

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Four Brothers Fashion (Extension)

RSC ID: 25616

Factory Address: Dhaka Uddan, Beribadh, Mohammad pur, Dhaka.

Geographical Coordinates of factory building: 23.76356585175183, 90.3430566758356

Other Factories: Four Brothers Fashion_(9235)



Inspected By: Mohammad Anayet Hossain

Date: 22-April-2024

Fire Safety Inspection Report

Introduction:

"Four Brothers Fashion (Extension)" complex was surveyed for fire safety on 22/04/2024 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

Factory Building name(s): Factory Building name(s) in this ID:25616:

1. Extension Building : (G+9); Ten (10) storied RCC building with partial basement (June 2016 to June 2021),
Construction Period: Interim.

Total area of the building : 29041.88 sft.(per floor: 3096 sft. average).

The Building (ID-25616) is structurally connected with Old ID (9235) where the all floors are merge together except 9th floor and roof top.

As new building is constructed which is directly connected with existing building and they are sharing process and egress. So all the building will be now consider as single fire compartment.

Factory Address: Dhaka Uddan, Beribadh, Mohammad pur, Dhaka.

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	Storage room directly discharge to exit stair enclosure at several locations.	Openings from exit enclosure to storage and machine room spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1 hr. fire rated door on the exit stair side and a 1- hr. fire rated door on the storage and machine room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure in accordance with RSC standard 6.14.3	Within 3 months
F-2	Fire Rated Construction	Areas used for combustible storage located at several floors are not separated by fire-rated construction	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4m and maximum area of 23m² - 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	Within 3 months



F-3	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies (all floor) due to building expansion joint, electrical cable riser, PVC plumbing pipe, etc.	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. (Type-1 Construction). or, Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. (Type-1 Construction). "Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level or seal all penetrations and openings in floors/ceiling assemblies by 3-hr fire rated listed/certified materials. The installation of such fire rated materials shall be following certified design."	Within 3 months
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F-4	Fire Rated Construction	The exit stair enclosures are not separated from work areas and other spaces on each floor by fire-rated construction.	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. 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. 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 the RSC Technical Guidelines Standard 6.8.3.1	Within 3 months
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F-5	Fire Rated Construction	Dining room are not properly fire separated from other occupancy by fire rated construction. Location: 5th floor.	Separate the dining room from production & other occupancies by minimum 3-hr fire rated construction. Provide rated exit passageways leading directly to the exit stairs with the same resistance rating.	Within 3 months
				

F-6	Means of Egress	In the 10 story RCC extension building, there is only one exit stair is available at 9th and roof top; a single exit is not permitted.	Provide minimum 2 exits and stairs for the 9th & roof from top to ground floor.	Within 3 months
F-7	Means of Egress	The width of egress aisles is less than 36-inch at several floor.	Provide minimum aisles widths of 36 inch. All the aisles shall be free from any kind obstruction.	Within 3 months
F-8	Means of Egress	Building did not have stair designation signs and occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month

F-9	Means of Egress	Width of new exit stair is less than 1.5 m (60 in.). Location: Stair-3 (SW-Stair).	Provide minimum clear and unobstructed exit stair widths of 1.5 m (60 in.) in accordance with RSC standard 6.5.6.2.1.	Within 3 months
F-10	Means of Egress	Updated fire evacuation map is not posted at the entrance of all exit stair.	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-11	Means of Egress	Parapets or guards are provided in occupiable roof which is less than 1067mm (42 inch.).	Provide parapets or guards with a minimum height of 42 in. for all occupiable roof areas.	Within 1 month

F-12	Fire Alarm & Detection System (FADS)	The factory has installed an addressable fire alarm & detection 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-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 02 months, installation/modification on within 03 months
F-13	Fire Detection ITM	Inspection, testing, and maintenance for the fire detection system is not in accordance with NFPA 72.	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	Fire protection System (Standpipe & Sprinkler System) installed and requires detailed review to confirm compliance with NFPA 13, 14, 20, 22, 24 & RSC Technical Guidelines (Standard)	The high-rise building has an occupied floor greater than 23 meter (75 feet) where required automatic sprinkler protection is installed through the factory. Sprinkler system is mandatory for the building based on height and type of construction but the Sprinkler System installed for the building along with standpipe system. However, both the system requires detailed review to confirm compliance with NFPA 13, 14, 20, 22, 24 and RSC Technical Guidelines (Standard).	Design within 02 months, installation/modification on within 04 months
F-15	Standpipe ITM	Inspection, testing and maintenance of the Standpipe system is not found in accordance with NFPA 14.	Inspect, Test & Maintain Standpipe System and keep written record as per NFPA 14 & NFPA 25.	Within 1 month (after installation)

F-16	Sprinkler ITM	Inspection, testing and maintenance of the Sprinkler system is not found in accordance with NFPA 13.	Inspect, Test & Maintain Standpipe & Sprinkler System and keep written record as per NFPA 13 & NFPA 25.	Within 1 month (after installation)
F-17	Fire Pump ITM	Inspection, testing and maintenance of the fire pump system is not found in accordance with NFPA 20.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20 and RSC standards.	Within 1 month (after installation)
F-18	Fire Extinguishers ITM	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 standards.	Within 1 month

F-19	Egress Lighting	Exit sign and Directional Sign are not provided at and towards exit at several floors.	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
F-20	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 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
F-21	Emergency Lighting ITM	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The RSC standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1 month