

INITIAL FIRE SAFETY INSPECTION REPORT

A.K.M. KNIT WEAR LTD. (Extension)

RSC ID: 25607

14, Gedda, Karnapara, Ulail, Savar, Dhaka.

Geographical Coordinates of factory building: 23°49'39.7"N 90°15'32.0"E

Other Factories: ID-9178 AKM Knitwear Ltd

ID: 24143 Al-Muslim Washing Ltd. & Al-Muslim Garments Accessories Ltd

ID- 25608 Al-Muslim Washing Ltd. & Al-Muslim Garments Accessories Ltd (Extension)



Inspected By: Mohammad Anayet Hossain and Tanvir Jubayer Rahman

Date: 24 March-2024

Fire Safety Inspection Report

A.K.M. KNIT WEAR LTD. (Extension)

Introduction:

The **A.K.M. KNIT WEAR LTD. (Extension)** complex was surveyed for fire safety on **24 March-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) in this ID-25607:

SI No	Building Name & Description	Construction History	Period
1	Utility Building-2 4 storied RCC building Total Approx Area: 14,655 Sft	Construction Start: November 2021 Construction End: March 2023 Date of first Operation: April 2023 Building Approval: 04-Oct-2021 (Savar Paurashava)	New Construction
2	Child Care Building 3 Storied Pre fabricated steel structure Total Approx Area: 5,400 Sft	Construction Start: January 2023 Construction End: May 2023 Date of first Operation: June 2023 Building Approval: 22-Jun-2022 (Savar Paurashava)	New Construction

Factory Address: 14,Gedda,Karnapara,Ulail, Savar, Dhaka.

Other RSC ID in the premises: ID-9178 AKM Knitwear Ltd

ID: 24143 Al-Muslim Washing Ltd. & Al-Muslim Garments Accessories Ltd

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Findings & Recommendations :

Table 1 summarizes the major fire safety issues identified during the inspection of main buildings. Recommendations have been provided to address each issue. An implementation schedule shall be developed by the factory to remediate each of the similar types of findings throughout the premises. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for approval.

Table-1:

Findings & Recommendations:				
SI No.	Category	Findings	Required Action	Remediation Time Frame
F-01	Fire rated Construction	The exterior exit stair is not separated from the building. Location: Child care building and Utility building-2	Exterior exit stairs shall be separated by minimum 2-hr fire-rated construction and the rating of the exterior wall shall extend 3.05 m (10 ft.) beyond the ends of the stair structure.	Within 3 Months
				

F-02	Fire Rated Construction	The exit stair is not separated from other occupancy due to the non-rated construction at child care building and non-functionality of the hardware of the fire rated door. Furthermore, the gap beneath the fire rated door has been found more than 19 mm at utility building. Some fire doors installation is underway.	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. The clearance under the bottom of a fire door shall be a maximum of 19 mm. From edges and top shall be limited to a maximum 4.8 mm. All measurement shall be taken from the ""pull side"" of the door. Any modification of fire doors beyond the job site preparation shall be approved by the door manufacturer. Install the fire door as per NFPA 80. Factory shall ensure the integrity of the functionality of the fire rated door through proper datasheet, certificate and listing label.	Within 3 Months
  				

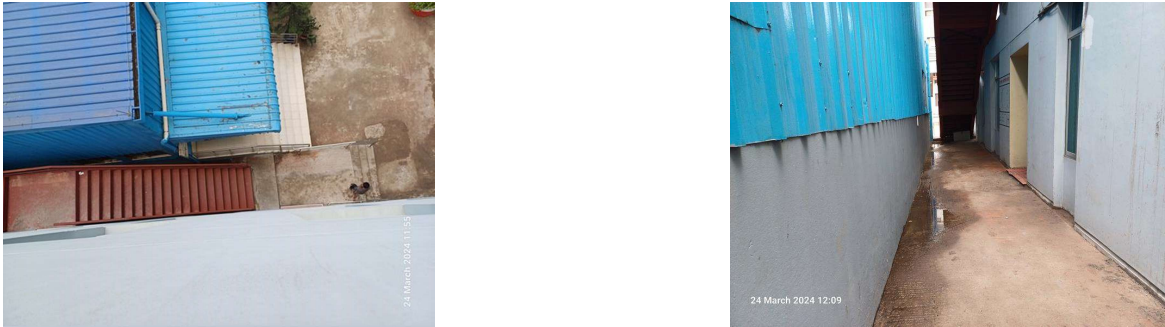
F-03	Fire rated Construction	The exit discharge path was not fire separated from work areas, or other spaces at ground floor by fire-rated construction due to opening from generator room of the building. Location: Stair-1, Utility building-2	Ensure that the passageway is fire rated by 2-hour including 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.	Within 3 Months
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F-04	Fire rated Construction	Ground floor exit-3 discharge path width of child care building is less than 10 feet and not separated from the surrounding building openings.	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.	Within 3 Months
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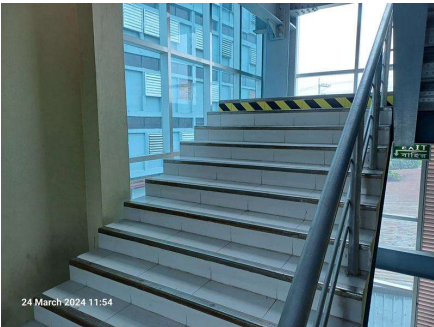


