

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Cortz Apparels Ltd. (Extension)

RSC ID: 24841

Factory Address: Baniarchala, Bagher Bazar, Sreepur, Gazipur.

GPS: 24.1642934, 90.4157608

Other Factories: Cortz Apparels Ltd. (RSC ID: 9714)



Inspected By: Md. Kamrul Hasan

Date: 19 December 2023

Fire Safety Inspection Report

Introduction:

Cortz Apparels Ltd. (Extension) complex was surveyed for fire safety on **19/12/2023** 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): 1. 6 storied RCC Building- 3 (B+G+5), (Construction duration: Apr 2016 - Nov 2017; Floor Occupied: Jan 18)
2. Boiler Room (G) (RCC), (Construction duration: Oct 2022 - Apr 2023; Floor Occupied: May 2023)
3. Fire Command Room (G) (RCC), (Construction duration: Jan- 2016, May-2016; Floor Occupied: Jun 2016)
4. Guard Room (G) (RCC). (Construction duration: Jan- 2016, May-2016; Floor Occupied: Jun 2016)

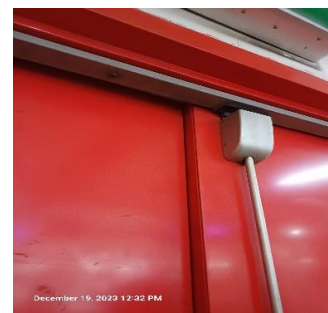
Factory Address: Baniarchala, Bagher Bazar, Sreepur, Gazipur.

Findings & Recommendations :

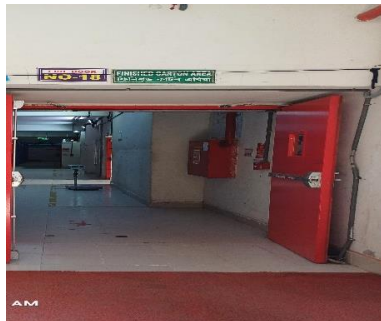
Table 1 summarizes the major fire safety issues identified during the inspection. Recommendations have been provided to address each issue. An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of improvements, including any requested extensions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

Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction. (6 storied RCC Building- 3)	Provide minimum 1-hr rated doors for buildings with 3 or fewer stories and 1.5-hr fire rated doors for buildings that are 4 or more stories. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. 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.	Within 3 months



2	Fire Rated Construction	Storage rooms discharges directly into exit stair enclosure on the 5th & Ground floor without vestibules. (6 storied RCC Building- 3)	Openings from exit enclosures to storage area spaces shall be provided with vestibules with fire rated construction and openings. Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the Store side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
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3	Fire Rated Construction	Storage areas were found on the 4th floor not maintaining as per standard. Also, on the ground floor machine store area have penetrations with boiler room (through cable passing & boiler piping). (6 storied RCC Building- 3)	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: - 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 be limited to 10 percent of the building area of the story in which they occur.	Within 2 months



4	Fire Rated Construction	Elevator shafts are directly open into exit stair enclosure-1 on the ground floor. (6 storied RCC Building- 3)	Modify the elevator shaft as per RSC Technical Guideline (Standard) V1-6.14.3. An exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material with fire resistance rating required for the type of construction of smoke proof enclosure. So, rearrange the facility to provide separate enclosure for lifts. If not possible anyway then provide a minimum 2-hr fire- rated elevator shaft with listed fire rated lift landing door to separate from each floor level. Recommended to follow "SUPPLEMENTARY PAPER ON REMEDIATION GUIDANCE ELEVATOR OR LIFT SHAFT OPENING IN EXIT ENCLOSURES" for remediation.	Within 3 months
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5	Fire Rated Construction	Discharge path of the exit stair-1 & 2 of the 6 storied RCC Building- 3 is not separated from the interior of the building. (6 storied RCC Building- 3)	Ensure that the passageway is fire rated by 2-hour including protection of unprotected opening by minimum 1.5 hour. An egress court serving as a portion of the exit discharge shall be open to the sky or provided with a fire resistance rated enclosure the same as the exit enclosure. Egress courts less than 3050 mm (10 ft) in width (as measured from the building and the adjacent property line) shall be provided with walls having a 1-hr fire resistance rated construction for a distance of 3050 mm (10 ft) above the floor of the court.	Within 3 months
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6	Fire Rated Construction	The boiler and compressor rooms are not separated by fire rated construction due to penetrations on the ground floor. (6 storied RCC Building- 3)	Separate the boiler and compressor rooms by a minimum 1-hr fire-rated construction for non-high rise. Seal and/or protect all openings to maintain the required fire separations. When located to the exterior of a building 3m (10 ft.) spatial distance shall be maintained around the boiler/compressor. Ensure proper ventilation for the boiler/compressor room.	Within 3 months
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7	Fire Rated Construction	The fire pump room is not provided with adequate fire separation. (6 storied RCC Building- 3)	Provide fire pump room with 2 hr rated fire separation when not sprinklered and 1 hr rated fire separation when provided with automatic sprinklers, in accordance with NFPA 20. In the case exterior it shall be 50 ft away from another occupancy.	Within 3 months

