

# INITIAL FIRE SAFETY INSPECTION REPORT

## ASWAD COMPOSITE MILLS LTD. ( U-2) (EXTENSION)

**RSC ID: 25868**

**ADDRESS: Kabirpur, Ashulia, Savar, Dhaka, Bangladesh.**

**Google Coordinate: 24.01070067527097, 90.2479475081518**

**Other Factories: ASWAD COMPOSITE MILLS LTD. (U-2) (RSC ID: 11095)**



**Inspected By: Md. Ferdaus Jaman**

**Date: 5th December 2024**

# Fire Safety Inspection Report

## ASWAD COMPOSITE MILLS LTD. (U-2) (EXTENSION) (ID : 25868)

### Introduction:

**ASWAD COMPOSITE MILLS LTD. ( U-2) (EXTENSION) (ID: 25868)** complex was surveyed for fire safety on **05-December-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**

There are total 11 structures in the factory compound, among them 6 structures were previously covered under RSC ID-11095 and the below structures/ buildings are covered under this ID-25868:

SL No	Name of Building/Structure	Construction Date	Occupied Date	Approval Authority & Date	Structure/Construction type (with per floor area)	Construction Period
1	Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level	April-2021 to April-2022	January-2024	1 No. Shimulia Union Parishad, Ashulia, Savar, Dhaka. Forwarding letter and date not mentioned.	Shed (2025.092937 sqm)	New
2	Single Storied Pre-fab Wastage store Shed (G)	January-2019 to December-2019	January-2024	1 No. Shimulia Union Parishad, Ashulia, Savar, Dhaka. Forwarding letter and date not mentioned.	Shed (137.732342 sqm)	Interim
3	Single Storied RCC Boiler Room (G)	May-2023 to December 2023	January-2024	1 No. Shimulia Union Parishad, Ashulia, Savar, Dhaka. Forwarding letter and date not mentioned.	RCC (174.2565056 sqm)	New
4	Rain Water Harvesting Plant room (Underground tank+G)	January 2021 to May-2021	January-2024	1 No. Shimulia Union Parishad, Ashulia, Savar, Dhaka. Forwarding letter and date not mentioned.	RCC (GF) (33.0855 sqm)	Interim

5	Single Storied RC Fire Pump Room with Basement (G)	June-2018 to May-2019	May-2019	1 No. Shimulia Union Parishad, Ashulia, Savar, Dhaka. Forwarding letter and date not mentioned.	RCC (57.6 sqm)	Interim
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**Factory Address: Kabirpur, Ashulia, Savar, Dhaka, Bangladesh.**

**Points of contact:**

<p>1. Name: Md. Arifur Rahman Khan          Designation: Senior Executive-Compliance (Fire Safety)          Contact No: +8801711-382 994          Email: arifur.rahman@palmalgarments.com</p>	<p>2. Name: Md Ahoshan Habib          Designation: General Manager (Admin, HR, Compliance &amp; Operations)          Contact No: +8801730-010 490          Email: ahoshan.hr@palmalgarments.com</p>
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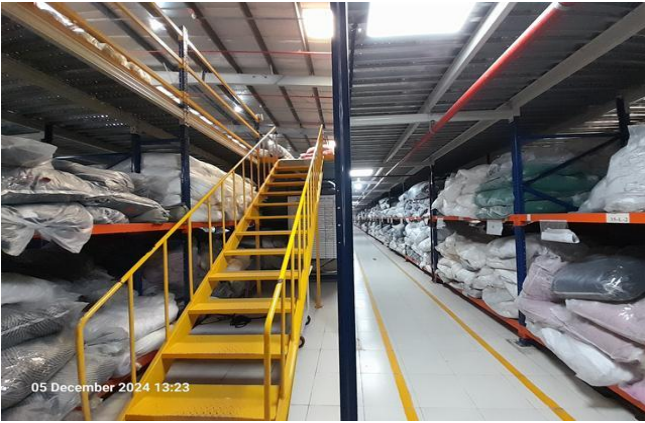




