

INITIAL FIRE SAFETY INSPECTION REPORT

Factory Name: Murad Apparels Ltd. (Extension)

RSC ID: 24756

ADDRESS: South Gouripur, Ashulia, Savar, Dhaka.

Other Factories: Murad Apparels Ltd. (ID: 9798) (in this premise)



Inspected By: Md. Ferdaus Jaman and Md. Sadid Rahman

Date: 21 September, 2023

Fire Safety Inspection Report

Factory Name: Murad Apparels Ltd. (Extension)

Introduction:

Murad Apparels Ltd. (Extension) complex was surveyed for fire safety on 21-Sep-2023 by The RSC Inspection Team. The purpose of the survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the RSC. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The inspection did not include identification of minor deficiencies, which will be further addressed as part of follow-up inspections.

Limitations

The information in this fire safety inspection report was obtained during a visit to the facility and during interviews with local factory management. It has not been possible to provide independent verification for all the information and data collected, and, therefore, The RSC cannot accept general responsibility for omissions or errors arising from inaccuracies in this report from the information obtained.

The findings and recommendations in this report are not intended to imply, guarantee, ensure or warrant compliance with any government regulations. Additionally, the results do not imply in any way that compliance with the findings or recommendations as stated in this report will eliminate all hazards, risks or exposures or that hazards, risks or exposures not referred to in this report do not exist. Compliance with the findings and recommendations stated in this report does not relieve the factory owner from obligation to comply with specific project requirements, industry standards, or the provisions of any local government regulations.

General Factory Information

Factory Building name(s):

Factory Building name(s): There are total 7 structures in the factory compound under 2 different RSC IDs.

The report is generated for the factory ID-24756 of the following structures:

1. Godown Building-1: 6- Storied RCC Godown Building (G+5_Interim)

Construction Start: Dec-2017/ Construction End: Oct-2019, Occupy: Nov-2019, Approval: 20-Nov-2017 (Union Parishod)

2. Godown Building-2: Single Storied RCC Godown Building (G_Interim) (Proposed 4 Storied)

Construction Start: Nov-2021/ Construction End: Oct-2022 (Ground Floor), Occupy: Dec-2022, Approval: 20-Nov-2017 (Union parishod)

3. RMS Room: Single Stories RCC Room (G)

Construction Start: Jan-2013/ Construction End: mar-2013, Occupy: Jun-2014

Following Structures were previously covered under ID: 9798:

1. Main factory Building-1: 3- Storied RCC Main Factory Building (G+2)

2. Canteen Building: 2- Storied Pre-fabricated (Steel) Canteen (G+1)

3. Utility Building: Single Storied RCC Utility Building with underground Fire Pump Room (B+G)

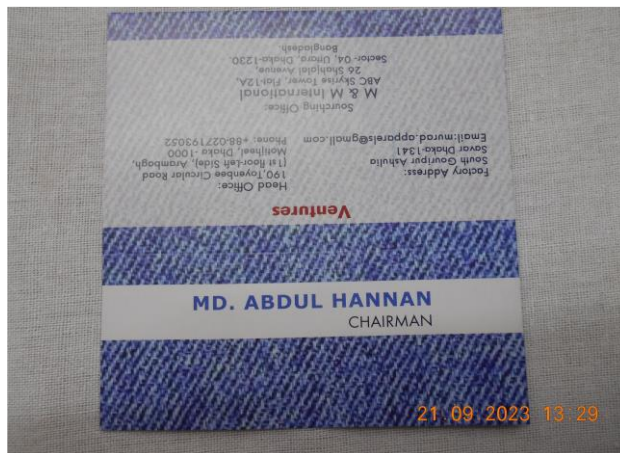
4. FACP Room: Single Storied RCC FACP Room

Factory Address: South Gouripur, Ashulia, Savar, Dhaka.

