INITIAL FIRE SAFETY INSPECTION REPORT

ACS Textiles (Bangladesh) Ltd. (Extension)

RSC ID: 25612

Vill: Tetlabo, PS: Rupgonj, Dist: Narayangonj.

Geographical Coordinates of factory building: 23.75447, 90.54795

Other Factories: ID-9966 (ACS Textiles (Bangladesh) Ltd.) & ID-11595 (ACS Towel Ltd)

RSC | RMG SUSTAINABILITY COUNCIL

Inspected By: Yusuf Ahmed and Tanvir Jubayer Rahman

Date: 10 March-2024

Fire Safety Inspection Report

ACS Textiles (Bangladesh) Ltd. (Extension)

Introduction:

The **ACS Textiles (Bangladesh) Ltd. (Extension)** complex was surveyed for fire safety on **10 March 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) in this ID-25612:

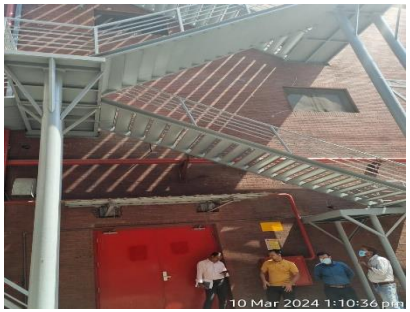
Sl No	Building Name & Description	Construction History	Period
1	**Digital printing building.** 3 storied RCC building with steel shed on roof. (Total 4 Storied) Total Approx Area: 29,109 Sft	Construction Start: 15-Jul-2015 Construction End: 1-Mar-1017 Date of first Operation: 1-Mar-1017 Building Approval: 13-Jul-2015 (Tarabo Paurashava)	Interim
2	**Weaving building-4.** 3 Storied RCC Building Total Approx Area: 105,000 Sft	Construction Start: 1-Aug-2015 Construction End: 1-Jun-1017 Date of first Operation: 5-Jun-1017 Building Approval: 13-Jul-2017 (Tarabo Paurashava)	Interim
3	**Sizing-3 (Re- Coning building).** 2 Storied RCC Building Total Approx Area: 12,000 Sft	Construction Start: 1-Aug-2015 Construction End: 1-Aug-2016 Date of first Operation: 5-Aug-2016 Building Approval: 13-Jul-2015 (Tarabo Paurashava)	Interim
4	**Dryer shed (washing units).** Single Storied Steel Structure Total Approx Area: 20,250 Sft	Construction Start: 1-Jan-2020 Construction End: 1-Aug-2020 Date of first Operation: 15-Aug-2020 Building Approval: 23-Nov-2022 (Tarabo Paurashava)	Interim
5	**Medical Center** 2 Storied RCC Building Total Approx Area: 3,790 Sft	Construction Start: 1-Jun-2019 Construction End: 1-Jun-2020 Date of first Operation: 15-Jun-2020 Building Approval: 28-Dec-2020 (Tarabo Paurashava)	Interim
6	**Security quarter.** 3 Storied RCC Building Total Approx Area: 16,750 Sft	Construction Start: 1-Mar-2017 Construction End: 1-Jun-2018 Date of first Operation: 1-Jun-2018 Building Approval: 27-Feb-2017 (Tarabo Paurashava)	Interim

Factory Address: Vill: Tetlabo, PS: Rupgonj, Dist: Narayangonj.

Other RSC ID in the premises: ID-9966 (ACS Textiles (Bangladesh) Ltd.) & ID-11595 (ACS Towel Ltd)

Findings & Recommendations :

Table 1 summarizes the major fire safety issues identified during the inspection of main building. 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:				
Digital Printing Building				
Sl No.	**Category**	**Findings**	**Required Action**	**Remediation Time Frame**
F-01	Fire rated Construction	Digital Printing Building: The exterior exit stairs are not separated from the building interior. Location: Stair-1 & Stair-2	Exterior exit stairs shall be separated by minimum 2-hr fire-rated construction and the rating of the exterior wall shall extend 3.05 m (10 ft.) beyond the ends of the stair structure.	Within 3 months
   				

