

INITIAL FIRE SAFETY INSPECTION REPORT

4A Yarn Dyeing Ltd. (Extension buildings)

ID: 24192

Kaichabari, West Side of DEPZ, Ashulia, Savar

Google Co-ordinate: 23.9459992, 90.2621963

Other Factories: None



Inspected By: Md. Rakibul Alam & Md. Hasibur Rahman Abir

Date: 25-August-2021

Fire Safety Inspection Report

4A Yarn Dyeing Ltd. (Extension buildings)

Summary:

4A Yarn Dyeing Ltd. (Extension buildings). complex was surveyed for fire safety on 25-08-2021 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.

Table-1: Findings & Recommendations

SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire-rated construction	The exit stairs are not separated from work areas, other spaces on 1st floor by fire-rated construction. Location: Warehouse (Building No-3) Installed fire doors throughout the factory were not swinging and closing properly due to inappropriate installation of door accessories (closer,coordinataor, holding devices etc.).	Stair shall be enclosed with a minimum 1-hr fire-rated construction. Seal all unprotected openings and provide minimum 1-hr fire rated doors to separate the exit stairs from work areas and other building spaces on all floor levels. The clearance under the bottom of a fire door shall be a maximum of 3/4 in. (19 mm). Ensure that the fire doors are self-closing, positive latching and that they are provided with fire exit (panic) hardware where serving production floors. Provide vestibules to separate any storage areas. 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



2	Fire-rated construction	Dining area is not separated from other occupancies (storage) with fire rated assemblies. Location: Ground Floor at New Production Building-Unit-2 (Building No-2)	Re-locate the dining area or separate the dining area from other occupancies with 3-hr fire rated construction. Provide required exits that lead directly to the street or exit stairwell or leading to a 3-hr fire rated corridor or open space.	Within 3 months
 				

3	Fire-rated construction	Penetrations through floor/ceiling assemblies are found unsealed. Location(s): Plumbing pipes and Electrical Riser of New Production Building-Unit-2 (Building No-2)	Penetrations of fire resistive rated assemblies shall be protected with a listed through penetration fire stop system tested in accordance with ASTM E814 in accordance with Accord standard 4.7.	Within 3 months
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4	Fire-rated construction	The Warehouse (Building No-3) is pre fabricated steel construction. The main structural element of the buildings are constructed by steel which is appears to be nonrated and were found in exposed condition.	The building shall be type-I or type-2 construction as per BNBC 2006 Part 3 Section 3.2.4, page 10356. Provide/ensure required fire rating on the structural elements by following Section 4.4 and Table 4.4.1 of the Accord Standard or Table 3.3.1 and Table 4.1.1 from BNBC. Consult a qualified fire protection engineer to achieve the required fire rating.	Within 6 months
 				

5	Fire-rated construction	Areas used for combustible storage are not separated by fire rated construction. Location: New Production Building-Unit-2 (Building No-2)	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. 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
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6	Egress	Width of aisles is less than 0.9m (36-in.). Location: Warehouse (Building No-3)	Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 1 month



7	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: 6th floor of New Production Buidling-Unit-2 (Building No-2), both building storage rooms/areas and where applicable.	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 1 month
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8	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: 6th floor of New Production Building-Unit-2 (Building No-2)	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
 				

9	Egress lighting	Exit sign not provided at exit. Location: 6th floor of New Production Building-Unit-2 (Building No-2)	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. Lighted exit signs shall be provided with either battery backup or uninterruptable power supply systems and shall be continuously illuminated.	Within 1 month
 				

10	Egress	Building did not have occupant load signs at required locations. Location: New Production Buidling-Unit-2 (Building No-2) 6th floor and where missed.	Post the occupant load for every assembly and production floor in a facility in a conspicuous space near the main exit or exit access doorway for the space.	Within 1 month
11	Egress	Fire evacuation maps is posted inside the stair enclosure. Location: New Production Buidling-Unit-2 (Building No-2)	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
12	Fire Alarm	The factory has installed an addressable fire alarm & detection system which is required to be reviewed and verified. Location: For all structures	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 NFPA- 72. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design within 1 months, installation/modificati on within 3 months

 				
13	Fire Pump	The factory has installed a fire pump system which is required to be reviewed and verified.	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 NFPA- 20. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design within 1 months, installation/modification within 3 months



14	Fire Standpipe	The height of the highest occupied floor is more than 33 ft and the factory has installed a class III standpipe system which is required to be reviewed and verified. Location: New Production Building-Unit-2 (Building No-2)	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 NFPA- 14. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design within 1 months, installation/modification within 3 months
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15	Sprinkler System	A sprinkler system has been installed in the building which is required to be reviewed and verified. Location: New Production Building- Unit-2 (Building No-2). Note: Based on the height of the highest occupied floor, sprinkler system is not mandatory however the factory has installed automatic sprinkler system in place of automatic fire detection system in accordance with Accord standard 5.7.3.1 for both fire detection and fire protection.	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 NFPA- 13. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design within 1 months, installation/modification within 3 months
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16	Inspection, testing, and maintenance	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 1 month
17	Inspection, testing, and maintenance	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
18	Inspection, testing, and maintenance	Inspection, testing and maintenance of the addressable fire alarm and detection system is not in accordance with NFPA 72.	Inspect, test and maintain the addressable fire alarm and detection system and keep written records on-site, in accordance with NFPA 72 and ACCORD standards.	Within 1 month