8	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies on the ground to 5th floor. (Sanitary piping) (6 storied RCC Building- 3)	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
  				
9	Means of egress	Fire evacuation map was not posted at all the entrance to each exit stair and some were found not updated as per on-site. (6 storied RCC Building- 3, Boiler room)	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month

10	Means of egress	Building did not have occupant load signs at all the required locations. (6 storied RCC Building- 3, Single storied Boiler room)	Provide occupant load signs at all the required locations.	Within 1 month
11	Means of egress	The exits in the work area on each floor level (without basement floor) are not remotely located from each other (less than one-half maximum diagonal distance of pace) such that a single fire event could compromise both exits. (6 storied RCC Building- 3)	Where two or more exits or means of egress are required, the exit doors or means of egress openings shall be located a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between exits or egress openings. Where the building is provided with a complete automatic sprinkler system, the separation of the exits or means of egress openings shall be not less than one-third of the maximum overall diagonal dimension.	Within 1 month



12	Means of egress	Parapets height found 39 inches on the occupiable roof. (6 storied RCC Building- 3)	All occupiable roofs shall be provided with parapets or guards with a minimum height of 1067mm (42 in.).	Within 1 month
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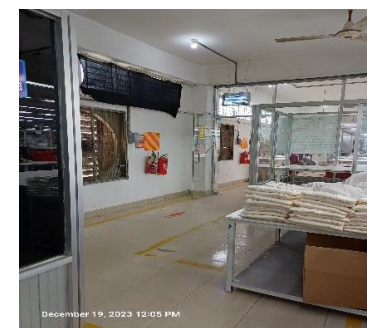
13	Means of egress	Handrails are not provided on both sides of the ramp & stair-1 discharge on ground floors. (6 storied RCC Building- 3)	Handrails shall be provided on both sides of each stairway/ramp. Handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.).	Within 1 month
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14	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. (6 storied RCC Building- 3, Single storied Boiler room)	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 2 months
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15	Emergency Lighting	Exit signage and directional signs were not provided at all required locations along a path of egress on the ground, 3rd & 4th floor. (6 storied RCC Building- 3, Single storied Boiler room)	Provide exit signs above all building exits to the exterior, all doors to the exit stairs; and 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
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16	ITM Emergency Lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in accordance with The RSC Technical Guidelines (Standard). Keep written records on-site.	Within 1 month
17	Fire Alarm & Detection system	Automatic fire alarm and detection system installation has been found complete which requires detailed review to confirm compliance with NFPA 72 and The RSC Technical Guidelines (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 buildings in accordance with review comment, 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. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.	Design Review within 2 months and installation/modification within 4 months
  				

18	Fire Protection System (Standpipe)	The building has highest occupiable floor level more than 11 meter (33 ft.) which requires standpipe system. (6 storied RCC Building- 3)	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 2 month and installation within 4 months (If require).
 				
19	ITM of Fire Alarm System	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 installation.

20	ITM of Standpipe System	Inspection, testing and maintenance for the standpipe system was not in accordance with standard.	Inspect, test and maintain the standpipe system in accordance with NFPA 25 and keep written records on-site.	Within 1 Month after installation.
21	ITM of Pump System	Inspection, testing, and maintenance for the Fire pump & water system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire pump & water system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after installation.
22	ITM extinguisher	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 on-site, in accordance with NFPA 10 and RSC Technical Guidelines.	Within 1 month