## Findings & Recommendations :

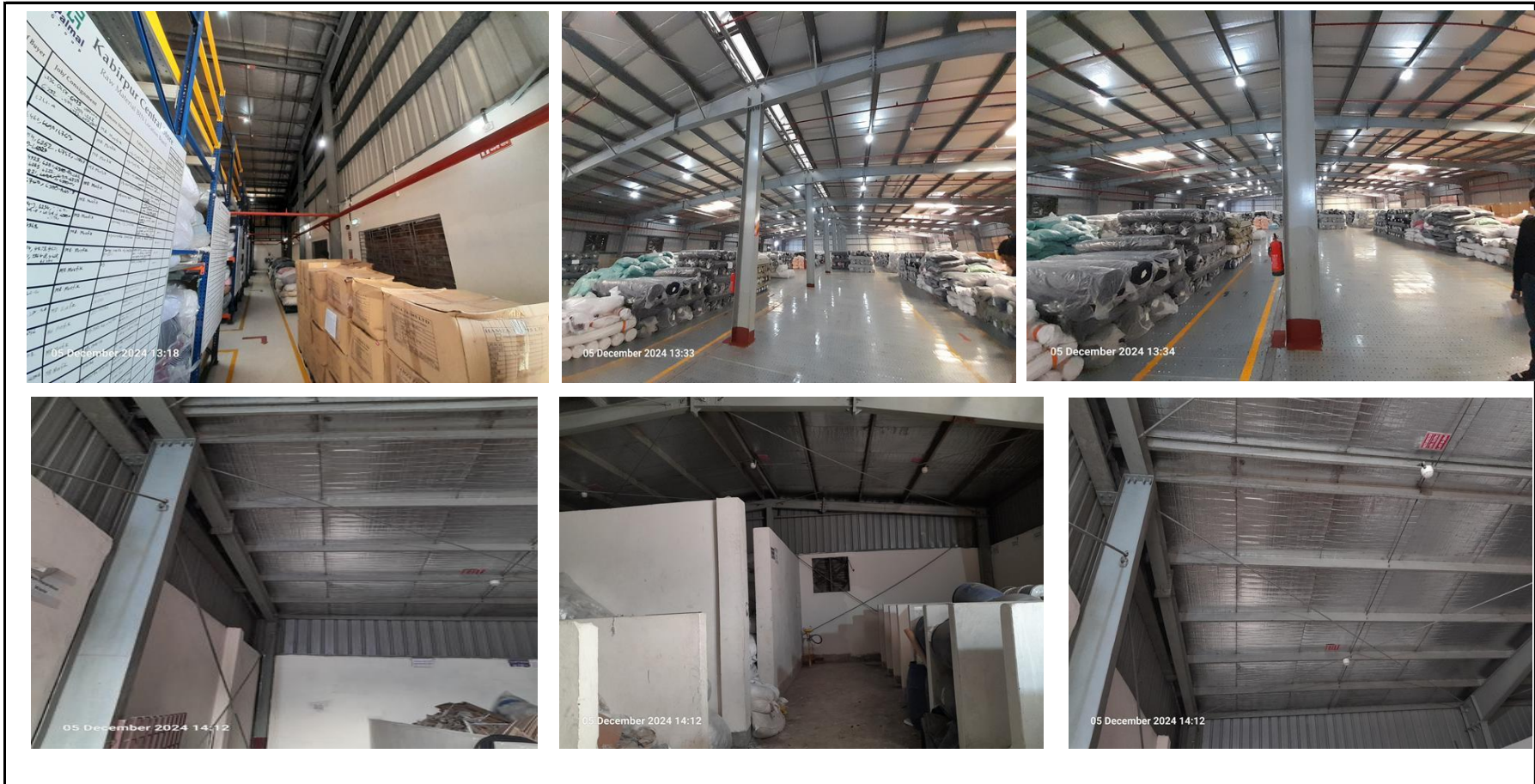
Table 1 summarize the fire safety non-compliant issues identified during the inspection. Recommendations have been provided to address each issue with specific remediation timeline. An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of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

