	<p>Liquefied or compressed gas cylinder is used within the factory premises. Location: Beside Boiler & Compressor Building</p>	<p>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:</p> <ol style="list-style-type: none"> 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, Chief Inspector of Boiler (CIOB) and Chief Inspector of Explosives Bangladesh (CIEB). 	Within 3 months
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3	Fire Rated Construction	<p>Unsealed penetration is located in the fire-rated ceiling. Location: Factroy Building (New)</p>	<p>Penetrations of fire resistive rated assemblies shall be protected with listed through penetration fire stop system, Tested in Accordance with ASTM E814 and RSC standard 4.7.</p>	Within 3 months
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4	Fire Rated Construction	The exterior walls do not have fire resistance and opening protection as specified in BNBC 2006, Tables 3.2.2 and 3.2.3. Location: Factroy Building (New) and Dining Building	The exterior walls shall have a fire resistance and opening protection as specified in BNBC 2006, Tables 3.2.2 and 3.2.3.	Within 4 months
<div style="display: flex; justify-content: space-around;">   </div>				



5	Means of Egress	<p>The stairs have a width less than the required minimum width. Location: Factroy Building (New) and Dining Building</p>	<p>Stairs shall have a minimum width of 1.5 m (60 in.) for all industrial occupancies and 2.0 m (79 in.) for all assembly occupancies.</p>	<p>Within 3 months</p>
 <p>The first photograph shows a narrow staircase with a metal handrail. The second photograph shows a digital depth gauge held against a surface, with the screen displaying '407' and '885'. The third photograph shows an outdoor staircase with a metal handrail and a green exit sign on the wall.</p>				

6	Means of Egress	<p>Handrails have a height of less than 865 mm (34 in.) when measured vertically from the leading edge of the tread. Location: Factroy Building (New) and Dining Building</p>	<p>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.</p>	Within 3 months
<div style="display: flex; justify-content: space-around;">   </div>				


7	Means of Egress	The egress aisles are not marked. Location: Factroy Building (New)	Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 3 months
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8	Means of Egress	Fire evacuation maps are not posted at the entrance of all exit stair. Location: Factroy Building (New)	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 3 months
9	Means of Egress	Building did not have stair designation signs at required locations. Location: Factroy Building (New) and Dining Building	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.	Within 3 months



10	Means of Egress	<p>The exit discharge path [South Stair] is less than 10 ft wide and is not separated from the building interior.</p> <p>Location: Factroy Building (New)</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.</p> <p>Alternatively, provide a second remote discharge path to the public way.</p>	Within 03 months
<div style="display: flex; justify-content: space-around;">   </div>				



11	Means of Egress	<p>Adequate parapets or guards are not provided on the occupiable roof. Location: Factory Building (New), Dining Building and office building</p>	<p>Provide parapets or guards with a minimum height of 1067mm (42 inch.).</p>	<p>Within 3 months</p>
<div style="display: flex; justify-content: space-around;">   </div>				

12	Means of Egress	<p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: Factory Building (New)</p>	<p>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.</p>	Within 3 months
<div style="text-align: center;">  <p>25 September 2024 11:50</p> </div>				

13	Inspection, Testing & Maintenance (Fire)	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with the RSC standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with the RSC standard. Keep written records on-site.	Within 3 months
14	Means of Egress	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 2 months

15	Means of Egress	<p>The exit stairs are not covered by a roof, leaving the top floor of the stairwell exposed to the sky. This exposure to rainwater can create slipping hazards on the stairs. Location: Dining Building</p>	<p>Walking surfaces in the means of egress shall be slip resistant under foreseeable conditions. Enclose the roof at the top of the exit stairs to prevent rainwater from making the stairs slippery.</p>	Within 1 month
				

16	Means of Egress	<p>The number of risers per flight in a straight flight stair was found 18. Location: Dining Building</p>	<p>The maximum number of risers per flight in a straight flight stair shall be 15. Also, ensure that the construction of the stairs complies with BNBC 2006, Part 3, Section 1.12.5.</p>	Within 3 months
<div style="display: flex; justify-content: space-around;">   </div>				

17	Fire Alarm & Detection System (FADS)	The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. All Buildings	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Design within 02 months, installation/modification on within 04 months
<div style="display: flex; justify-content: space-around;">   </div>				
18	Inspection, Testing & Maintenance (Fire)	Inspection, testing and maintenance for the fire detection and alarm system was not in accordance with standard.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72.	Within 3 months (After Installation)