

INITIAL FIRE SAFETY INSPECTION REPORT

Nkk Knitwear Ltd. (Extension)

RSC ID: 25618

Geographical Coordinates: 23.642571, 90.487552

Address: Kutubail, Fatullah, Narayanganj, Dhaka, Bangladesh.

Other Factories: Nkk Knitwear Ltd. (ID: 10161)



Inspected By: Al-Shahriar Shovon

Date: 05-November-2024

Fire Safety Inspection Report

Nkk Knitwear Ltd. (Extension)

Introduction:

RSC ID : 25618

Nkk Knitwear Ltd. (Extension) complex was surveyed for fire safety on **05-Nov-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

There is 1 structure covered under this RSC ID 25618. The building is as below:



SL No	Building Name	Building Construction Period	Approval Date & Authority	Occupied	Structure type	Construction Category
1	8-Storyed RCC New Production Building (Extension) (Building-3)	Apr-2017 to Dec-2019	Not taken yet (RAJUK) Note: 02-June-2021 (DIFE)	Jan-2020	RCC	Interim

Factory Address: Kutubail, Fatullah, Narayanganj, Dhaka, Bangladesh.

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.

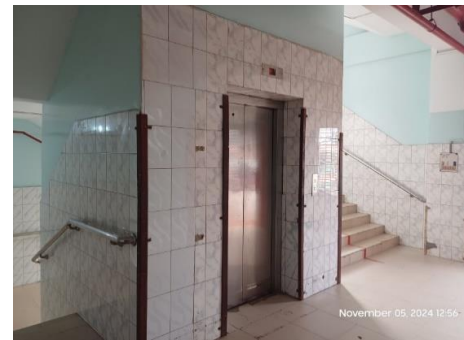
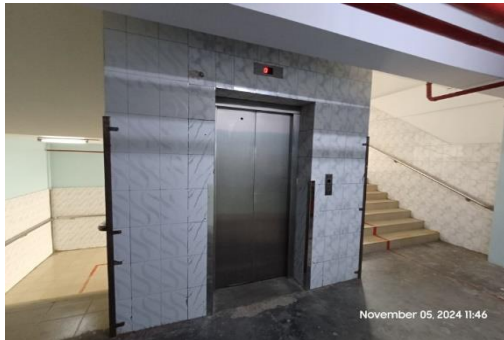
Table-1: 8-Storied RCC New Production Building (Extension) (Building-3)

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-01	Fire Rated Construction	Rooms used for combustible storage are not properly separated by fire rated construction. Location: 7th floor, Carton store.	Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 0.75 hr. fire rated door and seal all penetrations and openings by 0.75 hr. (45 Minutes) fire rated barrier construction.	Within 3 months
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F-02	Fire Rated Construction	<p>Areas used for in-process storage of combustible materials are open to the surrounding occupancy which are not separated by fire rated construction. Location: 6th floor.</p>	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Or, Where separate storage rooms are not feasible, Provide defined storage areas and limit the storage arrangement as follows:-</p> <p>1. General Condition: Maximum height of 2.4m (8 ft) and maximum area of 23 m² (250 sft). Separate areas of unenclosed combustible storage by a minimum clear distance of 3 m (10 ft).</p> <p>2. If sprinkler protected: Maximum height of 3.66 m (12 ft) and maximum area of 93 m² (1000 sft). Separate areas of unenclosed combustible storage by a minimum clear distance of 3 m (10 ft).</p> <p>Note: Do not exceed 10 percent of the building area of the story in which they occur.</p>	Within 3 months
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F-03	Fire Rated Construction	<p>Elevator shafts are not separated by fire rated construction from exit stair enclosure on each floors and directly open into inside of the exit stair enclosure. Location: Stair-2.</p>	<p>For new and interim construction, elevators shall not open into an exit enclosure as per RSC Technical Guidelines (Standard) V1.0-6.14.3. So, ensure separate enclosures for the elevator shafts with minimum 2 hr. fire rating. Seal all openings to maintain fire separations.</p> <p>Factory is recommended to follow RSC published "SUPPLEMENTARY PAPER ON REMEDIATION GUIDANCE ELEVATOR OR LIFT SHAFT OPENING IN EXIT ENCLOSURES" for different solutions.</p>	Within 3 months
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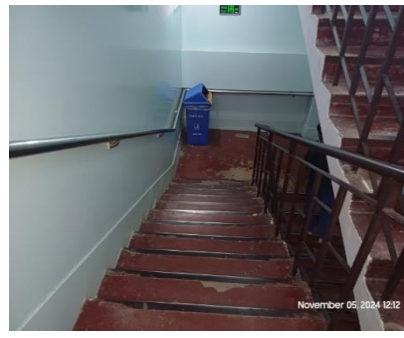
F-04	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies due to expansion joint and BBT on each floor several locations.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 3-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's guideline. or, 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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F-05	Means of Egress	The exit stair enclosures are not separated from work areas and other spaces on each floor by fire-rated construction.	<p>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 0.75 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.</p> <p>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.</p>	Within 3 months
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F-06	Means of Egress	Exit discharge paths of stair-04 are not separated by fire rated construction from the wastage storage. Unprotected openings and penetrations are found within the exit stairs discharge. Also, Electrical power cable raceway are located within the exit stair discharge.	Separate the exit stair discharge by a minimum 2 hr. fire rated construction barrier. Seal all penetrations and openings to the interior of the building along the discharge path with minimum 2 hr. fire rated materials. Remove & Relocate all electrical power cables from the exit discharge.	Within 3 months
 <p>The first photograph shows a staircase with a red and white checkered floor, with a yellow arrow pointing towards a doorway. The second photograph shows a hallway with a yellow circle highlighting a doorway area. The third photograph shows a hallway with yellow arrows pointing to electrical conduits and pipes on the ceiling.</p>				
F-07	Means of Egress	Stair width are found less than 60 in. (found 44 in. & 53 in.) for stair-3 & stair-4.	In new and interim construction, 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. For assembly use areas provided for prayer halls, dining halls and like areas that are for integral use by the factory workers, the minimum width for the primary occupancy use of the building shall be permitted to be used.	Within 3 months



F-08	Means of Egress	The building is more than 5-storied (8-storied) and provisions of re-entry on required floors are not provided on the exit stairs as per the RSC Technical Guidelines (Standard).	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets The RSC Technical Guidelines (Standard) 6.8.3.1	Within 3 months
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F-09	Means of Egress	Aisles are not properly marked on the floor. Location: 7th floor.	Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.). All the aisles shall be free from any kind obstruction.	Within 1 month	
					
F-10	Means of Egress	Updated evacuation map is not posted at the entrance of all exit stairs on each floors.	Evacuation maps shall be posted at the entrance on each exit stair.	Within 1 month	
F-11	Means of Egress	The directional signs are not provided where there is a change in direction and where the continuation of the egress path is not obvious.	Install 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 1 month	



F-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: Each floors.</p>	<p>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.</p>	Within 1 month
F-13	Means of Egress	<p>Manual on-off switch is provided for emergency lighting & exit signage units. Location: Each floor.</p>	<p>Remove manual on/off switches from emergency lighting & exit signage units to prevent them from being switched off.</p>	Within 1 month



F-14	Inspection, Testing & Maintenance (Fire)	Inspection, testing, and maintenance for the exit sign and emergency lighting system were not in accordance with the RSC Technical Guidelines (Standard).	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC Technical Guidelines (Standard) and keep written records on-site.	Within 1 month
F-15	Inspection, Testing & Maintenance (Fire)	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10 and RSC Technical Guidelines (Standard).	Within 1 month