

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Fakir Apparels Ltd. (Extension)

RSC ID: 24629

ADDRESS: A-127-131,135-138,142-145, B-501-503, BSCIC Hosiery Ind. Estate, Fatullah, Narayanganj
(23.622441, 90.480205)

Other Factories: Fakir Apparels Ltd. (ID-9485)



Inspected By: Ferdaus Jaman, Hamed Mustakim and Muntasir Ahmad Nasif
Date: 14th November 2023 and 1st January 2024

Fire Safety Inspection Report

Factory Name: Fakir Apparels Ltd. (Extension)

Introduction:

Fakir Apparels Ltd. (Extension) complex was surveyed for fire safety on 14/11/2023 & 01/01/2024 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):

Factory Building names: There are nine (34) structures in the premises under this ID-24629. They are:

1. Building FAL-17/A, Departmental Store (Single storied steel structure), Area: 91.46 sqm, Construction Start Date: 01-June-2017; End Date: 20-July-2017, Occupying Date: 20-July-2017, Local Authority Approval Date: 12 Jul 2000 (RAJUK), DIFE Approval Date: 05 Aug 2019, Construction Period: Interim.
2. Building FAL-19, WTP, (Single storied steel structure), Area: 182.18 sqm, Construction Start Date: 01-Feb-2013; End Date: 22-June-2013, Occupying Date: 22-June-2013, Construction Period: Existing.
3. Building FAL-27/A, Fabric Store (Single storied steel structure), Area: 2266.5 sqm, Construction Start Date: 01-Sep-2020; End Date: 31-Dec-2020, Occupying Date: 31-Dec-2020. Local Authority Approval Date: 27 Oct 2022 (RAJUK), DIFE Approval Date: 21 Jan 2021, Construction Period: Interim.
4. Building FAL-33, Washing & Dyeing, Finishing, (Single storied steel structure), Area: 2175.04 sqm, Construction Start Date: 01-Sep-2014; End Date: 10-Feb-2015, Occupying Date: 10-Feb-2015, Local Authority Approval Date: 06 Oct 2002 (RAJUK), DIFE Approval Date: 28 Feb 2022, Construction Period: Interim.
5. Building FAL-34, Knitting, (Single storied steel structure), Area: 2416.71 sqm, Construction Start Date: 01-Aug-2014; End Date: 05-Feb-2015. Occupying Date: 05-Feb-2015, Local Authority Approval Date: 06 Oct 2002 (RAJUK), DIFE Approval Date: 05 Dec 2021, Construction Period: Interim.
6. Building FAL-35, Knitting, (Single storied steel structure), Area: 2974.42 sqm, Construction Start Date: 01-Apr-2015; End Date: 02-Sep-2015, Occupying Date: 02-Sep-2015, Construction Period: Interim.
7. Building FAL-36 Maintenance Workshop, (Single storied steel structure with mezzanine), Area: 749.55 sqm, Construction Start Date: 01-Aug-2015; End Date: 23-May-2015, Occupying Date: 23-May-2015. Local Authority Approval Date: 07 Jun 1999 (RAJUK), DIFE Approval Date: 23 Jul 2020, Construction Period: Interim.
8. Building FAL-37, Canteen, (Two storied steel structure), Area: 1495.94 sqm, Construction Start Date: 01-Aug-2015; End Date: 01-Mar-2017, Occupying Date: 01-Mar-2017. Local Authority Approval Date: 07 Jun 1999 (RAJUK), DIFE Approval Date: 27 Nov 2017, Construction Period: Interim.

