

INITIAL FIRE SAFETY INSPECTION REPORT

UNITED COSTUME LIMITED (Building - 02)

RSC ID: 26006

Malancha Nagar, I/A, R # 02, West Isdair, Fatullah, Narayanganj, Bangladesh.

Geographical Coordinates : 23.63354523665316, 90.48189869339879

Other Factories: UNITED COSTUME LIMITED (RSC ID: 23445)



Inspected By: Md. Kawsar Rubaiat

Date: 20-Feb-2025

Fire Safety Inspection Report

UNITED COSTUME LIMITED (Building - 02)

Introduction:

UNITED COSTUME LIMITED (Building - 02) complex was surveyed for fire safety on **20-February-2025** 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

SI No	Building Name & Description	Construction History	Period
1	Building-1: Production Building-02 Proposed 8-storied RCC Building G+3 Currently Occupied (3rd floor is not architecturally completed yet) Total Approx Area: 37,200 Sq. ft (74, 400 Sq. ft Proposed)	Construction Start: Jan 2020 Construction End: Construction work is ongoing Constructed up to G+2 on Jun 2024 (3rd floor architectural renovation is ongoing) Date of first Operation: Jan 2022 Building Approval: On 10-Mar-2019 from Rajuk	Interim
2	Building-2: Boiler Room Single-storied RCC building Total Approx Area: 151 Sq. ft	Construction Start: Jan 2020 Construction End: Dec 2021 Date of first Operation: Jan 2022 Building Approval: On 10-Mar-2019 from Rajuk	Interim
3	Building-3: Compressor Room-2 Single-storied RCC building Total Approx Area: 581 Sq. ft	Construction Start: Jan 2020 Construction End: Dec 2021 Date of first Operation: Jan 2022 Building Approval: On 10-Mar-2019 from Rajuk	Interim
4	Building-4: Underground Fire Pump Room & Reservoir Single-storied RCC building (Underground) Total Approx Area: 861 Sq. ft	Construction Start: Jan 2020 Construction End: Dec 2021 Date of first Operation: Jan 2022 Building Approval: On 10-Mar-2019 from Rajuk	Interim

5	Shed-1: Dining Shed Single Storied Steel Shed Total Approx Area: 5920 Sq. ft	Construction Start: Jan 2020 Construction End: Dec 2021 Date of first Operation: Jan 2022 Building Approval: On 10-Mar-2019 from Rajuk	Interim
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Factory Address: Malancha Nagar, I/A, R # 02, West Isdair, Fatullah, Narayanganj, 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 approval.

Table-1: For Building# 1

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Means of Egress	Exit stairs are not separated from work areas & other spaces on each floor by fire-rated construction due to unprotected openings, penetrations & fire doors forcefully open with external objects. Location: Building-2: all floors.	Separate the exit stairs from work areas and other building spaces on all floor levels by minimum 2- hr. fire-rated construction. Provide a minimum 1.5- hr. fire-rated doors and seal all unprotected openings and penetrations to maintain the fire separation. Ensure that all fire doors are self-closing and positive latching, and are provided with fire exit (panic) hardware where serving production floors or assembly occupancies. 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 Guidelines (standard) 6.8.3.1.	Within 3 months
				

F-2	Means of Egress	The width of egress aisles is less than 36-in. on the ground floor. Location: Building-2: Ground Floor.	Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 1 month
				
F-3	Fire Rated Construction	Rooms used for combustible storage are not separated by fire-rated construction from surrounding occupancies due to gap beneath the fire doors more than 19 mm & opening with external sources. Locations: Ground floor (Building-2).	Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. However, separated areas shall ensure required means of egress as per RSC Technical Guidelines.	Within 3 months
 				

F-4	Fire Rated Construction	Areas used for in-process storage open to the factory are not separated by fire-rated construction Location: 1st floor. (Building-2).	Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 1-hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) , maximum area of 23m2 (250 ft2) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. - If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m2 (1000 ft2). - In-process storage shall not exceeds 10 percent of floor or compartment area.	Within 1 month
 				

F-5	Fire Rated Construction	Elevator shafts (provisions) are directly open into both exit enclosures which is a violation of RSC Technical Guidelines (Standard)-6.14.3. Location: All floors, Building-2.	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 opening protective as per RSC Technical Guidelines (Standard) 6.14.3. Factory is recommended to follow RSC published "SUPPLEMENTARY PAPER ON REMEDIATION GUIDANCE ELEVATOR OR LIFT SHAFT OPENING IN EXIT ENCLOSURES" for different solutions.	Within 4 months
 				

