

INITIAL FIRE SAFETY INSPECTION REPORT

Habitus Fashion Limited- Extension Building

RSC ID: 25532

ADDRESS: Gazariapara, Bhawal, Mirzapur, Gazipur

Other Factories: Habitus Fashion Limited(11866)_In this premises



Inspected By: Md. Anisuzzaman & Hamed Mustakim

Date: 3rd September 2024

Fire Safety Inspection Report

Habitus Fashion Limited- Extension Building

Introduction:

Habitus Fashion Limited- Extension Building; complex was surveyed for fire safety on **03/09/2024** 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): There are four structure under this ID-25532 which are listed below:

1. Finishing building , 4-Storied RCC Structure (Construction: June -2022 to Dec-2023 & Occupied: July-2024. Total area= 11492 SQM, GF=3017 SQM & other Per floor area=2825 SQM, Design approved by Gazipur City Corporation on date Dec 2020, Interim Construction).
2. Security Building, 6-Storied RCC Structure (Construction: June -2013 to Nov-2013 & Occupied: Nov-2013). Total area=1366 SQM, Per Floor area=227.6 SQM, Design approved by Gazipur City Corporation on date June-2013, Existing Buildings)
3. Boiler building, Single storied RCC building(Construction: January-2023 to Mar-2023 & Occupied: July -2024. Total area=196 SQM, Design approved by Gazipur City Corporation on date Dec 2020, Interim Construction).
4. Outdoor Substation Room , Single storied RCC structure. (Construction: January-2020 to Feb-2020 & Occupied: May-2020. Total area=42 SQM, Design approved by Gazipur City Corporation on date Dec 2020, Interim Construction).

Buildings under Habitus Fashion Limited (Existing RSC ID- 11866) which are listed below:

1. Six Storied Office building, RCC structure
2. Six storied factory building, RCC structure. Six Storied Office building & Six storied factory building are architecturally interconnected each other by expansion joint.
3. Two storied energy building , RCC structure
4. Fire pump room, Single storied RC basement structure

Factory Address: Gazariapara, Bhawal, Mirzapur, Gazipur

Points of contact:

1. Name: Kazi Al Imran
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2. Name: Engr. Md Ruhul Amin
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Findings & Recommendations :

Table 1-2 summarizes the fire safety non-compliant issues identified during the inspection. Recommendations have been provided to address each issue with specific remediation timeline.

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: Finding & recommendation for 4-Storied finishing building.

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Through cable riser(BBT)	Penetrations of fire resistive rated assemblies shall be protected with a listed through-penetration fire stop system tested in accordance with ASTM E814 & As per RSC Technical Guideline standard V1-4.7 OR Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months
 Current Location Sep 03, 2024 02:00:29 (PT)				

F-2	Fire rated construction	The Dining area is not separated by fire rated construction with the adjacent occupancies. Location: Ground floor of 4-storied building	Separate the dining/canteen area from other occupancies (office, store) by minimum 3-hr fire rated construction. Provide rated exit passageways leading directly to the exit stairs of the same resistance rating.	Within 3 months
 				
F-3	Fire Rated Construction	Room used for combustible storage are not properly fire separated by fire rated construction due to non-functional fire door & unprotected opening through duct. Location: 1st & 2nd floor of 4-storied finishing building.	Provide dedicated storage rooms separated by minimum 1 hr. fire rated construction. Seal all unprotected openings and penetration. 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.	Within 3 months

 				
F-4	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire rated construction on 2nd and 3rd floor. Location: Finishing Building	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) from other storage areas 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 fire rated construction.	Within 3 months



F-5	Means of Egress	Store room directly open into exit stair enclosure. Location: ground floor & first floors of 4-storied finishing building.	Openings from exit enclosure to storage spaces shall be provided with a vestibule with fire rated construction as per RSC Technical Guideline (Standard) V1-6.14.3 . Provide a 1.5-hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storage 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-6	Fire Rated Construction	Elevator shafts are directly open into the production floor without proper fire separation. Location: West side of 4-storied finishing building.	Ensure minimum 2-hr listed/3rd party certified fire rated lift landing doors for elevator shafts otherwise close the area of the shaft with a 2-hr fire rated construction barrier	Within 3 months
				