F-02	Fire rated Construction	Digital Printing Building: Chemical store is not separated from other occupancies at the ground floor.	Separate the chemical store by a minimum 4-hr fire rated construction. Ensure mixed occupancy seperation with the chemical store as per table 3.2.1 and table 3.2.3 of BNBC 2006. A 2-hr seperation can be accepted if the chemical storage fulfills all the requirments of section 2.13.1.3 ,part 3 of BNBC 2006.	Within 3 months
  				
F-03	Fire rated Construction	Digital Printing Building: The main structural element of the 3rd floor of the building is constructed by steel which is non-rated and were found in exposed condition without any fire protection.	The building shall be Type 1 or Type 2 construction as required in BNBC 2006 Part 3 Table 3.2.4. So, provide require rating for the structural elements of the building following BNBC 2006-Table 3.2.4, 3.1.9 and 3.3.1. Factory shall ensure that, all the design, datasheet, certificate, and the design-philosophy has been reviewed from the RSC prior to install the passive fire protection system.	Within 6 months

				
F-04	Means of Egress	Digital Printing Building: 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-05	Emergency Lighting	Digital Printing Building: 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-06	Egress Lighting	Digital Printing Building: Directional signs are not provided where direction of the path of travel to an exit has changed. Location: 3rd floor.	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-07	Inspection Testing and Maintenance of Emergency lighting	Digital Printing Building: 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-8	Fire Alarm & Detection System (FADS)	Digital Printing Building: 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, 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 within 2 months and installation within 4 months.

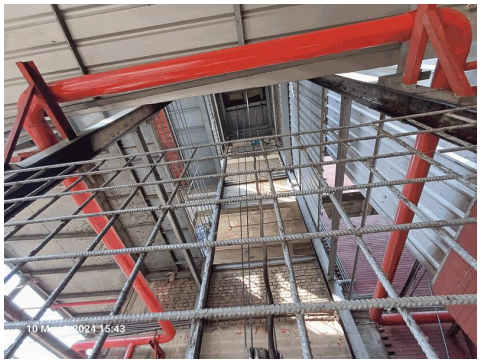
				
F-9	ITM of Fire Alarm and Detection System	Digital Printing Building: Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with table 14.3.1 of NFPA 72. (After Installation)	Within 1 month after installation.
F-10	Fire Suppression System (SUPS)-Standpipe System	Digital Printing Building: The building has an occupied floor greater than 10 meter (33 feet) where required standpipe system found installed. Standpipe installation requires detailed review to confirm compliance with relevant NFPA 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 within 2 months and installation within 4 months.

  				
F-11	ITM of Standpipe system	Digital Printing Building: 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-12	ITM of fire pump	Digital Printing Building: Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25.	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 25.	Within 1 Month after installation.

Findings & Recommendations : Weaving Building-4				
Sl No.	**Category**	**Findings**	**Required Action**	**Remediation Time Frame**
F-13	Fire rated Construction	Weaving Building-4: Areas used for combustible storage are open to the factory area and not separated by fire rated construction from the mending section. Location: 2nd Floor mending section.	Provide dedicated storage room seperated by minimum 1-hr fire-rated construction. Seal/protect all unprotected openinigs to maintain the fire seperation. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4m and maximum area of 23m2 - If sprinkler protected: maximum height of 3.66m and maximum area of 93m2 -Separate areas of unenclosed combustible storage by a minimum clear distance of 3m -Occupancies that are incidental to the main occupancy shall be considered accessory occupancies to the main occupancy when they do not exceed 10 percent of the building area of the story in which they occur.	Within 3 months
  				

F-14	Fire rated Construction	Weaving Building-4: Chemical Bonded Warehouse is not separated from the other occupancies (embroidery section, register book storage, Yarn office, DB panels and other occupancies) at ground floor.	Separate the chemical store by a minimum 4-hr fire rated construction. Ensure mixed occupancy seperation with the chemical store as per table 3.2.1 and table 3.2.3 of BNBC 2006.	Within 3 months
   				
