

# INITIAL FIRE SAFETY INSPECTION REPORT

**Factory Name: Axis Knitwears Ltd (relocated)**

**Factory ID: 24178**

**ADDRESS: Mawna, Sreepur, Gazipur.**

**GPS Coordinates: 24.253269, 90.399112**

**Other Factories: None**



**Inspected By: Md. Atick Al Zaman & Mahfuza Khanom**

**Date: 17 June 2021**

## Summary Report

**Factory Name: Axis Knitwears Ltd (relocated)**

### **Summary:**

Axis Knitwears Ltd (relocated) complex was surveyed for fire safety on 17/06/2021 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.

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.

## Findings & Recommendations :

Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	The exit stairs are not separated from other occupancy on each floor by fire rated construction.	Provide minimum 1.5-hr fire rated doors for buildings that are 4 or more stories. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. 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. 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 accord standard 6.8.3.1.	Within 3 months



2	Fire Rated Construction	Rooms used for storage of combustible materials are not separated from the surrounding occupancy/areas & floors. Location: 7th Floor	Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum 1 hour construction.	Within 3 months
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3	Fire Rated Construction	Areas used for combustible storage are not separated by fire rated construction. Store room on seventh floor.	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows:</p> <ul style="list-style-type: none"> <li>- Maximum height of 2.4m and maximum area of 23m<sup>2</sup></li> <li>- If sprinkler protected: maximum height of 3.66m and maximum area of 93m<sup>2</sup>.</li> </ul> <p>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.</p>	Within 3 months
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4	Fire Rated Construction	Flammable gas storage area is not separated by fire-rated construction (openings, non-rated doors, penetrations) from other area.	<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"> <li>1. The storage building must be at least 3 meters away from any other building and boundaries.</li> <li>2. The exterior walls of the building must have a fire resistance rating of 3 hours using noncombustible construction.</li> <li>3. Doors and other openings in the exterior walls must be protected with suitable closing devices having a fire protection rating of 3 hours.</li> <li>4. The building is to be used for no other purpose than the storage of LPG/CNG cylinders.</li> <li>5. The building must be mechanically ventilated to control the accumulation of flammable vapors.</li> <li>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.</li> </ol>	Within 1 month
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5	Fire Rated Construction	Penetrations through floor/ceiling assemblies are found unsealed.	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 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months
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6	Fire Protection	Fire pump, water supply & sprinkler system installation requires detailed review to confirm compliance with NFPA 13, 14, 20, 22, 25 and ACCORD standards.	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 done as per the reviewed design and standard.	Design within 2 months, installation /modification within 4 months
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7	Fire Alarm System	Fire alarm system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval.	Design within 2 months, installation /modification within 4 months
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8	Fire Rated Construction	Unsealed penetrations and openings are located in exit stair enclosures.	Seal all penetrations and openings in the wall of exit enclosure walls (full thickness of the wall) by fire rated materials to maintain the fire resistance rating.	Within 3 months
				
9	Fire Rated Construction	Compressor room is not properly separated by fire rated construction with canteen. Location: Building-4	Compressor shall be separated from other occupancies by a minimum 1-hr fire rated construction (wall, floor, slab etc). Seal all penetrations and openings (door, window etc.) should be protected by 0.75-hr (45 min) fire rated materials to maintain the fire separation if required. All exhaust systems shall discharge to the exterior of the building in a safe location.	Within 3 months



10	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 3 months
11	Egress Lighting	Directional signs are not provided where direction of the path of travel to an exit has changed.	Illuminated directional signs shall be provided where there is a change in the direction for the path of travel and the direction to an exit is not obvious.	Within 3 months

12	Egress	Parapets or guards are observed less than 42 in. in occupiable roof.	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 2 months
				
13	Inspection, testing, and maintenance of Fire Alarm System	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 and Accord standards.	Within 1 month (After installation)

14	Inspection, testing, and maintenance of Fire Protection	Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 25.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 25 and Accord standards.	Within 1 month (After installation)
15	Inspection, testing, and maintenance of Fire Protection	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 and Accord standards.	Within 1 month (After installation)