**Table-1:**

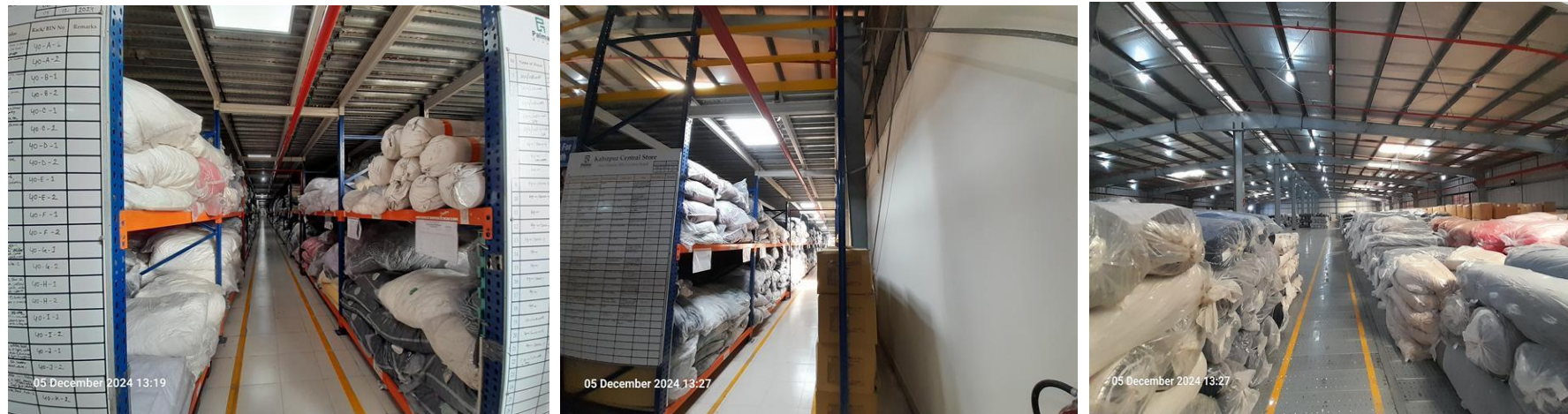
SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b>                      The exit stairs are not separated from work areas, and other spaces on each floor by fire-rated construction.</p>	<p>Provide minimum 2-hr fire rated construction for buildings 4 storied or more and 1-hr for upto 3 storied. Seal all unprotected openings to separate the exit stairs from work areas and other spaces on all floor levels by 90 minutes for 2 hr construction and 60 minutes for 1-hr construction. Ensure that the fire rated doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors and provide vestibules to avoid direct discharge from storage to exit stair enclosure.</p> <p>If fire rated doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.</p>	Within 3 months

					
F-2	Fire Rated Construction	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b> The interior exit stair discharges inside the storage area on ground floor of fabric store shed.</p>	<p>Provide 2-hr fire-rated exit passageway leading directly outside.</p> <ul style="list-style-type: none"> <li>- Modify stair to discharge directly outside.</li> <li>- Provide 2-hr fire-rated exit passageway leading directly outside (vestibules to separate any storage areas).</li> </ul>	Within 3 months	
					

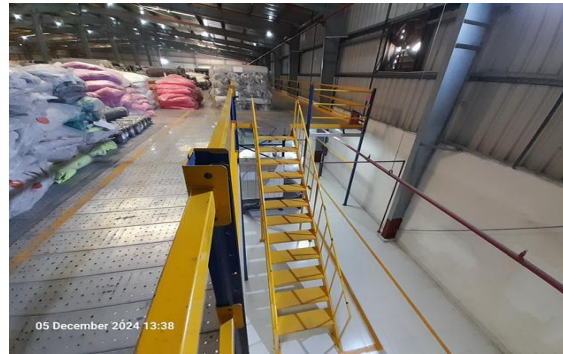
F-3	Fire Rated Construction	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level and Single Storied Pre-fab Wastage store Shed (G):</b></p> <p>The main structural elements of factory buildings (H2) are constructed by steel which is non-rated structure and were found in exposed condition without any fire protection. As per RSC Technical Guidelines (Standard) 1.5.4 this building is defined as New and an interim building so, fire protection shall be provided for the structural elements of the building following section 3.5.2 of RSC Technical Guidelines (Standard) V1.0.</p>	<p>For new and interim construction, 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.</p> <p>Factory shall ensure that, all the design, datasheet, certificate (If applicable), and the design-philosophy has been reviewed from the RSC prior to install the passive fire protection system.</p>	Within 6 months
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F-4	Fire Rated Construction	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b>          Mezzanine floor area was found more that 33% of main floor and not separate with the ground floor of fabric store shed. Note: Reportedly main floor areas is 2025.092937 sqm and 1st floor level area is 19700 sqm.</p>	<p>The mezzanine floor at the lowest level shall be designated as main floor and each Intermediate floor is limited to an area which is not more than one third of the main floor under one roof or one ceiling.</p> <p>Separate each floors by fire rated construction as per Table 3.3.1 (a), 3.3.1 (b) and Table 3.2.1 Part-III of BNBC-2020.</p>	Within 6 months
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F-5	Means of egress	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b>          Travel distance of egress paths exceeds the allowable limit on the ground and 1st floor level of fabric shed.</p>	<p>Occupant load and components of exits shall be arranged in such a manner that the travel path from any point in the area served shall not be exceeded (38 meter for non-sprinklered and 45 meter sprinklered building) as listed in the Table 4.3.8 of BNBC 2020.</p>	Within 3 months
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F-6	Means of egress	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b>          Non-compliant sliding doors are provided at building exits on ground floor of fabric shed.</p>	<p>Replace all collapsible gates/ sliding doors/ rolling shutter doors along the means of egress with side-hinged, swinging egress doors.          If locks are required for security reasons, utilize specialized door locking features complying with NFPA101.</p>	Within 1 month
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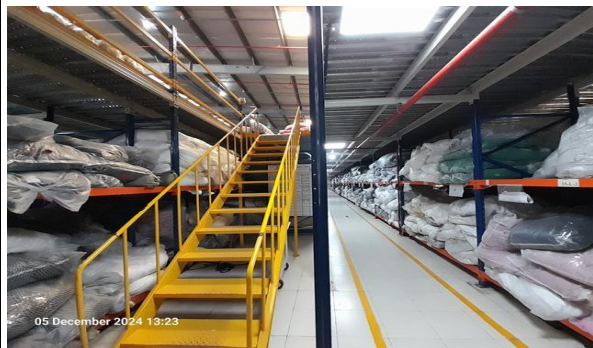