F-15	Fire rated Construction	Weaving Building-4: The exit discharge path serving exit stair-2 is less than 10 ft wide and is not separated from the building interior.	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft., to provide a minimum 1-hr fire separation. Alternatively, provide a second remote discharge path to the public way (only include this if feasible).	Within 3 months

				
F-16	Fire rated Construction	Weaving Building-4: Storage rooms discharges directly into exit stair enclosure without vestibules on 1st and 2nd floor.	Openings from the exit enclosure to the storage room, shall be provided with a vestibule with fire-rated construction and openings. Provide a minimum 1 hr. fire rated door on the exit stair side and a minimum 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. The minimum dimension of the vestibule shall be not less than the required width of the corridor leading to the vestibule but shall not have a width of less than 44 inches (1118 mm) and shall not have a length of less than 72 inches (1829 mm) in the direction of egress travel.	Within 3 months
				

F-17	Fire rated Construction	Weaving Building-4: Elevator shafts are directly open into production floor without proper fire separation.	Provide a minimum 1-hr fire rated construction for the elevator shaft with a minimum 1-hr fire protective opening assembly.	Within 3 months
				
F-18	Fire rated Construction	Weaving Building-4: Electrical panels were located in the exit stair enclosure. Location: stair-1	Remove or re-locate all electrical panels from exit stair enclosure.	Within 2 months

				
F-19	Emergency Lighting	Weaving Building-4: 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-20	Emergency Lighting	Weaving Building-4: Lighted exit signage was not provided above all required exits on the ground floor chemical store area.	Provide lighted exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious. Lighted exit signs shall be provided with either battery backup or emergency power and shall be continuously illuminated.	Within 1 Month

 				
F-21	Inspection Testing and Maintenance of Emergency lighting	Weaving Building-4: 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	Fire Alarm & Detection System (FADS)	Weaving Building-4: 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, 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 within 2 months and installation within 4 months.

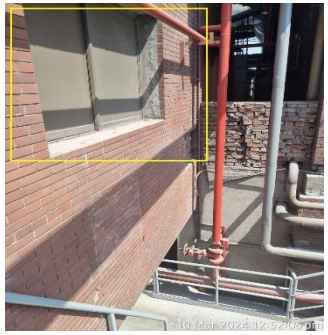
				
F-23	ITM of Fire Alarm and Detection System	Weaving Building-4: Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)	Within 1 month after installation.

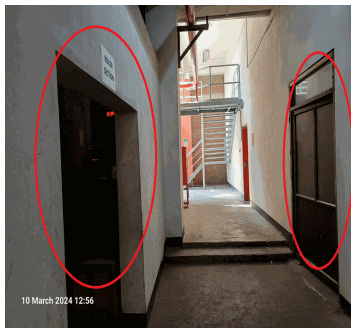
Findings & Recommendations : Dryer shed (washing units).				
Sl No.	**Category**	**Findings**	**Required Action**	**Remediation Time Frame**
F-24	Fire rated Construction	Washing unit-4: The west exit discharge path is not seperated from the Chemical Store.	Separate the chemical store by a minimum 4-hr fire rated construction. Ensure mixed occupancy seperation with the chemical store as per table 3.2.1 and table 3.2.3 of BNBC 2006. A 2-hr seperation can be accepted if the chemical storage fulfills all the requirments of section 2.13.1.3 ,part 3 of BNBC 2006.	Within 3 months
				

F-25	Fire rated Construction	Washing unit-4: The main structural element of the building is constructed by steel which is non-rated and were found in exposed condition without any fire protection.	The building shall be Type 1 or Type 2 construction as required in BNBC 2006 Part 3 Table 3.2.4. So, provide require rating for the structural elements of the building following BNBC 2006-Table 3.2.4, 3.1.9 and 3.3.1. Factory shall ensure that, all the design, datasheet, certificate, and the design-philosophy has been reviewed from the RSC prior to install the passive fire protection system.	Within 6 months
				
F-26	Emergency Lighting	Washing unit-4: 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-27	Inspection Testing and Maintenance of Emergency lighting	Washing unit-4: 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-28	Fire Alarm & Detection System (FADS)	Washing unit-4: 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, 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-29	ITM of Fire Alarm and Detection System	Washing unit-4: 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.