9. Building FAL-43, Utility building, (Two storied RCC structure), Area: 1350 sqm, Construction Start Date: 01-June-2016; End Date: 01-July-2017, Occupying Date: 01-July-2017. Local Authority Approval Date: 07 Mar 1999 (RAJUK), DIFE Approval Date: 05 Aug 2019, Construction Period: Interim.
10. Building FAL-44, Fabric Store, (Single storied steel structure), Area: 1450 sqm, Construction Start Date: 01-Oct-2016; End Date: 01-May-2017, Occupying Date: 01-May-2017. Local Authority Approval Date: 21 Mar 1999 (RAJUK), DIFE Approval Date: 12 Jun 2017, Construction Period: Interim.
11. Building FAL-53, Yarn Store, (Single storied steel structure), Area: 2361.87 sqm, Construction Start Date: 01-May-2022; End Date: 01-Dec-2022, Occupying Date: 01-Dec-2022, Local Authority Approval Date: 31 Jul 2022 (Enayetnagar Union Parishad, Fatullah, Narayanganj), DIFE Approval Date: 26 Dec 2022, Construction Period: New.
12. Building FAL-54, Fabric Shed, (Single storied steel structure), Area: 1503.94 sqm, Construction Start Date: 01-July-2022; End Date: 01-Nov-2022, Occupying Date: 01-Nov-2022. Local Authority Approval Date: 12 May 2022 (Enayetnagar Union Parishad, Fatullah, Narayanganj), DIFE Approval Date: 5 Jun 2023, Construction Period: New.
13. Building FAL-56, Wastage Area, (Single storied steel structure), Area: 790.8 sqm, Construction Start Date: 01-Aug-2022; End Date: 01-Dec-2022, Occupying Date: 01-Dec-2022, Construction Period: New.
14. Building FAL-57, Yarn Storage Shed, (Single storied steel structure), Area: 158.47 sqm, Construction Start Date: 1-Dec-2022; End Date: 01-Apr-2023, Construction Period: New.
15. Building FAL-12 LEED Building, (6 Storied Steel Structure) (G+M+5), Total area of the building: 281465 sft. Construction: 17 Aug 2012 to 31 Dec 2017, Occupying Date: 31 Dec 2017, Local Authority Approval Date: 29 Mar 1999, Construction Period: Interim.
16. Building FAL-20 ETP Building (2 Storied RCC Structure), Total area of the building: 1919 sft., Construction: 12 Nov 2009 to 25 Aug 2010, Occupying Date: 25 Aug 2010. Local Authority Approval Date: 29 Mar 1999 (Rajuk), Construction Period: Existing.
17. Building FAL-22, Singeing Machine Shed (Single Steel Shed), Total area of the building: 1477 sft., Construction: 11 Sep 2014 to 11 Nov 2014, Occupying Date: 11 Nov 2014, Local Authority Approval Date: 29 Mar 1999 (Rajuk), Construction Period: Interim.
18. Building FAL-24, Dyeing Shed (Single Steel Shed), Total area of the building: 2856 sft., Construction: 20 Oct 2001 to 20 Jan 2002, Occupying Date: 20 Jan 2002. Local Authority Approval Date: 30 Oct 2002 (Rajuk), Construction Period: Existing.
19. Building FAL-28, Central Chemical Store (Single Steel Shed), Total area of the building: 1477 sft., Construction: 02 Apr 2013 to 16 Oct 2013, Occupying Date: 16 Oct 2013. Local Authority Approval Date: 20 Oct 2002 (Rajuk), Construction Period: Interim.

20. Building FAL-29, Office & Maintenance Workshop (Single Steel Shed), Total area of the building: 1830 sft., Construction: 06 Jun 2014 to 10 Oct 2014, Occupying Date: 10 Oct 2014, Local Authority Approval Date: 20 Oct 2002 (Rajuk), Construction Period: Interim.
21. Building - FAL-30, ETP Chemical & Sludge Storage Area (Single Steel Shed), Total area of the building 2627 sft., Construction: 17 Feb 2013 to 13 Sep 2013, Occupying Date: 13 Sep 2013. Local Authority Approval Date: 15 Mar 1999 (Rajuk), Construction Period: Interim.
22. Building FAL-31, Boiler Shed (Single Steel Shed), Total area of the building: 1008 sft., Construction: 10 Mar 2013 to 16 Nov 2013, Occupying Date: 16 Nov 2013. Local Authority Approval Date: 01 Mar 1999 (Rajuk), Construction Period: Interim.
23. Building FAL-32, Boiler Shed (Single Steel Shed), Total area of the building: 6100 sft., Construction: 02 Feb 2013 to 07 Oct 2013, Occupying Date: 07 Oct 2013, Local Authority Approval Date: 01 Mar 1999 (Rajuk), Construction Period: Interim.
24. Building FAL-40, Medical & Day Care Building (4 Storied RCC structure) (G+ 3), Total area of the building: 11748 sft., Construction: 06 Jun 2015 to 28 May 2016, Occupying Date: 28 May 2016, Local Authority Approval Date: 07 Sep 2000 (Rajuk), 07 Sep 2000, Construction Period: Interim.
25. Building FAL-42, Dyeing Finishing (Single Steel Shed), Total area of the building: 18000 sft., Construction: 09 Jan 2013 to 28 Oct 2013, Occupying Date: 28 Oct 2013, Local Authority Approval Date: 10 Oct 2002 (Rajuk), Construction Period: Interim.
26. Building FAL-45, Dyeing Finishing (Single Steel Shed), Total area of the building: 11000 sft., Construction: 19 Nov 2021 to 20 Aug 2022, Occupying Date: 20 Aug 2022. Local Authority Approval Date: 18 Apr 2021 (Rajuk), Construction Period: New.
27. Building FAL-46, Fire Pump Room (Single Storied RCC Structure), Total area of the building: 1144 sft. Construction: 01 Feb 2017 to 12 Jun 2017, Occupying Date: 12 Jun 2017, Local Authority Approval Date: 25 July 2000 (Rajuk), Construction Period: New.
28. Building FAL-47, Dyeing Finishing (Single Steel Shed), Total area of the building: 9500 sft. Construction: 15 July 2022 to 05 Dec 2022, Occupying Date: 05 Dec 2022, Local Authority Approval Date: 18 Apr 2021 (Rajuk), Construction Period: New.
29. Building FAL-48, Boiler Shed (Single Steel Shed), Total area of the building: 5000 sft., Construction: 02 Feb 2013 to 27 Nov 2013, Occupying Date: 27 Nov 2013, Local Authority Approval Date: 20 May 2002 (Rajuk), Construction Period: Interim.