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F-7	Means of egress	Handrail height was found less than 0.9 meter from 1st floor level to GF of <b>fabric store shed</b> , and handrail found missing for <b>Rain Water Harvesting Plant stair, and wastage store entrance</b> .	Handrails shall have a minimum height of 0.9 m measured from the nose of stair to the top of the handrail.	Within 3 months
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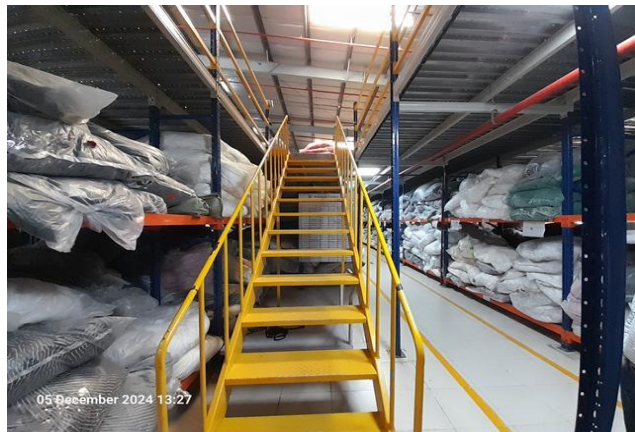
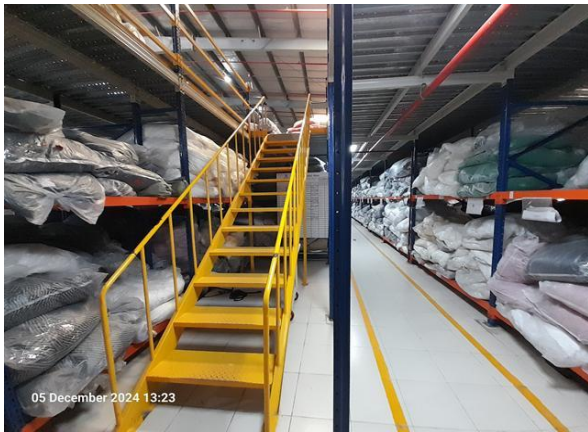