F-6	Fire Rated Construction	Unsealed penetrations and openings due to plumbing pipes are located in the fire-rated floor/ceiling assemblies. Locations: Floor & toilet areas, Building-2.	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. (Type-1 Construction). Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation has been reviewed from the RSC prior to install the passive fire protection system (If required).	Within 3 months
 				

F-7	Fire Rated Construction	The required fire separation distance for Building-02 does not comply with the requirements of BNBC 2006.	The exterior walls shall have a fire resistance and opening protection as specified in BNBC 2006, Tables 3.2.2 and Part 3 Section 2.4.1.3.	Within 3 months
				

F-9	Means of Egress	Directional signs are not provided where the direction of the path of travel to an exit has changed. Location: 1st floor, Building-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
				

F-10	Means of Egress	Handrails and guardrails are not provided on the exit stairs. Location: Building-2.	Provide handrails on both sides of the exit stairs. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread	Within 1 month
				
F-11	Means of Egress	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: All floors, Building-2.	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-12	Means of Egress	Parapets or guards are not provided on the occupiable roof. Location: Building-2.	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 1 month
 				
F-13	Means of Egress	Aisle marking has not been provided properly. Location: 3rd floor (Building-2) & Dining shed.	Aisles mark shall be provided at required places with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 1 month
 				

F-14	Means of Egress	Stairway treads are not uniform & abrupt changes in elevation exceed 1/4 inch which may lead to a tripping hazard during an emergency. Change in level was also observed on stair discharge from mezzanine & ground floor occupants. Location: Production Building-2.	Remove the obstructions and Provide an even level walking surface in exit discharge in accordance with 6.3.4 of RSC Technical Guidelines (Standard). Provide adequate number of steps to mitigate tripping hazards where changes in level are observed on exit discharge.	Within 1 month
				
F-15	Mean of Egress	Uneven path of travel was observed in the exit discharge path due to construction purposes. Locations: West side, Production Building-2.	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 3 months
				

F-16	Means of Egress	Occupant load sign, updated evacuation map & stair designation sign were found missing at the required locations on all floors. Location: Production Building-2.	Provide occupant load sign & evacuation plans at required locations. Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-17	Means of Egress	Occupant load signs & updated evacuation maps were found missing at the required locations on all floors. Location: Dining Building	Provide occupant load signs & evacuation plans at required locations. Fire evacuation maps shall be posted at the entrance to each exits.	Within 1 month
F-18	Fire Detection & Alarm System	The factory has installed a fire alarm and detection system that requires a detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (Standard). Locations: All Buildings.	Submit the fire alarm and detection system design to RSC for review. Once the design is reviewed, install and modify the fire detection and alarm system throughout the building in accordance with review comments, RSC Technical Guidelines (Standard) and NFPA 72. After installation, the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 2 months and installation within 4 months.
F-19	Inspection, testing, and maintenance of the Fire Alarm & Detection System (ITM).	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72 and RSC standards.	1 Month after installation.

F-20	Fire Protection System(Standpipe System)	Standpipe system installation requires detailed review to confirm compliance with NFPA 14, 20, 22, & 24 and as per RSC Technical guidelines (Standard). Location: Production Building-2.	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install/ modify the standpipe system throughout the building in accordance with review comment, RSC Technical Guidelines 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 2 months and installation within 4 months.
F-21	Fire Protection System(Sprinkler System)	Sprinkler system installation requires detailed review to confirm compliance with NFPA 13, 14, 20, 22, & 24 and as per RSC Technical guidelines (Standard). Location: Production Building-2.	Submit the sprinkler system drawing to RSC for review. Once the design is reviewed, install/ modify the standpipe system throughout the building in accordance with review comment, RSC Technical Guidelines and NFPA 13, 14, 20, 22, & 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 2 months and installation within 4 months.
F-22	Inspection, testing, and maintenance of the Fire Pump (ITM).	Inspection, testing and maintenance of the fire pump system, automatic fire sprinkler & Standpipe system are not in accordance with NFPA 25. Locations: Production Building-2.	Inspect, test and maintain the fire pump system, sprinkler system, standpipe system and keep written records on-site, in accordance with NFPA 25.	Within 1 month after installation.
F-23	Fire Protection System(ITM of Extinguishers)	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10. Locations: All Buildings.	Inspect, test and maintain the portable fire extinguishers and keep written records on- site, in accordance with NFPA 10 and RSC standards.	Within 1 month
F-24	Fire Protection System(ITM of Emergency Lighting System)	Inspection, testing and maintenance for the emergency lighting system was not in accordance with The RSC standard. Locations: All Buildings.	Inspect, test and maintain the emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1 month