

INITIAL FIRE SAFETY INSPECTION REPORT

ECHOKNITS LTD (EXTENSION 2)

RSC ID: 26202

Factory Address: A-99/1, Bokterpur, Kaliakoir, Gazipur

Other Factories: ECHOKNITS LTD (previously Shomahar Sweaters Ltd). RSC ID-10349 ; ECHOKNITS LTD (Extension) - 24842



Inspected By: Mahbub Alam Sami

Date: 29 April 2025

Fire Safety Inspection Report

ECHOKNITS LTD (EXTENSION 2)

Introduction:

ECHOKNITS LTD (EXTENSION 2) complex was surveyed for fire safety on **29 April 2025** 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

SI No	Building Name & Description	Construction History	Period
1	Building 1: Production Shed (Shed-14) Single Storied Pre-fabricated Steel Shed Building Total Approx Area: 2500 sqm	Construction Start: January 2023 Construction End: August 2024 Date of first Operation: August 2024 Building Approval: On 03 April 2023 from Kaliakoir Pouroshova, Gazipur.	New
2	Building 2: Utility Building Three Storied RCC Building (G+2) Total Approx Area: 1900 sqm	Construction Start: April 2024 Construction End: February 2025 Date of first Operation: April 2025 Building Approval: On 30 December 2024 from Kaliakoir Pouroshova, Gazipur.	New

Factory Address: A-99/1, Bokterpur, Kaliakoir, Gazipur

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.

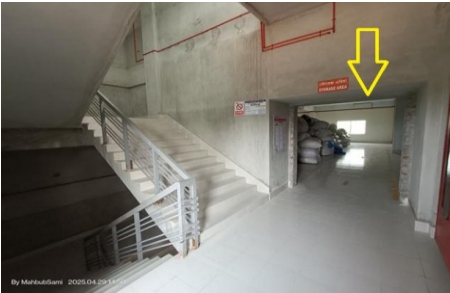
Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The required fire separation distance for Production Shed-14 & Utility Building does not comply with the requirements of BNBC 2020. Location: Production Shed-14 & Utility Building.	The exterior walls shall have a fire resistance and opening protection as specified in BNBC 2020 Part 3 Table 3.2.2 & 3.2.3 and BNBC 2020 Part 3 Section 2.4.1.3.	Within 6 Months
				

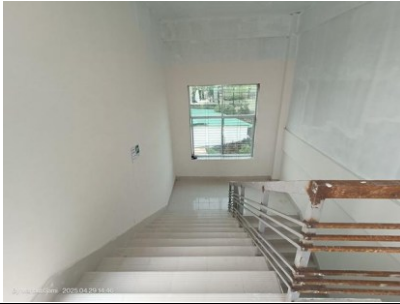
F-2	Fire Rated Construction	The exit stair enclosures are not separated from work areas and other spaces on each floor by fire-rated construction. Location: Utility Building.	The exit stair enclosure shall be provided with a minimum 1-hr fire resistance rating for buildings with 3 or fewer stories and a minimum of 2-hr. fire resistance rating for buildings 4 or more stories. Provide 1-hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction for building with 3 or fewer stories. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated fire rated barrier construction for building with 4 or more stories in accordance with section 6.3.1.2 of RSC Technical Guidelines (Standard)¹ V1.0. 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-3	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: Production Shed-14.	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45 m and maximum area of 23 m² and is separated by a minimum 3.0 m (10ft) from other storage areas and they do not exceed 10 percent of the building area of the story in which they occur. or, If sprinkler protected, Maximum height 12 ft (3.66 m) and maximum area of 1000 ft² (93 m²) and separated by a at least 25 ft (7.62 m) and does not constitute more than 10 percent of the building area or 4000 ft² (372 m²) of the sprinklered area, whichever is greater. or, Enclose the storage area from the surrounding occupancy with a minimum 1 hour construction.	Within 3 months
 				