30. Building FAL-49, Warehouse (Single Steel Shed), Total area of the building: 6108 sft., Construction: 13 Feb 2013 to 20 Nov 2013, Occupying Date: 20 Nov 2013, Local Authority Approval Date: 20 Feb 2023 (Rajuk), Construction Period: Interim.
31. Building FAL-50, Store Building Warehouse (6 Storied Steel structure) (G+ 5), Total area of the building: 42498 sft., Construction: 27 Feb 2020 to 26 Feb 2022, Occupying Date: 26 Feb 2022, Local Authority Approval Date: 18 Apr 2002 (Rajuk), Construction Period: Interim.
32. Building FAL-51, Boiler Shed (Single Steel Shed), Total area of the building: 2119 sft., Construction: 05 Mar 2019 to 13 July 2019 Occupying Date: 13 July 2019, Local Authority Approval Date: 18 Apr 2021, (Rajuk), Construction Period: Interim.
33. Building FAL-52, Finished Carton-Warehouse (Single Steel Shed), Total area of the building: 5924 sft., Construction: 27 Feb 2020 to 30 Oct 2021, Occupying Date: 30 Oct 2021, Local Authority Approval Date: 18 Apr 2021, (Rajuk), Construction Period: Interim.
34. Building FAL-55, Dyeing Finishing Shed (Single Steel Shed), Total area of the building: 3604 sft., Construction: 22 May 2022 to 31 Sep 2022, Occupying Date: 31 Sep 2022. Local Authority Approval Date: 31 July 2022 (Enayetnagar Union Parishad, Narayanganj), Construction Period: New

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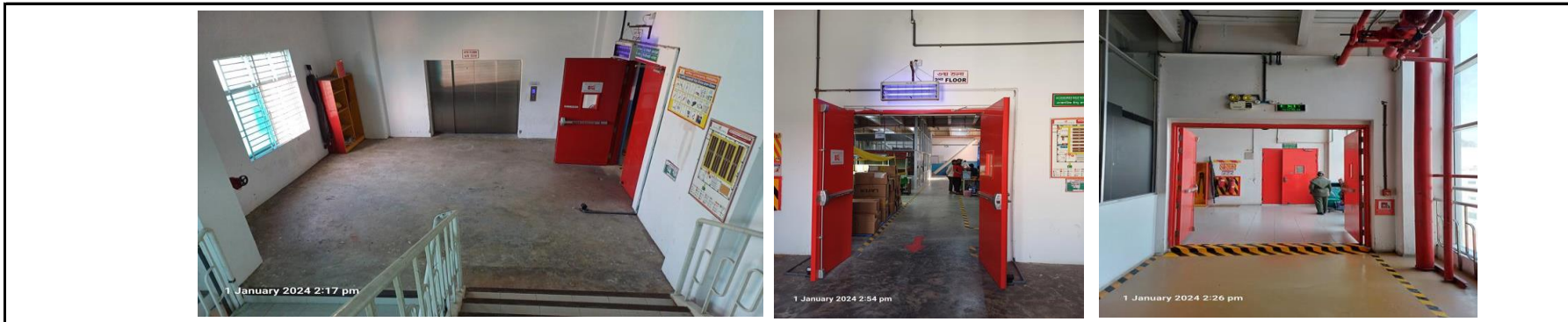


Findings & Recommendations :

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>Building FAL-12 & 50:</p> <p>The exit stairs are not separated from work areas, 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> <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 The RSC Technical Guidelines (Standard) 6.8.3.1</p>	Within 3 months

