

INITIAL FIRE SAFETY INSPECTION REPORT

Norp Knit Industries Ltd. Unit-2 (Extension)

RSC ID: 24594

R.I Park, 93, Islampur, Kodda, Nandun, Gazipur 1700

Geographical Coordinates of factory building: 23°59'08.9"N 90°21'11.5"E

Other Factories: Norp Knit Industries Ltd. Unit-2 (ID: 9711) in the premises



Inspected By: Mohammad Anayet Hossain & Shahina Imam

Date: 17 September 2023

Fire Safety Inspection Report

Norp Knit Industries Ltd. Unit-2 (Extension)

Introduction:

Norp Knit Industries Ltd. Unit-2 (Extension) was surveyed for fire safety on **17/09/2023** 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):

1. New Admin Building -RC (G+4)
Start Date: June, 2018
End Date: December, 2019
Production Star: December, 2019
2. Dry Process Building- RC (G+3)
Start Date: June, 2017
End Date: February, 2018
Production Star: February, 2018
3. Six storied Store Building. -RC (G+5)
Start Date: January, 2018
End Date: December, 2019
Production Star: February, 2023
4. North Side Toilet block-RC (G+2) [Adjacent with-ID: 9711]
Start Date: August, 2017
End Date: December, 2017
Production Star: December, 2017
5. Compressor Building-RC (G+2)
Start Date: May, 2022
End Date: August 2022
Production Star: September, 2022

6. Boiler Room-RC Single story

Start Date: April, 2018

End Date: June, 2018

Production Star: June, 2018

7. Wastage Room- Single storied Masonry structure.

Start Date: March, 2022

End Date: June, 2022

Production Star: July, 2022

R.I Park, 93, Islampur,Kodda, Nandun, Gazipur 1700

Findings & Recommendations :

Norp Knit Industries Ltd. Unit-2 (Extension)

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 exit stairs are not separated from [work areas, other spaces] on each floor by fire-rated construction.	Provide minimum 2-hr fire rated construction for buildings 4 storied or more and 1-hr for upto 3 storied. Seal all unprotected openings to separate the exit stairs from work areas and other spaces on all floor levels by 90 minutes for 2 hr. construction and 60 minutes for 1-hr construction. Ensure that the fire rated doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors and provide vestibules to avoid direct discharge from storage to exit stair enclosure. If fire rated 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 Technical Guidelines (Standard) 6.8.3.1If 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-2	Fire Rated Construction	Rooms used for combustible storage are not separated by fire-rated construction from Water treatment plant & Dehumidifier m/c . Location: 3rd Floor (Dry process Building).	Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum 1 hour construction. Openings shall be protected with minimum ¾ hr. fire protective opening assemblies.	Within 3 Months
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F-3	Fire Rated Construction	Storage room discharges directly into the exit stair discharge. Location: 3rd Floor (Dry process Building) & Six Storied Store Building.	Openings from exit enclosure to storage room, generator and hazard spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the Store, generator, substation room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 Months
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F-4	Fire Rated Construction	Chemical storage area is not separated by fire-rated construction having non rated door and unsealed penetrations and openings. Location: Ground Floor of Dry Process Building.	Separate the chemical storage room by 2-hr fire rated construction. Seal all penetrations and protect the openings to maintain the required fire separations.	Within 3 Months
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F-5	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: 2nd floor of Dry Process Building	Provide defined storage areas and limit the storage arrangement as follows:- 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. or 3. Enclose the storage area from the surrounding occupancy with a minimum 1 hour construction.	Within 3 Months
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F-6	Fire Rated Construction	Elevator shafts are directly open into Exit Enclosure of Six Storied Store Building.	For interim construction, elevators shall not open into an exit enclosure as per RSC-6.14.3. So, separate the stair enclosure from elevator shaft throughout the building.	Within 3 Months
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F-7	Fire Rated Construction	Elevator shafts are directly open the inside the floor of New Admin Building.	Ensure minimum 1.5-hr fire rating for the doors of elevator shafts otherwise close the shafts area with 2-hr fire rated construction barrier and 1.5-hr fire rated doors.	Within 3 Months
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F-8	Fire Rated Construction	The Exit Stair discharge to the interior of the New Admin Building (Ground floor).	Modify stair to discharge directly outside. Or Provide 2-hr fire-rated exit passageway leading directly outside (Vestibule to separated any storage areas.)	Within 3 Months
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F-9	Means of Egress	A single means of exit has been provided for 3-story compressor building	Provide additional exit according to RSC Technical Guidelines Standard V1.0 6.6.2	Within 3 Months
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F-10	Mean of Egress	Changes in elevation of walking surfaces do not exceed 6.35 mm (1/4 in) unless provided with a beveled slope of 1 in 2 that does not exceed 12.7 mm (1/2 in). Location Stair-2 of six storied store building.	Resurface the change in elevation to provide a slope that is less than 1 in 48 in.	Within 3 Months
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F-11	Means of Egress	Building did not have stair & Floor designation signs at required locations.	Provide stair & Floor designation sign at each floor entrance from the stair to the floor in English and Bengali. Signs shall indicate the name of the stair and the floor level. Signs shall be posted adjacent to the door.	Within 1 Month
F-12	Means of Egress	Building did not have occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 Month
F-13	Means of Egress	Egress door serving 50 or more occupants but does not swing in the direction of egress travel. Location: Ground Floor of New Admin Building.	Modify swing direction of egress doors to the direction of egress travel. Doors serving an occupant load of more than 50 shall swing in the direction (out-ward) of egress travel	Within 1 Month



F-14	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes on all floors.	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-15	ITM of Emergency light and Exit Sign	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The RSC Technical standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC Technical standard. Keep written records on-site.	Within 1 Month after installation
F-16	Egress Lighting	Exit signs were provided on both side of exit.	Lighted exit signs shall be placed at entrance to an exit. Additional exit signs shall be placed throughout the facility anywhere the continuation of the egress is not obvious.	Within 1 Month

F-17	Egress Lighting	Illuminated 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 1 Month
F-18	Egress Lighting	Manual On/Off Switch is provided at emergency lighting.	Remove manual on/off switches from emergency lighting / exit signage units to prevent them from being switched off.	Within 1 Month
F-19	Fire Alarm and Detection System (FADS)	Fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (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 Review within 2 months and installation within 4 months.



F-20	Inspection, Testing and Maintenance of FADS.	Inspection, testing and maintenance for the fire detection and alarm system was not in accordance with standard.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.	Within 1 Month (after installation)
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F-21	Fire Protection System(Standpipe)	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 and RSC standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Design Review within 2 months and installation within 4 months.
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F-22	Fire Protection System(ITM of standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the standpipe system in accordance with NFPA 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month after installation.
F-23	Fire Protection System(ITM of fire pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the fire pump in accordance with NFPA 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month (after installation)
F-24	ITM of Fire Extinguishers	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 The RSC Technical Guidelines (Standard).	Within 3 Months

F-25	Smoking Sign	The required no smoking signs are not present in the factory.	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 Month
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