

# INITIAL FIRE SAFETY INSPECTION REPORT

**Factory Name: Aleya Apparels Ltd.**

**RSC ID: 24087**

**Address: 244, Singair Road, Hemayetpur, Savar**

[Location Co-ordinates: 23°47'31.0"N 90°15'57.0"E](#)

**Other Factories: None**



**Inspected By: Mohammad Anayet Hossain and Hamed Mustakim**

**Date: 05 Nov 2023**

# Fire Safety Inspection Report

Factory Name: Aleya Apparels Ltd.

## Introduction:

RSC ID: 24087

Aleya Apparels Ltd. complex was surveyed for fire safety on 05th November 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):**

**Building-1 Single Storied Factory building with Mezzanine:**

**Building-2 Utility Building (Old) :**

**Building-3 RCC Building:**

**Building-4 New Utility:**

**Factory Address: 244, Singair Road, Hemayetpur, Savar**



## 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:**

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 on 1st floor in Building-3.	<p>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.</p> <p>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 23m<sup>2</sup> (250 ft<sup>2</sup>) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage.</p> <p>- If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m<sup>2</sup> (1000 ft<sup>2</sup>) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage.</p>	Within 3 Months





F-2	Means of Egress	Non- compliant sliding door located at several locations at the Building.	Replace all gates and doors along the means of egress with side-hinged, swinging egress doors in accordance with RSC standard 6.8.1.	Within 1 Month
				

F-3	Means of Egress	<p>Water pump (domestic use) located at exit stair enclosure without separated by fire-rated construction.</p> <p>Location: <b>Building-3, Stair-1 Ground floor.</b></p>	<p>The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating for buildings 4 or more stories</p>	<p>Within 3 Months</p>
<div style="display: flex; justify-content: space-around;">   </div>				
F-4	Fire Rated Construction	<p>Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies.</p> <p>Location: <b>Building-3, Ground floor &amp; First floor.</b></p>	<p>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.</p>	<p>Within 3 Months</p>





F-5	Fire-Rated Construction	<p>The dining area is not separated from Production floor area by fire rated construction.</p> <p>Location: <b>Building-3, 4th floor.</b></p>	<p>Canteen shall be separated from production area by minimum 3 Hr. rated separation. Seal and/or protect all openings to maintain the required fire separation.</p> <p>Also provide at least two means of exits leading directly to the street or leading to a corridor or open space having access to exits in two independent and different direction.</p>	Within 3 Months
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F-6	Fire Rated Construction	<p>Elevator shafts are directly open into the exit stair for stair-1 &amp; 2.</p> <p>Location: <b>Building-C</b></p>	<p>In new and interim construction, 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 as per RSC-6.14.3. So, separate the stair enclosure from elevator shaft throughout the building.</p> <p>There is a variety of opening protective types i.e., fire rated lift landing doors, fire doors, fire rated curtain combination for both heat &amp; smoke control with integration with fire alarm control panel.</p>	Within 3 Months
				

F-7	Fire Rated Construction	<p>Catwalk has been constructed on High rack storage and the area of the intermediate deck creates a full floor where the size of the deck is more than 33% of the total floor area and requires fire rated separation.</p> <p>Location: Building 1-Ground Floor (Bonded warehouse).</p>	<p>Remove the catwalk of the intermediate deck. Or , Maintain fire separation (3hr for type 1) between floor to floor as per BNBC 2006 Table 3.3.1. Provide required fire rating on the structural elements by following Table-3.2.4, 3.1.9 &amp; Table 4.4.1 of the RSC Technical Guidelines Standard or Table 3.3.1 of BNBC-2006. Consult a qualified fire protection engineer to design the rated construction barriers in between two floors and in structural members. Factory shall submit all required product datasheet, installation design along with design philosophy to RSC for review prior to installation on site.</p>	Within 6 Months
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F-8	Fire Rated Construction	<p>The boiler and Generator rooms are not separated by fire rated construction due to openings, non-rated doors, and penetrations.</p> <p>Location: <b>Building-2 (Ground floor)</b></p>	<p>Separate the boiler 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.</p> <p>Separate the generator room by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations.</p>	Within 3 Months
<div style="display: flex; justify-content: space-around;">   </div>				
F-9	Fire Rated Construction	<p>The Compressor rooms are not separated by fire rated construction due to openings, non-rated doors, and penetrations.</p> <p>Location: <b>Building-3 (1st Floor) &amp; Southside of Building-01.</b></p>	<p>Separate the compressor rooms by a minimum 2-hr fire-rated construction from storage occupancy.</p> <p>Seal and/or protect all openings to maintain the required fire separations.</p>	Within 3 Months



F-10	Fire Rated Construction	Underneath of Cutting table areas used for combustible storage open to the factory are not separated by fire rated construction on Ground floor in Building-3.	Remove all combustibles stored underneath the cutting tables at the noted locations.	Within 2 Months
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F-11	Means of Egress	Parapet or Guardrail not provided on rooftop	All occupiable roofs shall be provided with parapets or guards with a minimum height of 1067 mm (42 in.).	Within 2 Months
				
F-12	Fire Alarm & Detection System (FADS)	<p>The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.</p> <p><b>Location: All building.</b></p>	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Design Review within 2 months and installation within 4 months.



F-13	Inspection Testing and Maintenance of Fire Alarm and 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. (After Installation)	Within 1 month after installation.
F-14	Fire Suppression System (SUPS)	Fire pump, water supply & standpipe system installation requires detailed review to confirm compliance with NFPA 14, 20, 22, 25 and RSC standards.	Submit the fire protection systems 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 fire protection system.	Design Review within 2 months and installation within 4 months.

F-15	Inspection Testing and Maintenance of Fire Suppression System (Standpipe) (ITM)	Inspection, testing and maintenance of the standpipe system is not found in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25.	Within 1 Month after installation.
F-16	Inspection Testing and Maintenance of Fire Suppression System (Pump) (ITM)	Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 20.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20 and RSC standards.	Within 1 Month after installation.



F-17	Fire Rated Construction	Storage room discharged directly into the exit stair enclosures at Building-1 Ground floor, Stair-2.	Opening from exit enclosure to storage areas shall be provided with a vestibule with fire rated construction and openings. Provide 1.5- hr fire rated door on the exit stair side and 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
F-18	Means of Egress	Building did not have stair designation signs and occupant load signs at required locations on all floors	Provide stair designation signs and occupant load signs at required locations.	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.  Location: <b>Building-1 and Building-3</b>	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-20	Egress Lighting	Illuminated directional signs are not provided where direction of the path of travel to an exit has changed.  Location: <b>Building-1 and Building-3.</b>	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-21	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-22	Inspection Testing and Maintenance of Portable Fire 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 onsite, in accordance with NFPA 10.	Within 1 Month