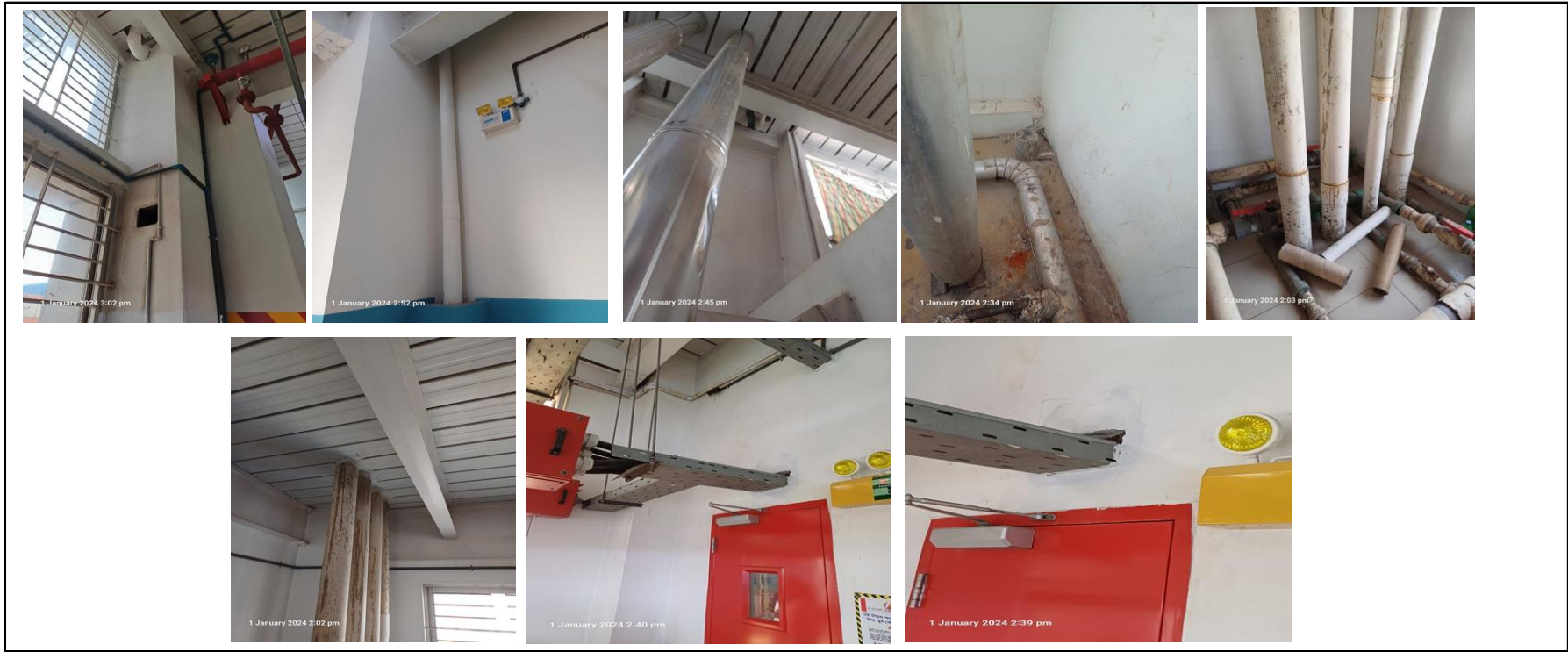


F-2	Fire Rated Construction	<p>Building FAL-12: Elevator shafts are directly open into the inside of floor area on several floors.</p>	<p>Modify the elevator shaft as per RSC Technical Guideline (Standard) V1-6.14.3. Elevator shaft shall be 2-hr fire rated opening protection from factory floor.</p>	Within 6 months
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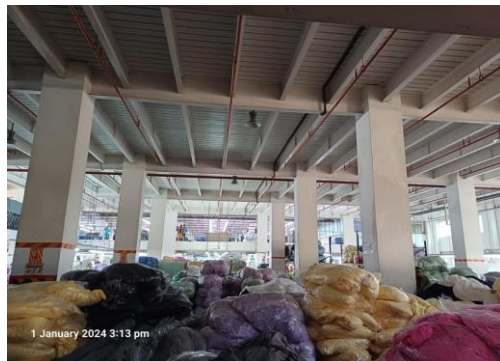


