

INITIAL FIRE SAFETY INSPECTION REPORT

Colour & Co. Ltd

RSC ID: 25528

24.232118, 90.423614

Tepirbari, Sreepur, Gazipur

Other Factory : No



Inspected By: Md. Sadid Rahman & Tanvir Jubayer Rahman

Date: 03-Mar-2024

Fire Safety Inspection Report

Colour & Co. Ltd

Introduction:

Colour & Co. Ltd complex was surveyed for fire safety on **03-Mar-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): A short description of the structures of this RSC ID are following,-

SI	Name	Construction year	Type
01	Building# 1- Garments Production (8 Storied RCC Building)	Construction year : Dec-2019 to Sep-2023. Occupied year : Jan-2023 Approval Date: Dec-2020 (PWD- Public Works Department)	Interim Construction
02	Building# 2- Admin Building (2 Storied RCC Building)	Construction year : Dec-2019 to Sep-2023. Occupied year : Jan-2023 Approval Date: Dec-2020 (PWD- Public Works Department)	Interim Construction
03	Building# 3- Security Building (Single Storied RCC Building)	Construction year : Dec-2019 to Sep-2023. Occupied year : Jan-2023 Approval Date: Dec-2020 (PWD- Public Works Department)	Interim Construction
04	Shed# 1- Utility Shed (Single Storied Steel Structure)	Construction year : Dec-2019 to Sep-2023. Occupied year : Jan-2023 Approval Date: Dec-2020 (PWD- Public Works Department)	Interim Construction
05	Shed# 2-Pump House (Single Storied Steel Structure)	Construction year : Dec-2019 to Sep-2023. Occupied year : Jan-2023 Approval Date: Dec-2020 (PWD- Public Works Department)	Interim Construction

Factory Address: Tepirbari, Sreepur, Gazipur

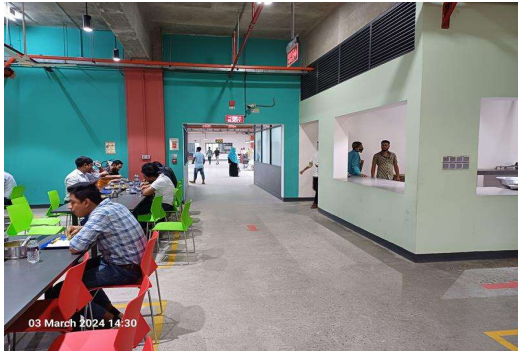
Findings & Recommendations :

Table 1 summarizes the major fire safety issues identified during the inspection of main buildings. Recommendations have been provided to address each issue. An implementation schedule shall be developed by the factory to remediate each of the similar types of findings throughout the premises. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for approval.

Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire rated construction. Location: 3rd floor in Main Production Building .	Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 0.75 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: Where the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m2 (1000 ft2) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage.	Within 3 Months
 				

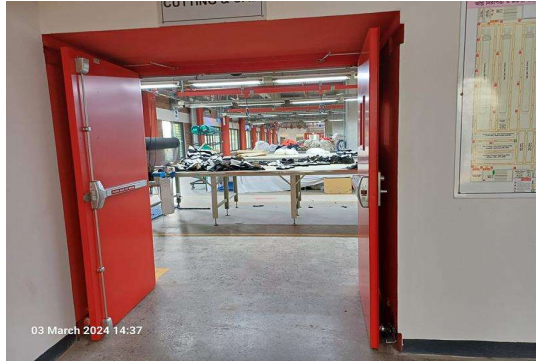
F-2	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies through out the main production building due to BBT, cable riser, steam pipe, Plumbing PVC pipe of toilet block. Location: Building# 1	Provide a minimum 2-hr fire rated shaft to separate 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
 The grid contains six photographs documenting fire safety issues in Building #1: Top Left: A close-up of a pipe penetration through a concrete floor slab, showing a gap between the pipe and the surrounding structure. (03 March 2024 14:01) Top Middle: A view of a large, irregular opening in a concrete ceiling, filled with a fibrous, yellowish material, possibly insulation or debris. (03 March 2024 14:07) Top Right: A view of a ceiling area with exposed pipes and a fire-rated shaft or enclosure. (03 March 2024 13:58) Bottom Left: A view of a ceiling area with exposed pipes and a fire-rated shaft or enclosure. (03 March 2024 14:39) Bottom Middle: A view of a ceiling area with exposed pipes and a fire-rated shaft or enclosure. (03 March 2024 14:39) Bottom Right: A view of a ceiling area with exposed pipes and a fire-rated shaft or enclosure. (03 March 2024 14:49)				

F-3	Fire-Rated Construction	The dining area is not separated from production area by fire rated construction where occupant capacity has been found 400 person as per the sitting arrangement. Location: 2nd Floor of Building# 1	Occupancy Assembly E3(less than 300 person) is permitted with Occupancy Industrial Building G2.(table: 3.2.1, BNBC:2006) Reduce the seating arrangement less than 300 person and separate the dining area by a minimum 3-hr fire-rated construction having two direct access to exit stair or safe location. Seal and/or protected all openings to maintain the required fire separations. Or, Remove dining area from production building.	Within 3 Months
 				