F-05	Fire rated Construction	The substation room is not separated by fire rated construction due to openings and non-rated structure.	Separate the substation room by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations. When located on the exterior of a building 3m (10 ft.) spatial distance shall be maintained around the substation.	Within 3 Months
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F-06	Fire rated Construction	The intermediate distance between child care building and acid wash shed is only 6 feet 8 inch and exterior wall is not protected by fire rated assembly as per BNBC Part 3 Table 3.2.2	All new buildings and structures shall be separated from other buildings in accordance with BNBC Part 3 Table 3.2.2 and BNBC Part 3 Section 2.4.1.3. Exterior walls of exit enclosures in new and existing buildings must meet the requirements of BNBC. (See also 6.14.5).	Within 3 Months
				

F-07	Fire rated Construction	The main structural element of the building is constructed by steel which is non-rated and were found in exposed condition without any fire protection. Location: Child care building	The building is a new steel structure which shall be type-I or II construction. So, provide require rating in the structural elements of the building. Consult with a qualified fire protection engineer. Follow BNBC 2020-Table 3.3.1, 3.2.4 & 3.1.9. Factory shall ensure that, all the design, data sheet, certificate, and the design-philosophy has been reviewed from the RSC prior to install the structural fire protection system.	Within 6 Months
 				
F-08	Means of Egress	Building did not have adequate evacuation map, stair designation signs and occupant load signs at required locations on all floors Location: Child care building and Utility Building-2	Provide Evacuation map, stair designation signs and occupant load signs at all required locations as per RSC Technical guideline.	Within 1 Month

F-09	Means of Egress	Handrails at open side acting as a guard in the exit stair where the height of the handrails found 35 in. Guards shall not be less than 42 inch to avoid falling hazard. Location: Child care building and Utility Building-2	Stairways serving as means of escape shall have continuous guards and handrails on both sides. Provide guards at all open sides of means of egress with a minimum height of 42 inches. 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.).	Within 2 Months
 				
F-10	Means of Egress	Handrails are not provided on both sides of the exit stairs on all floors. Location: Child care building, Stair-1	Provide handrails on both sides of the exit stair. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in. 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.	Within 1 Month

				
F-11	Fire Alarm & Detection System (FADS)	The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards. Location: Child care building and Utility building-2	Replace the fire alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72. 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 building 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.	Design Review within 2 Months and installation within 4 Months.
F-12	ITM of Fire Alarm and Detection System	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72. Location: Child care building and Utility building-2	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-13	Fire Suppression System (SUPS)- Standpipe System	The building has an occupied floor greater than 10 meter (33 feet) where required standpipe system found under installation. Standpipe installation requires detailed review to confirm compliance with NFPA 14, 20 and RSC standards. Location: Utility building-2	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC 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-14	ITM of Standpipe system	Inspection, testing and maintenance of the standpipe system is not found in accordance with NFPA 14 and 25. Location: Utility building-2	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 14 and 25.	Within 1 Month after installation.
F-15	ITM of fire pump	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 10 and 25 or as per RSC standard.	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 20 and 25 or as per RSC standard.	Within 1 Month after installation.

F-16	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). (Child care building and Utility building-2)	Inspect, test and maintain the emergency lighting system in accordance with RSC technical guidelines (standard). Keep written records on-site.	Within 1 Month
F-17	Inspection Testing and Maintenance of Fire extinguisher (ITM)	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10. (Child care building and Utility building-2)	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10.	Within 1 Month