F-3	Fire Rated Construction	<p align="center">Building FAL-12 & 50:</p> <p>Elevator shafts are directly open into the inside of exit enclosure on several floors.</p>	<p>An exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material 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 6 months
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F-4	Fire Rated Construction	<p style="text-align: center;">Building FAL-12 & 50:</p> <p>Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies. Followings are the description of openings or penetrations indicating specific locations:</p> <ol style="list-style-type: none"> 1. Passing of BBT riser through floor slabs from ground floor to top floor of the building. 2. Passing of IT/Network cable riser through floor slabs from ground floor to top floor of the building. 3. Plastic pipes penetrate the floor slabs in toilet block of the building. 4. Steamline/GI pipes penetrate the floor slabs of the building. 5. Plastic pipes of wastage water discharge penetrate the floor slabs of the building. 7. Electrical cable riser through rated walls on several floors of the building. 	<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 style="text-align: center;">Or</p> <p>Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.</p>	Within 3 months
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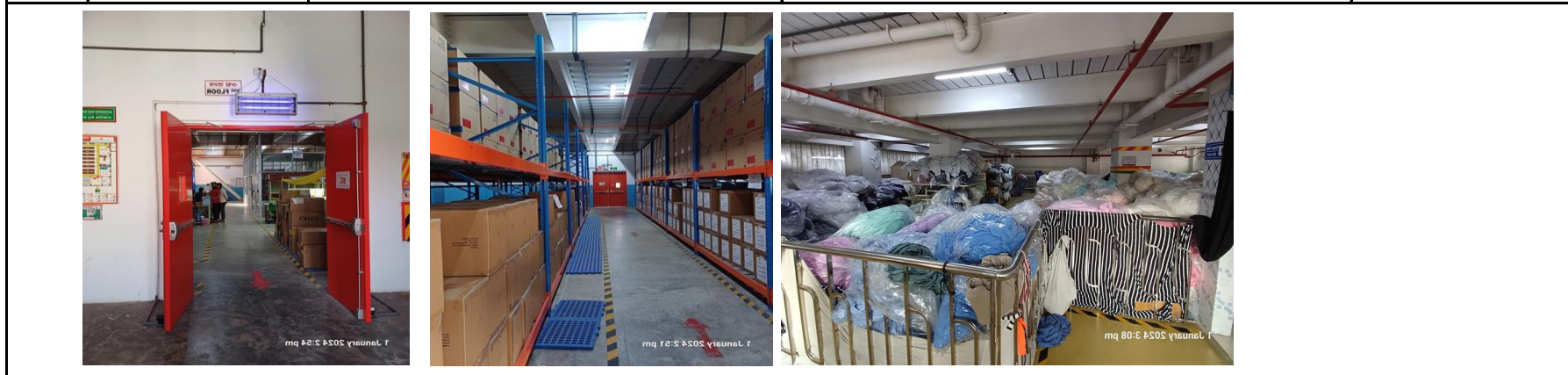
F-5	Fire Rated Construction	<p style="text-align: center;">Building FAL-12:</p> <p style="text-align: center;">Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: On Ground and Mezzanine floor.</p>	<p>Provide defined storage areas and limit the storage arrangement as follows: -</p> <ol style="list-style-type: none"> 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. 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. <p style="text-align: center;">or</p> <ol style="list-style-type: none"> 3. Enclose the storage area from the surrounding occupancy with a minimum 1-hour construction. 	Within 3 months
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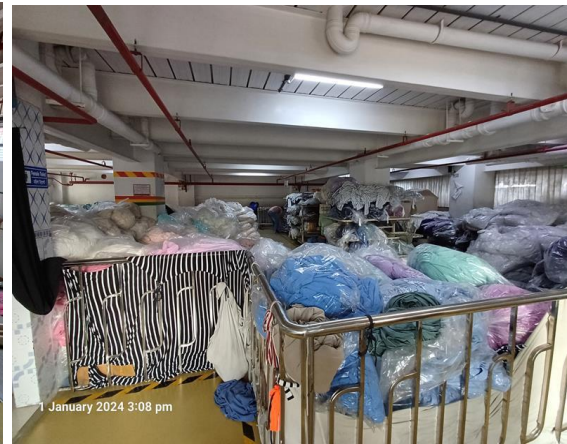
F-6	Fire Rated Construction	<p>Building FAL-50: Rooms used for combustible storage are not properly separated by fire rated construction due to unprotected openings and penetrations.</p>	<p>Separate or seal the unprotected openings and penetrations of the storage rooms by a minimum 1-hr fire rated construction.</p>	Within 3 months
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F-7	Fire Rated Construction	<p>Building FAL-12 & 50: Storage discharges directly into the exit stair discharge. Location: On ground and Mezzanine floor for FAL-12 and all floors for FAL-50.</p>	<p>Openings from exit enclosure to storage room, shall be provided with a vestibule 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.</p>	Within 4 months
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F-8	Fire Rated Construction	<p align="center">Building FAL-12:</p> <p>Mezzanine floor area was found more than 33% of main floor and not separate with the ground floor of FAL-12.</p>	<p>Mezzanine floor shall not exceed 33.33% of the building plinth area as per BNBC-2006, Article 1.12.6.1.</p> <p>Separate each floors by fire rated construction as per BNBC-2006, Part-3, Chapter-3 and Table 3.3.1. 2-hr fire rated separation is required from claimed mezzanine floor (actually first floor) to ground floor. Also, separation is required for required number of exit stairs. Seal all penetrations and protect the openings to maintain the required fire separations.</p>	Within 3 months
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F-9	Fire Rated Construction	<p>Building Fal-12 & 50. Unsealed penetrations and openings are located in the exit stair enclosures.</p>	Seal all penetrations and openings in exit stair enclosure walls to maintain minimum 2 hrs fire separations.	Within 3 months
F-10	Fire Rated Construction	<p>Building FAL-12: The main structural elements of factory buildings (G and/ or 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 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>	For 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. 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-11	Fire Rated Construction	<p style="text-align: center;">Building FAL-50:</p> <p>The main structural elements of factory buildings (G and/ or 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 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 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. 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.</p>	Within 6 Months
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F-12	Fire Rated Construction	<p>Building FAL-12 & 50: The exit discharge path serving exit stair is not separated from the building interior.</p>	<p>The building exterior walls within 3050 mm (10 ft) horizontally of a non-rated wall or unprotected opening shall have a fire resistance rating of not less than 2-hr and the rating of the exterior wall shall extend 3.05 m (10 ft.) beyond the ends of the stair structure.</p>	Within 3 months
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F-13	Means of egress	<p align="center">Building FAL-12 & 50: 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-14	Means of Egress	<p align="center">Building FAL-12 & 50: 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-15	Egress Lighting	<p>Building FAL-12 & 50: Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.</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-16	Egress Lighting	<p>Building FAL-12 & 50: Exit signs are not provided at exit on several locations.</p>	<p>Provide exit signs above all exits to the exterior and all doors to the exit stair.</p>	Within 1 month
F-17	Egress Lighting	<p>Building FAL-12 & 50: 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>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.</p>	Within 1 month

