

FIRE SAFETY INSPECTION REPORT

JK Knit Composite Limited (Textile & Utility Buildings)

Factory ID: 2425

10/1, South Dariapur, Savar, Dhaka-1340, Bangladesh.

23.835038, 90.25495

Other Factories in the Building: None



Inspected by: Md. Rakibul Alam

Date: 03 July 2022



Summary

JK Knit Composite Limited (Textile & Utility Buildings) complex was surveyed for fire safety on 03 July 2022 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.



Table 1. Findings And Recommendations

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Protection	The fire pump set installation requires detailed review to confirm compliance with NFPA 20 and RSC Technical Guidelines (Standard).	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Within 2 months
				
F-2	Fire Protection	The firefighting system (standpipe system) installation requires detailed review to confirm compliance with NFPA 14.	Submit as built drawing, testing records, equipment certification and all relevant documents to the RSC for review, approval and acceptance test.	Within 2 months





F-3	Fire Protection	The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards.	Replace the fire alarm and detection system with a new, listed automatic fire alarm system in accordance with NFPA 72 and RSC technical guidance (standard).	Design within 2 Months Install within 4 months
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F-4	Fire Protection	Inspection, testing and maintenance of the automatic fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the automatic fire alarm system and keep written records on-site, in accordance with NFPA 72.	Within 7 months
F-5	Egress Lighting	Exit signage was not provided at several exits / along the path of egress / in a readily visible location. (All building/shed)	Provide exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious.	Within 1 month
F-6	Egress	Handrails are not provided on both sides of both exit stairs.	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.)	Within 2 months



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F-7	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 supply adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and along exit discharge paths and a minimum 2.5 lux along exit access aisles.	Within 1 month
F-8	Egress	Building did not have stair designation sign, occupant load sign & floor level signs at required locations.	Provide occupant load sign, stair & floor designation signs at required locations.	Within 1 month
F-9	Egress	Width of both stairs are less than 1.5 m (60 in.) (S-E stair is 44 in. and N-W stair is 48 in.).	Provide exit stair minimum clear and unobstructed width of 1.5 m (60 in.) in accordance with RSC 6.5.6.2.1.	Within 6 months
F-10	Egress	Elevator shaft is provided in the exit stair enclosure and open to exit stair enclosure.	Modify the elevator and stair enclosure arrangement in a way to satisfy RSC 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



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F-11	Fire Rated Construction	Exit stairs are not separated from work areas & other spaces on each floor by fire-rated construction due to unprotected openings and penetrations.	Separate the exit stairs from work areas and other building spaces on all floor levels by minimum 2- hr fire-rated construction. Provide minimum 1.5- hr fire rated doors and seal all unprotected openings and penetrations to maintain the fire separation. Ensure that all fire doors are self-closing and positive latching, and are provided with fire exit (panic) hardware where serving production floors or assembly occupancies. 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 RSC standard 6.8.3.1.	Within 3 months
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F-12 Egress

Exit stair do not discharge directly to the outside.
(N-W stair)

Modify stair to discharge directly outside.
Or Provide 2-hr fire-rated exit passageway leading directly outside (vestibules to separate any storage areas).
Or Provide sprinkler protection for discharge floor in accordance with NFPA 13 meeting RSC 6.17.3.

Within 4 months



F-13	Fire rated Construction	The factory shed is steel construction which appears to be nonrated and were found in exposed condition. (Finishing shed and Dyeing shed, both are new constructed and height is more than 8m)	Fire rating for structural and non- structural elements of group- I construction shall be in accordance with BNBC 2020 Table 3.3.1 (a). For all new Type I-E of Group I construction, the maximum allowable story and height shall be one story and 8 m respectively. BNBC 2020 Part 4 Table 4.1.1 and Part 4 Section 1.5 shall apply for fire rating of common building elements.	Within 6 months
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