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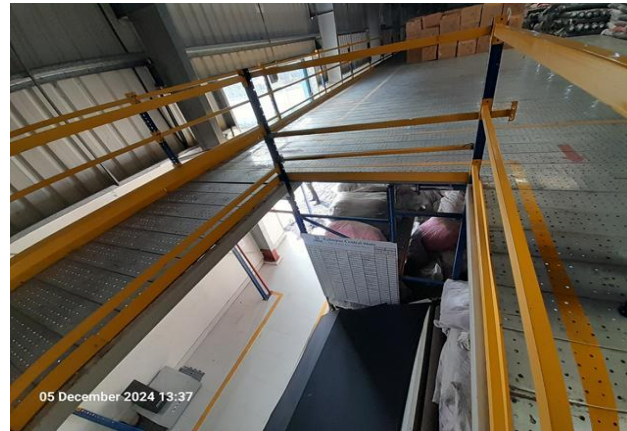
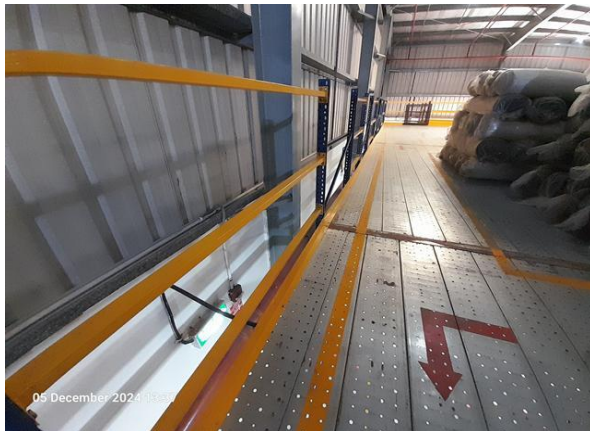


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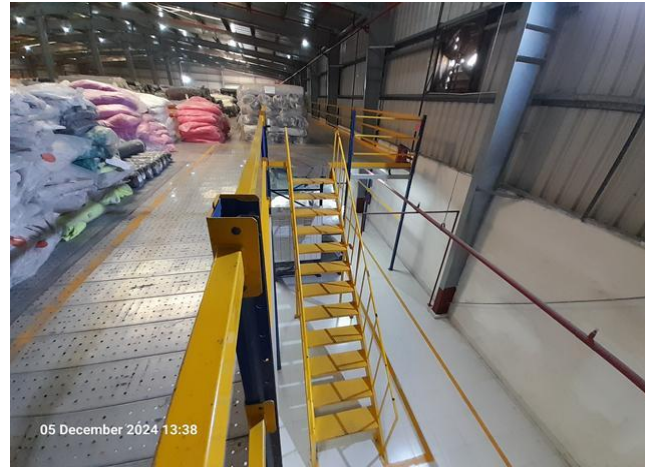
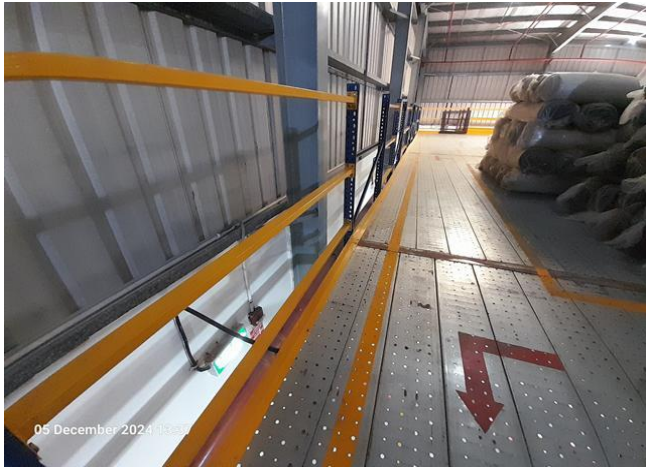
F-8	Means of egress	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b>  Width of exit stairs (1st floor to ground floor stair width-36.5 &amp; 38 inch) are found less than 1.5 m (60 in.).</p>	<p>In new and interim construction stairs shall have a minimum width of 1.5 m (60 in.) for all industrial occupancies.</p>	<p>Within 3 months</p>
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F-9	Means of egress	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b>  Guards on 1st floor level was not provided as per the section 6.12.2 Guards of the RSC Technical Guidelines (Standard).</p>	<p>Guards shall be provided at all open sides of means of egress that exceed 760 mm (30 in.) above the floor or finished ground below:</p> <ul style="list-style-type: none"> <li>-New and interim guards shall have a minimum height of 1067 mm (42 in.).</li> <li>-Open guards shall have intermediate rails or pattern such that a sphere 200 mm (8 in.) in diameter cannot pass through any opening up to a height of 865 mm (34 in.).</li> </ul>	Within 3 months
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F-10	Means of egress	<p><b>For all structures:</b></p> <p>The building did not have stair designation signs or occupant load signs at the required locations.</p>	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month
F-11	Means of egress	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b></p> <p>Fire evacuation maps are not posted at the entrance to each exit stair.</p>	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-12	Egress Lighting	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b></p> <p>The directional signs are not provided where there is a change in direction and where the continuation of the egress path is not obvious.</p> <p>Location: On ground and 1st floor level of fabric shed.</p>	Install 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