F-18	Egress Lighting	Building FAL-12 & 50: Manual ON/OFF switches were found with the emergency lighting unit.	Remove manual on/off switches from emergency lighting /exit signage units to prevent them from being switched off.	
F-19	Egress Lighting ITM	Building FAL-12 & 50: Inspection, testing, and maintenance for the emergency lighting system were not in accordance with The RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in the accordance with The RSC Technical Guidelines (Standard) and keep written records on-site.	Within 1 month
F-20	Fire Alarm & Detection system	Building FAL-12 & 50: Automatic fire alarm and detection system installation 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, 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. 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 within 4 months

F-21	ITM of Fire Alarm & Detection system	<p>Building FAL-12 & 50: Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72 and and The RSC Technical Guidelines (Standard).</p>	<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</p>	<p>Within 1 month (after installation)</p>
F-22	Fire Protection System (Standpipe)	<p>Building FAL-12 & 50: The existing building has an occupied floor greater than 10 meter (33 feet) and standpipe system has installed throughout the buildings. The standpipe installation requires detailed review to confirm compliance with NFPA 14, 20, 22, 24 and RSC Technical Guideline (Standard).</p>	<p>Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC Technical Guideline (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.</p>	<p>Design Review within 2 months and installation within 4 months.</p>

F-23	Fire Protection System (Standpipe)	<p>Building FAL-12 & 50: The high-rise building has an occupied floor greater than 23 meter (75 feet) and sprinkler system has installed throughout the buildings. The sprinkler system installation requires detailed review to confirm compliance with NFPA 13, 14, 20, 22, 24 and RSC Technical Guideline (Standard).</p>	<p>Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC Technical Guideline (Standard) and NFPA 13, 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.</p>	<p>Design Review within 2 months and installation within 4 months.</p>
F-24	Fire Protection System(ITM of fire pump)	<p>Building FAL-12 & 50: Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 20, 25 and RSC Technical Guideline (Standard).</p>	<p>Inspect, test and maintain the fire pump in accordance with NFPA 20, 25 and RSC Technical Guideline (Standard) and keep written records on-site.</p>	<p>Within 1 Month (after installation)</p>

F-25	Fire Protection System(ITM of Standpipe)	<p>Building FAL-12 & 50: Inspection, testing, and maintenance for the standpipe and sprinkler system is not in accordance with NFPA 14, 25 and RSC Technical Guideline (Standard).</p>	<p>Inspect, test and maintain the standpipe system in accordance with NFPA 14, 25 and RSC Technical Guideline (Standard) and keep written records on-site.</p>	<p>Within 1 Month (after installation)</p>
F-26	ITM of Fire Extinguishers	<p>Building FAL-12 & 50: Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.</p>	<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).</p>	<p>Within 3 months</p>


F-27	Fire Rated Construction	<p>Building FAL-40 (Medical & Day-Care): The exit stairs are not separated from work areas, 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 up to 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. 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
<div style="display: flex; justify-content: space-around;">   </div>				
F-28	Means of Egress	<p>Building FAL-40 (Medical & Day-Care): Fire evacuation maps are not posted at the entrance to each exit stair.</p>	<p>Fire evacuation maps shall be posted at the entrance to each exit stair.</p>	Within 1 Month

F-29	Means of Egress	Building FAL-40 (Medical & Day-Care): Building did not have stair designation signs or occupant load signs at the required locations. For most of the structures.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 Month
F-30	Inspection Testing and Maintenance of Emergency lighting	Building FAL-40 (Medical & Day-Care): 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-31	Inspection Testing and Maintenance of Portable Fire Extinguisher.	Building FAL-40 (Medical & Day-Care): 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
F-32	Fire Alarm & Detection System (FADS)	Building FAL-40 (Medical & Day-Care): The fire alarm and detection system installation is completed. The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review, modification (if required) shall have to done as per the reviewed design and NFPA-72 with a listed Addressable Fire Alarm System. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design Review within 2 months and installation/modification within 4 months.