F-4	Means of Egress	Aisles were found missing on several locations throughout the building. Location: Production Shed-14.	Provide minimum aisle widths of 36-in. Aisles mark shall be clearly visible.	Within 1 month
 				
F-5	Means of Egress	The exits are not remotely located from each other, such that a single fire event could compromise both exits of the North portion of Production Shed-14. Location: Production Shed-14 (North) Diagonal Distance: 141 feet Exit Distance: 64 feet	Provide additional exit or reconfigure the exit arrangement to ensure that the exit doors or means of egress openings are located a distance apart as per RSC Technical Guideline (Standard) section of 6.6.6.	Within 3 months

				
F-6	Means of Egress	Storage areas discharges directly into the exit stair enclosure. Location: 2nd & 1st Floor, Utility Building	Openings from exit enclosure to Storage areas/ basements/ transformer rooms/ generator rooms/ boiler rooms and similar normally unoccupied spaces shall be provided with a vestibule with fire rated construction and openings in accordance with section 6.14.3 of RSC Technical Guidelines (Standard)¹ V1.0. Provide a min 1-hr fire rated door on the exit stair side and a 1.5 hr./1-hr fire rated door on the Store, generator, sub-station room side . Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure as per RSC Technical Guidelines (Standard)¹ V1.0. section 6.14.3. The minimum width for vestibules shall not be less than 1.1m and length 1.8m.	Within 3 months
 				

F-7	Means of Egress	Falling hazards are present at the Occupiable roof, which are situated at a high altitude. Location: Utility Building.	Guards shall have a minimum height of 1067 mm (42 in.). 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.). Guard/Handrail shall construct in accordance with RSC Technical Guidelines (Standard)¹ V1.0 Section 6.12	Within 1 month
				

F-8	Means of Egress	Handrails are not provided on both sides of each exit stairs on all floors. Having handrails on one side of said staircase, may pose as a falling hazard during evacuation. Location: Utility Building.	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.). 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.). Handrail shall construct in accordance with RSC Technical Guidelines (Standard)¹ V1.0 Section 6.12.	Within 1 month
				
F-9	Means of Egress	A single means of exit has been provided for the new construction building. Location: 1st floor, Utility Building. Occupant Load: 40 Travel Distance: 101 feet	The number of means of egress from any floor, story or portion thereof shall not be less than 2 except where a single exit is permitted by RSC Technical Guideline (Standard), section 6.6.2. Provide additional exit and ensure that the exit doors or means of egress openings are located a distance apart as per RSC Technical Guideline (Standard) section of 6.6.6	Within 3 months

				
F-10	Means of Egress	Fire evacuation maps is not posted at the entrance of all exit stair. Location: Utility Building.	Fire evacuation maps shall be posted at the entrance to each exit stair in accordance with RSC Technical Guidelines (Standard)¹ V1.0 Section 13.3.	Within 1 month
F-11	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: Production Shed-14 & Utility Building.	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

				
F-12	Fire Alarm & Detection System (FADS)	The factory has installed a fire alarm and detection system that requires a detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (Standard). Location: Production Shed-14 & Utility Building.	Submit the fire alarm and detection 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, 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 within 2 months and modification/ installation with 4 months
				

F-13	Fire Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire detection system is not found in accordance with NFPA 72. Location: Production Shed-14 & Utility Building.	Inspect, test and maintain the fire detection system, and keep written records on-site, in accordance with NFPA 72.	Within 1 month after installation.
F-14	Fire Protection System(ITM of Extinguishers)	Inspection, testing and maintenance of portable fire extinguishers is not found in accordance with NFPA 10. Location: Production Shed-14 & Utility Building.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10.	Within 1 month.
F-15	Emergency lighting system inspection, testing and maintenance (ITM of Emergency lighting)	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with the RSC Technical Guidelines (Standard)¹ V1.0. Location: Production Shed-14 & Utility Building.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with the RSC Technical Guidelines (Standard)¹ V1.0.. Keep written records on-site.	Within 1 month.