F-4	Fire Rated Construction	The exit stair is not separated from other occupancy due to the non-functionality of the hardware of the fire rated door. Furthermore, the gap beneath the fire rated door has been found 27 mm and some cases door hardware (door-coordinator) has been found missing.	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. The clearance under the bottom of a fire door shall be a maximum of 19 mm. From edges and top shall be limited to a maximum 4.8 mm. All measurement shall be taken from the ""pull side"" of the door. Any modification of fire doors beyond the job site preparation shall be approved by the door manufacturer. Install the fire door as per NFPA 80. Factory shall ensure the integrity of the functionality of the fire rated door through proper datasheet, certificate and listing label.	Within 3 Months
  				

F-5	Fire Rated Construction	PVC plumbing pipe passed through exit stair enclosures on Stair-2, 2nd floor, which created unsealed penetration in the rated wall of the exit enclosure. Both the penetration and plumbing pipes are prohibited inside exit stair enclosure following section 6.14.4 of RSC Technical Guideline (Standard). Location: Building-1	Penetrations into and through an exit enclosure shall be prohibited with the exception of required exit doors, sprinkler piping, standpipes, electrical raceway for fire alarm equipment, and electrical conduit serving the exit enclosure. Seal all the created unprotected openings with a minimum of 1.5 hours listed/certified fire-rated materials or 2-hr masonry construction.	Within 3 Months
 				

F-6	Fire Rated Construction	Unprotected elevator or lift shaft openings located at floor due to non functional hardware of the fire rated door. Location: 5th Floor_Cargo Lift, Building-1	Ensure the lift shaft is enclosed by a minimum 3-hour fire-rated wall with a minimum 2.0-hr fire-rated door and the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware. 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-7	Means of Egress	Exit stairs serve more than 5 stories and do not have required re-entry provisions on all floors.	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry as per RSC technical guidelines standard 6.8.3.	Within 1 Month
 				
F-8	Means of Egress	Building did not have adequate evacuation map, stair designation signs and occupant load signs at required locations on all floors	Provide Evacuation map, stair designation signs and occupant load signs at all required locations as per RSC Technical guideline.	Within 1 Month

F-9	Means of Egress	Aisle mark has not been provided several floors such as ground floor, 6th floor, 7th floor. Location: Building-1	Aisles shall be provided with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 1 Month
  				
F-10	Means of Egress	Inadequate Parapets/ Guardrail were provided. Location: Utility Shed and Pump room shed.	Stairways serving as means of escape shall have continuous guards and handrails on both sides. Where the width of the stair exceeds 2.2 m, intermediate handrails shall be provided so that no point on the stair is farther than 1 m from the handrails.	Within 1 Months
  				

F-11	Emergency Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs 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-12	Inspection Testing and Maintenance of Emergency lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with RSC technical guidelines (standard).	Inspect, test and maintain the emergency lighting system in accordance with RSC technical guidelines (standard). Keep written records on-site.	Within 1 month
F-13	Inspection Testing and Maintenance of Fire extinguisher (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.	Within 1 Month

F-14	Fire Alarm & Detection System (FADS)	The fire alarm system installation found almost completed. The system requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit the fire alarm 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 comment, Accord/ 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-15	ITM of Fire Alarm and Detection System	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. (After Installation)	Within 1 month after installation.

F-16	Fire Suppression System (SUPS) - Sprinkler System	The high-rise building has an occupied floor greater than 23 meter (75 feet) where required automatic sprinkler protection is under installation.	Submit the sprinkler system drawing to RSC for review. Once the design is reviewed, install and modify the sprinkler/standpipe system throughout the building in accordance with review comment, RSC Technical guideline (Standard) and NFPA 13,14,20,22 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-17	Fire Suppression System (SUPS)- Standpipe System	The main production building (building-1) has an occupied floor greater than 10 meter (33 feet) where required standpipe is under installation. Standpipe installation requires detailed review to confirm compliance with NFPA 14, 20 and RSC standards.	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC standard and NFPA 14,20,22 and 24. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the standpipe system.	Design Review within 2 months and installation within 4 months.

				
F-18	ITM of Standpipe system	Inspection, testing and maintenance of the standpipe system is not found in accordance with NFPA 14 and 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 14 and 25.	Within 1 Month after installation.

F-19	ITM of Sprinkler system	Inspection, testing and maintenance of the sprinkler system is not found in accordance with NFPA 13 and 25.	Inspect, test and maintain the sprinkler system and keep written records on-site, in accordance with NFPA 13 and 25.	Within 1 Month after installation.
F-20	ITM of fire pump	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 10 and 25 or as per RSC standard.	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 20 and 25 or as per RSC standard.	Within 1 Month after installation.