				
<p>F-33</p>	<p>Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)</p>	<p>Building FAL-40 (Medical & Day-Care): Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.</p>	<p>Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)</p>	<p>Within 1 month after installation.</p>

F-34	Fire Rated Construction	<p>Utility building, FAL-43: The exit stairs are not separated from work areas, 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 up to 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. 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
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F-35	Fire-Rated Construction	<p>Utility building, FAL-43: Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies.</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 guideline. (Type-1 Construction). or, Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required. (Type-1 Construction).</p>	Within 3 Months
				
F-36	Means of Egress	<p>Utility building, FAL-43: 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-37	Means of Egress	Utility building, FAL-43: Building did not have stair designation signs or occupant load signs at the required locations. For most of the structures.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 Month
F-38	Inspection Testing and Maintenance of Emergency lighting	Utility building, FAL-43: 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-39	Inspection Testing and Maintenance of Portable Fire Extinguisher.	Utility building, FAL-43: 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
F-40	Fire Alarm & Detection System (FADS)	Utility building, FAL-43: The fire alarm and detection system installation is completed. The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review, modification (if required) shall have to done as per the reviewed design and NFPA-72 with a listed Addressable Fire Alarm System. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design Review within 2 months and installation/modification within 4 months.

				
<p>F-41</p>	<p>Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)</p>	<p>Utility building, FAL-43: Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.</p>	<p>Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)</p>	<p>Within 1 month after installation.</p>

F-42	Fire Rated Construction	<p>Canteen building, FAL-37: The exit stairs are not separated from work areas, 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 up to 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. 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-43	Means of Egress	<p>Canteen building, FAL-37: Doors are swing out over exit stair landing in the north exit stair of canteen building.</p>	<p>Modify the egress door, door shall not swing out over exit stair landing.</p>	Within 3 Months



F-44	Means of Egress	Canteen building, FAL-37: Fire evacuation maps are not posted at the entrance to each exit stair.	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 Month
F-45	Means of Egress	Canteen building, FAL-37: Building did not have stair designation signs or occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 Month
F-46	Means of Egress	Canteen building, FAL-37: The required no smoking signs are not present in the factory.	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 Month
F-47	Emergency Lighting	Canteen building, FAL-37: Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs.	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-48	Inspection Testing and Maintenance of Emergency lighting	Canteen building, FAL-37: 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-49	Inspection Testing and Maintenance of Portable Fire Extinguisher.	Canteen building, FAL-37: 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
F-50	Fire Alarm & Detection System (FADS)	Utility building, FAL-37: The fire alarm and detection system installation is completed. The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review, modification (if required) shall have to done as per the reviewed design and NFPA-72 with a listed Addressable Fire Alarm System. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.	Design Review within 2 months and installation/modification within 4 months.
F-51	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Canteen building, FAL-37: 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-52	Fire Rated Construction	<p>Building (Knitting), FAL-34: Areas used for combustible storage open to the factory are not separated by fire rated construction.</p>	<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: -</p> <ol style="list-style-type: none"> 1. Maximum height of 2.45m (8ft.), maximum area of 23m² (250 ft²) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. 2. If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (1000 ft²) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. 	Within 3 Months
				

F-53	Fire Rated Construction	<p>Building (Fabric Store), FAL-44 and Building (Fabric Store)) FAL-54: Rooms used for combustible storage are not separated from assembly occupancies (rest and prayer area) by fire rated construction.</p>	<p>Separate the storage rooms or areas by minimum 3-hrs fire-rated construction from assembly areas. Or, Re-locate the assembly occupancy to a safe location.</p>	Within 3 months
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F-54	Fire Rated Construction	<p>Maintenance Workshop, FAL-36: Liquefied or compressed gas cylinders were located within the factory on ground floor of FAL-36, Maintenance Workshop.</p>	<p>The RSC Technical Guideline (Standard) V1, section 3.4.2.1.11 prohibits the storage or use of liquefied or compressed flammable gas (LPG/CNG) cylinders within the factory building. However, if it is not feasible then conditionally those are permitted to be stored in a separate dedicated building on the factory premises within its boundaries if the building meets the following conditions.</p> <ol style="list-style-type: none"> 1. The storage building must be at least 3 meters away from any other building and boundaries. 2. The exterior walls of the building must have a fire resistance rating of 3 hours using noncombustible construction. 3. Doors and other openings in the exterior walls must be protected with suitable closing devices having a fire protection rating of 3 hours. 4. The building is to be used for no other purpose than the storage of LPG/CNG cylinders. 5. The building must be mechanically ventilated to control the accumulation of flammable vapors. 6. The installations must be approved and accepted by the requirements of the AHJ, Gas supply company regulations, manufacturers/supplier's instructions/guidance, Chief Inspector of Boiler (CIOB) and Chief Inspector of Explosives Bangladesh (CIEB). 	Within 6 Months
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F-55	Fire Rated Construction	<p>Building (Fabric Store Shed), FAL-27/A: The main structural elements of factory buildings (G and/ or 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 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 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. 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.</p>	Within 6 Months
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F-56	Fire Rated Construction	<p>Building (Knitting Shed), FAL-34: The main structural elements of factory buildings (G and/ or 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 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 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. 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.</p>	Within 6 Months
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F-57	Fire Rated Construction	<p>Building (Knitting Shed), FAL-35: The main structural elements of factory buildings (G and/ or 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 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 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. 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.</p>	Within 6 Months
				