F-7	Means of Egress	Lift shaft(lift machine) was not properly fire separated from exit stair due to unprotected opening & penetration. Location: West side of exit stair-1 of 4-Storeied building.	Seal all penetrations and openings in the wall (full thickness of the wall) assemblies by minimum 2-hr fire-rated materials to maintain the required fire-resistance rating	Within 3 months
 				
F-8	Mean of Egress	Width of exit stairs are less than 1.5 m (60 in.). Location: Stair-2 of 4- storied Finishing Building	Provide exit stair minimum clear and unobstructed width of 1.5 m (60 in.) for all industrial occupancies in accordance with RSC standard 6.5.6.2.1	Within 3 months



F-9	Mean of Egress	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction due to non-functional fire doors. Location: 4-Storeyed Finishing Building	The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating with 90 minutes opening protection. The clearance under the bottom of a fire door shall be a maximum of 19mm. 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 RSC Technical Guideline (Standard) V1 6.8.3.1.	Within 3 months
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F-10	Means of Egress	Updated Occupant load sign is not posted at the exit stair at all level.	Updated Occupant load sign shall be posted at the entrance to exit stair at all level.	Within 1 month
F-11	Means of Egress	Open guard's intermediate rails or pattern such that a sphere 200 mm (8 in.) in diameter pass through at stair-1. Location: Finishing Building	Open guards shall have intermediate rails or pattern such that a sphere 200 mm (8 in.) in diameter cannot pass through any opening up to a height of 865 mm (34 in.).	Within 1 month



F-12	Means of Egress	Stair-2 does not discharge directly to the outside. Location: Finishing Building	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 Technical Guideline Standard V1- 6.17.3.	Within 3 months
 				
F-13	Means of Egress	The means of egress of the ground floor on the discharge point is very narrow comparing to stair width which increases the possibility of bottlenecking of the discharge system. Location: East side of 4-Storeyed Finishing building.	Modify the width of the means of egress on the ground floor.	Within 2 months



F-14	Means of Egress	Updated Building did not have stair designation signs & exit designation signs at required locations.	Provide Updated stair designation sign & exit 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-15	Means of egress	Uneven path of travel and blockage in exit discharge path due to construction purpose. Location: North side exit stair discharge path of 4-Storeyed finishing building.	Remove unnecessary items and level exit path to the public way. Means of egress shall be maintained continuously free and clear of all obstructions	Within 1 month

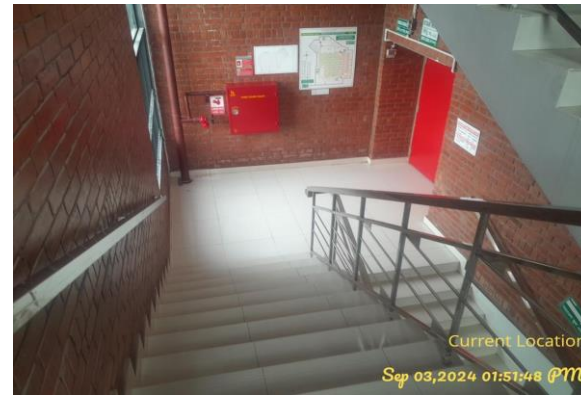
				
F-16	Means of egress	Aisles mark is not provided at several package section . Location: 2nd & 3rd floor at package section of 4-storied finishing building.	Aisles shall be provided with a minimum unobstructed clear width of 0.9 m (36 in.).	Within 2 months
 				

F-17	Mean of Egress	Updated fire evacuation plan & maps is not posted at the entrance of all exit stair.	Update Fire evacuation plan & maps shall be posted at the entrance to each exit stair as per RSC Technical guideline standard V1-13.3	Within 1 month
F-18	Egress lighting	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-19	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 3 months
F-20	Egress lighting	Emergency lights not illuminated during testing (burned out, broken, etc.). Location: Several floors of main production building	Regularly inspect all emergency lighting system as per RSC standard and replace/install lights as needed to illuminate signs.	Within 1 month

F-21	ITM(Egress lighting)	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 1month
F-22	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 1 month and modification within 3 months (If require).