Findings & Recommendations : Sizing-3 (Re- Coning building).				
Sl No.	**Category**	**Findings**	**Required Action**	**Remediation Time Frame**
F-30	Fire rated Construction	Sizing-3 (Re- Coning building): The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction due to non-functional fire doors. Several fire doors did not latch propelry. Also stair-2 is not seperated from boiler room, office area and utility rooms locatd on the ground floor. Exterior exit stairs are not seperated from the building due to unprotected openinigs.	Provide minimum 1-hr fire rated separation in exit enclosures with minimum 0.75-hr fire rated doors and seal all unprotected openings and penetration 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. Exterior exit stairs shall be separated by minimum 1-hr fire-rated construction and the rating of the exterior wall shall extend 3.05 m (10 ft.) beyond the ends of the stair structure.	Within 3 months



F-31	Fire rated Construction	Sizing-3 (Re- Coning building): Unsealed penetrations and openings is located in exit stair enclosures due to the steam line passing through the wrapping section at ground level.	Seal all penetrations and openings in wall assemblies of exit enclosure to maintain the fire separation same as the exit enclosure. Penetrations in a concrete or masonry wall by steel, ferrous or copper conduits, pipes, tubes or vents with a maximum 150 mm (6 in.) nominal diameter where the area of the opening through the wall does not exceed 0.0929 m^2 (144 in^2) shall be permitted to be protected using concrete, grout or mortar installed the full thickness of the wall to maintain the fire resistance rating. If through-penetration fire stop system is used the system shall be tested in accordance with ASTM E814 or approved alternative standard. The installation shall be as per certified design.	Within 2 months
				

F-32	Fire rated Construction	Sizing-3 (Re- Coning building): Penetrations through floor/ceiling assemblies are found unsealed. Location: Ground floor.	Seal all unselaed penetration by 3-hr fire rated construction. Penetrations in a single concrete floor by steel, ferrous or copper conduits, pipes, tubes or vents with a maximum 150 mm (6 in.) nominal diameter shall be permitted to be protected using concrete, grout or mortar installed the full thickness of the floor or the thickness required to maintain the fire-resistance rating. The penetrating items shall not be limited to the penetration of a single concrete floor, provided the area of the opening through each floor does not exceed 0.0929 m^2 (144 in^2). If through-penetration fire stop system is used the system shall be tested in accordance with ASTM E814 or approved alternative standard. The installation shall be as per certified design.	Within 3 months
				

F-33	Fire rated Construction	Sizing-3 (Re- Coning building): Areas used for combustible storage are open to the floor area and not separated by fire rated construction. Location: 1st Floor reconning section.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4m and maximum area of 23m2 - If sprinkler protected: maximum height of 3.66m and maximum area of 93m2 Separate areas of unenclosed combustible storage by a minimum clear distance of 3m	Within 3 months
				
F-34	Means of Egress	Sizing-3 (Re- Coning building): 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-35	Emergency Lighting	Sizing-3 (Re- Coning building): 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-36	Inspection Testing and Maintenance of Emergency lighting	Sizing-3 (Re- Coning building): 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-37	Fire Alarm & Detection System (FADS)	Sizing-3 (Re- Coning building): 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 within 2 months and installation within 4 months.
				
F-38	ITM of Fire Alarm and Detection System	Sizing-3 (Re- Coning building): 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 table 14.3.1 of NFPA 72. (After Installation)	Within 1 month after installation.

F-39	Fire Alarm & Detection System (FADS)	Medical Center: 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, 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 within 2 months and installation within 4 months.
				
F-40	ITM of Fire Alarm and Detection System	Medical Center: 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.