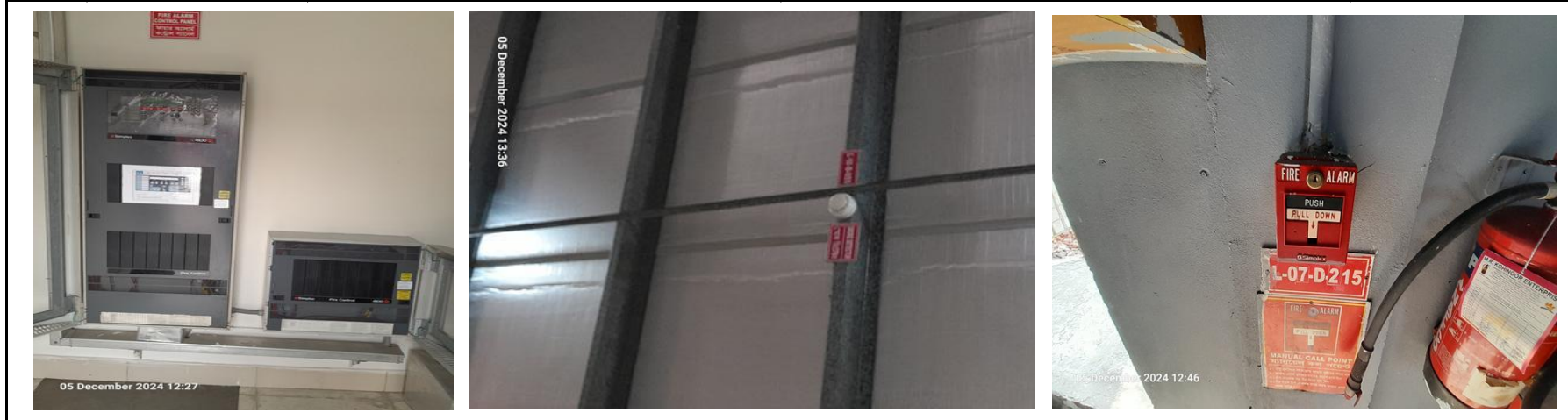


F-13	Egress Lighting	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level:</b>          Exit signs are not provided at exit.          Location: On 1st floor level of fabric shed.</p>	<p>Provide exit signs above all exits to the exterior and all doors to the exit stair.</p>	<p>Within 1 month</p>
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F-14	Egress Lighting ITM	<p><b>For all structures:</b>          Inspection, testing, and maintenance for the emergency lighting system were not in accordance with The RSC Technical Guidelines (Standard).</p>	<p>Inspect, test and maintain the emergency lighting system in the accordance with The RSC Technical Guidelines (Standard) and keep written records on-site.</p>	<p>Within 1 month</p>
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F-15	Fire Alarm & Detection system	<p><b>Single Storied Pre-fab Fabric Store Shed (G) with non-rated intermediate level, Rain Water Harvesting Plant room and containers:</b></p> <p>Automatic fire alarm and detection system installation complete which requires detailed review to confirm compliance with NFPA 72 and The RSC Technical Guidelines (Standard).</p>	<p>Submit the fire alarm system design to the 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, the 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.</p>	Design Review within 2 months and installation within 4 months
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F-16	ITM of Fire Alarm & Detection system	<p><b>For all structures:</b>  Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72 and The RSC Technical Guidelines (Standard).</p>	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72 and The RSC Technical Guidelines (Standard) and keep written records on-site	Within 1 month (after installation)
F-17	ITM of Fire Extinguishers	<p><b>For all structures:</b>  Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.</p>	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10 and The RSC Technical Guidelines (Standard).	Within 3 months



F-18	Fire Rated Construction	<p><b>Single Storied Pre-fab Wastage store Shed (G) and Containers:</b></p> <p>Four nos containers were located on north side of the wastage shed with 3 feet distance only, where adequate separation was not maintained. The container was observed with full of combustibile materials.</p>	<p>Relocate the containers from the shed/ building and other egress path by maintaining minimum 10 feet distance. Or,</p> <p>Ensure a minimum 3-hr fire separation from containers to shed or egress path/ buildings.</p>	Within 2 months
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