F-23	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 (Table-14.3.1) or as per RSC standard.	Within 1 month after modification(If require).
F-24	Fire Protection System(Standpipe)	Standpipe system installation requires detailed review to confirm compliance with NFPA- 14 , 20 ,22 & 24 or as per RSC standard.	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install and modify the standpipe system throughout the building in accordance with review comment, RSC Standard and NFPA- 14,20,22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 1 month and modification within 3 months (If require).



F-25	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 month after modification(If require).
F-26	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the fire pump system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 month after modification(If require).
F-27	Fire Protection System(ITM of Extinguisher)	Inspection, testing, and maintenance of the extinguisher system is not in accordance with NFPA 10 or as per RSC standard.	Inspect, test and maintain the extinguisher system, and keep written records on-site, in accordance with NFPA 10 or as per RSC standard.	Within 3 months

Table-2: Finding & recommendation for 6-Storeyed Security building.

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-28	Fire rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Through Plumbing PVC pipe of 6-storied security building	Penetrations of fire resistive rated assemblies shall be protected with a listed through-penetration fire stop system tested in accordance with ASTM E814 & As per RSC Technical Guideline standard V1-4.7 OR Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months
  				

F-29	Mean of Egress	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction due to unprotected opening. Location: 6-Storied Security building	The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating with 90 minutes opening protection. 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 RSC Technical Guideline (Standard) V1 6.8.3.1.	Within 3 months
 				
F-30	Means of Egress	Updated Occupant load sign is not posted at the exit stair at all level	Updated Occupant load sign shall be posted at the entrance to exit stair at all level.	Within 1 month

F-31	Means of Egress	Electrical panels were located in the exit stair-1 enclosure. Location: Security Building	Remove and re-locate all electrical panels from exit stair enclosures.	Within 1 month
				
F-32	Means of Egress	Updated Building did not have stair designation signs & exit designation signs at required locations.	Provide Updated stair designation sign & exit 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-33	Means of egress	Aisles mark is not provided at several floors Location: 6-Storied Security building.	Aisles shall be provided with a minimum unobstructed clear width of 0.9 m (36 in.).	Within 2 months

F-34	Mean of Egress	Updated fire evacuation plan & maps is not posted at the entrance of all exit stair.	Update Fire evacuation plan & maps shall be posted at the entrance to each exit stair as per RSC Technical guideline standard V1-13.3	Within 1 month
F-35	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 3 months
F-36	ITM(Egress lighting)	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 1month

F-37	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. Location: 6-Storied security building, Boiler building, Outdoor REB substation room.	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 1 month and modification within 3 months (If require).
				
F-38	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 (Table-14.3.1) or as per RSC standard.	Within 1 month after modification(If require).

F-39	Fire Protection System(Standpipe)	Standpipe system installation requires detailed review to confirm compliance with NFPA- 14 , 20 ,22 & 24 or as per RSC standard. Location: 6-Storied Security building.	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install and modify the standpipe system throughout the building in accordance with review comment, RSC Standard and NFPA- 14,20,22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 1 month and modification within 3 months (If require).
 				
F-40	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 month after modification(If require).

F-41	ITM of Protection System(SUPS)	Inspection, testing, and maintenance for the fire pump system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 month after modification(If require).
F-42	Fire Protection System(ITM of Extinguisher)	Inspection, testing, and maintenance of the extinguisher system is not in accordance with NFPA 10 or as per RSC standard.	Inspect, test and maintain the extinguisher system, and keep written records on-site, in accordance with NFPA 10 or as per RSC standard.	Within 3 months