F-58	Means of Egress	<p>Fire evacuation maps are not posted at the entrance to each exit stair. For most of the structures.</p>	<p>Fire evacuation maps shall be posted at the entrance to each exit stair.</p>	Within 1 Month

F-59	Means of Egress	Building did not have stair designation signs or occupant load signs at the required locations. For most of the structures.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 Month
F-60	Means of Egress	The width of egress aisles is less than 36-inch. Locations: FAL-54 & FAL-53.	Provide minimum aisle width of 36-in.	Within 1 Month
				
F-61	Means of Egress	For all single storied sheds: The required no smoking signs are not present in the factory.	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 Month

F-62	Means of Egress	<p>Building (Yarn Store Shed), Fal-53: The common path of egress travel for storage occupancies exceed 30 m (100 ft) for storage shed, FAL-53.</p>	<p>The common path of egress travel for Group H (storage) occupancies with not more than 30 occupants shall not exceed 30 m (100 ft).</p>	Within 1 Month
				
F-63	Emergency Lighting	<p>For all single storied sheds: Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs in the most of the structures/buildings.</p>	<p>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.</p>	Within 1 Month

F-64	Emergency Lighting	<p>For most of the large single storied sheds:</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>	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-65	Inspection Testing and Maintenance of Emergency lighting	<p>For all single storied sheds:</p> <p>Inspection, testing, and maintenance for the emergency lighting system was not in accordance with RSC technical guidelines (standard).</p>	Inspect, test and maintain the emergency lighting system in accordance with RSC technical guidelines (standard). Keep written records on-site.	Within 1 month
F-66	Inspection Testing and Maintenance of Portable Fire Extinguisher.	<p>For all single storied sheds:</p> <p>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.	Within 1 Month

F-67	Fire Alarm & Detection System (FADS)	<p>Building FAL-17/A, FAL-19, FAL-27/A, FAL-33, FAL-34, FAL-35, FAL-36, FAL-44, FAL-46, FAL-53, FAL-54, FAL-56, FAL-57:</p> <p>The fire alarm and detection system installation is completed. The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.</p>	<p>Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review, modification (if required) shall have to done as per the reviewed design and NFPA-72 with a listed Addressable Fire Alarm System. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.</p>	<p>Design Review within 2 months and installation within 4 months.</p>
F-68	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	<p>Building FAL-17/A, FAL-19, FAL-27/A, FAL-33, FAL-34, FAL-35, FAL-36, FAL-44, FAL-46, FAL-53, FAL-54, FAL-56, FAL-57:</p> <p>Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.</p>	<p>Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72. (After Installation)</p>	<p>Within 1 month after installation.</p>
F-69	Fire Alarm & Detection System (FADS)	<p>Building FAL-20, FAL-22, FAL-24, FAL-28, FAL-29, FAL-30, FAL-31, FAL-32, FAL-39, FAL-42, FAL-45, FAL-47, FAL-48, FAL-49, FAL-50, FAL-51, FAL-52 & FAL-55:</p> <p>The fire alarm and detection system installation is completed. The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard.</p>	<p>Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review, modification (if required) shall have to done as per the reviewed design and NFPA-72 with a listed Addressable Fire Alarm System. Upon approval & modification (if required) the factory shall inform RSC to conduct final testing and commissioning verification of the system for final acceptance.</p>	<p>Design Review within 2 months and installation within 4 months.</p>

F-70	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	<p>Building FAL-20, FAL-22, FAL-24, FAL-28, FAL-29, FAL-30, FAL-31, FAL-32, FAL-39, FAL-42, FAL-45, FAL-47, FAL-48, FAL-49, FAL-50, FAL-51, FAL-52 & FAL-55:</p> <p>Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72.</p>	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-71	Human Element Programmes	<p>Building (Maintenance & Workshop Shed) FAL-36:</p> <p>Hot work permit is not found.</p>	A hot-work permit system in accordance with NFPA 51B shall be provided for any construction in an occupied facility.	Within 1 month

