

INITIAL FIRE SAFETY INSPECTION REPORT

Ayesha Fashion Limited

RSC ID: 24507

ADDRESS: 256, 257 & 258,Adamjee EPZ, Siddinganj,Narayanganj, Bangladesh.

Other Factories: None



Inspected By: Mohammad Anayet Hossain & Md. Anisuzzaman

Date: 06-Feb-2023

Fire Safety Inspection Report

Ayesha Fashion Limited

Introduction:

Ayesha Fashion Limited; complex was surveyed for fire safety on **06/02/2023** 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. Building#1- Main Production Building -6 Storied both RCC & Steel structure.
2. Building#2-Utility Building-Two Storied RCC
3. Building#3- Underground reservoir, pump & wastage room
4. Building #4- Guard Room & Fire Control Room
5. Building#5-RMS Room
6. Building#6-Diesel Room

Findings & Recommendations :

Table 1- 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: Findings & Recommendations

| SI No. | Category | Findings | Required Action | Remediation Time Frame |
|--------|-------------------------|---|---|------------------------|
| F-1 | Fire Rated Construction | <p>The exit stairs are not separated from [work areas, other spaces] on each floor by fire rated construction due to unprotected opening</p> <p>Location: 6 Storied main production building.</p> | <p>The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating with 90 minutes opening protection.</p> <p>The clearance under the bottom of a fire door shall be a maximum of 19mm.</p> <p>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.</p> <p>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.</p> <p>Openings from exit enclosures to storage areas shall be provided with vestibules as per RSC Technical Guideline (Standard) V1-6.14.3</p> | Within 3 months |



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| F-2 | Fire rated construction | <p>Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies.</p> <p>Location: Building construction joint , sewage line & Riser</p> | <p>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 datasheet.</p> <p>Or</p> <p>Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.</p> | within 3 months |
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| F-3 | Fire Rated Construction | <p>Elevator shafts are directly open into the inside of exit enclosure.</p> <p>Location: Stair-1 & stair-4 of production building</p> | <p>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, ensure the lift shaft is 2-hr fire rated including opening protection with similar rating.</p> | Within 3 months |
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| F-4 | Fire Rated Construction | <p>The Dining area (E4) is not separated by fire rated construction with the adjacent production occupancies(present storage & Sample section) Location: 5th floor of main production building.</p> | <p>Separate the dining area from production & other occupancies(present temporary storage) by minimum 3-hr fire rated construction. Provide rated exit passageways leading directly to the exit stairs of the same resistance rating.</p> | Within 3 months |
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| F-5 | Fire Rated Construction | It has been observed that the ground floor to first floor (claimed mezzanine) are not separated from each other of main production building where claimed mezzanine floor is occupying more than 33.33% of the building plinth area(measure full plinth area). | <p>Mezzanine floor shall not exceed 33.33% of the building plinth area as per BNBC-2006, clause 1.12.6.1.</p> <p>Separate each floors by fire rated construction as per BNBC, Part-3, chapter-3 and Table 3.3.1.</p> <p>3-hr fire rated floor to floor separation is required from claimed mezzanine floor (actually first floor) to ground floor other surroundings as well as separation is needed at required number of exit stairs.</p> | Within 4 months |
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| F-6 | Fire Rated Construction. | <p>Areas used for in-process storage of combustible materials are open to the surrounding occupancy.</p> <p>Location: Several floor of main production building.</p> | <p>Provide defined storage areas and limit the storage arrangement as follows:</p> <p>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.</p> <p>or,</p> <p>Enclose the storage area from the surrounding occupancy with a minimum 1 hour fire rated construction.</p> | Within 3 months |
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| F-7 | Fire Rated Construction | <p>The newly constructed main production building is steel construction which appears to be nonrated and were found in exposed condition.</p> <p>Location: 6 Storied main production building.</p> | <p>The building is a new steel structure which shall be type-I or II construction. So, provide require fire rating in the structural elements of the building. Consult with a qualified fire protection engineer. Follow BNBC 2006- Table 3.2.4, 3.1.9 and 3.3.1 as reference.</p> | Within 6 months |
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| F-8 | Egress of lighting | <p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes .</p> <p>Location: Main production building.</p> | <p>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.</p> | Within 3 months |
| F-9 | ITM of Lighting | <p>Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The RSC standard.</p> | <p>Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC standard. Keep written records on-site.</p> | Within 3 months |

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| F-10 | Egress Lighting | Manual on-off switch is provided for [emergency lighting / exit signage] units. | Remove manual on/off switches from emergency lighting / exit signage units to prevent them from being switched off. | Within 1 month |
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| F-11 | Fire Alarm & Detection System (FADS) | Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. | <p>Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any.</p> <p>After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation.</p> <p>Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.</p> | Design Review within 1 month and modification within 3 months (If require). |



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| F12 | 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 installation. |
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| F-13 | Fire Protection System(Standpipe) | Standpipe system installation requires detailed review to confirm compliance with NFPA 14 ,20 ,22 & 24 or as per RSC standard. | <p>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.</p> <p>After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.</p> | Design Review within 1 month and modification within 3 months (If require). |
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| F-14 | Fire Protection System(Sprinkler System) | Based on the type of structure and height of the main building sprinkler system is not mandatory but installed in lieu of detector so it is now mandatory and shall be ensured compliant as per NFPA-13. | Submit the sprinkler system drawing to RSC for review. Once the design is reviewed, install and modify (if required) the sprinkler system throughout the building in accordance with review comment, RSC Standard and NFPA 13,20,22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing. Note: If the system is omitted then compliant detection system shall be ensured for the building following RSC Technical Guideline (Standard)-V1.0. | Design Review within 1 month and modification within 3 months (If require). |
| F-15 | Fire Protection System(Standpipe) | 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 installation. |
| F-16 | Fire Protection System(Pump) | 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. |

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| F-17 | Fire Protection System(Sprinkler System) | Inspection, testing, and maintenance for the sprinkler system is not in accordance with NFPA 25, 13 or as per RSC standard. | Inspect, test and maintain the sprinkler system and keep written records on-site, in accordance with NFPA 25, 13 or as per RSC standard. | Within 1 Month after installation. |
| F-18 | 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 1 Month |