Points of contact:

1. Name: Md. Abdul Hannan,
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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
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F-1	Fire Rated Construction	<p align="center">(Godown Building-1)</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 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. 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
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F-2	Fire Rated Construction	<p>Elevator shafts are directly open into the inside of exit enclosure.</p> <p>Located: Lobby of Stair-1.</p>	<p>Modify the elevator shaft as per The RSC Technical Guideline (Standard) V1-6.14.3. An exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material with fire resistance rating required for the type of construction of smoke proof enclosure.</p>	Within 6 months
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F-3	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies.	Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level. Seal all penetrations and openings in floors/ceiling assemblies to maintain the fire separation.	Within 3 months
				
F-5	Fire Rated Construction	Storage discharges directly into the exit stair discharge. Location: On ground and 1st floor of stair-1 an stair-2.	Openings from exit enclosure to storage room, generator and transformer spaces 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, generator, sub-station room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 4 months



F-6	Fire Rated Construction	Unsealed penetrations and openings are located in the exit stair enclosures.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separations.	Within 1 month
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F-7	Means of egress	<p>Means of egress have a ceiling height less than 2.03 m (6 ft 8 in.).</p> <p>Location: On ground floor stair-2 exit door.</p>	<p>All means of egress shall have a minimum ceiling height of 2.3 m (7 ft 6 in.) with projections from the ceiling not less than 2.03 m (6 ft 8 in.). The minimum ceiling height shall be maintained for at least 2/3 of the space or room as long as the remaining area shall be not less than 2.03 m (6 ft 8 in.). Headroom on stairs shall not be less than 2.03 m (6 ft 8 in.).</p>	Within 3 months
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F-8	Means of egress	Handrails are not provided on both sides of each exit stairs on all floors. Having handrails on one side of said staircase, may pose as a falling hazard during evacuation.	Provide handrails on both sides of the exit stair. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.)	Within 3 months
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F-9	Means of egress	Fire evacuation map is not posted at the entrance of all exit stair.	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-10	Means of egress	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-11	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.	Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.	Within 1 month
F-12	Egress Lighting	The directional signs are not provided where there is a change in direction and where the continuation of the egress path is not obvious. Location: On several floors of production building (B-1).	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	Exit signs are not provided at exit. Location: Exit of Stair-2 on several floors of production building (B-1).	Provide exit signs above all exits to the exterior and all doors to the exit stair.	Within 1 month
F-14	Egress Lighting ITM	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 3 months

F-15	Fire Alarm & Detection system	Automatic fire alarm and detection system installation complete which requires detailed review to confirm compliance with NFPA 72 and The RSC Technical Guidelines (Standard). For all structures of this ID.	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-16	ITM of Fire Alarm & Detection system	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72 and and The RSC Technical Guidelines (Standard).	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	Fire Protection System (Standpipe)	<p>Standpipe installation requires detailed review to confirm compliance with NFPA 14, 20 and RSC Technical Guideline (Standard).</p> <p>Location: Production building (B-1)</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>
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F-18	Fire Protection System(ITM of fire pump)	<p>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>
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F-19	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 14, 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the standpipe system in accordance with NFPA 14, 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month (after installation)
F-20	ITM of Fire Extinguishers	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 and The RSC Technical Guidelines (Standard).	Within 3 months



F-21	Means of egress	<p style="text-align: center;">Godown Building-2:</p> <p>Handrails are not provided on both sides of each exit stairs on all floors. Having handrails on one side of said staircase, may pose as a falling hazard during evacuation.</p>	<p>Provide handrails on both sides of the exit stair. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.)</p>	Within 3 month
				
F-22	Means of egress	Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch.).	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 3 months



F-23	Means of egress	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-24	Means of egress	Fire evacuation map is not posted at the entrance of all exit stair.	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month

F-25	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.	Test the emergency lighting system on each floor and provide additional emergency fixtures to provide adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and exit discharge paths and minimum 2.5 lux along exit access aisles.	Within 1 month
F-26	Egress Lighting	Exit signs are not provided at exit. Location: On Ground floor of office and pump house building (B-3).	Provide exit signs above all exits to the exterior and all doors to the exit stair.	Within 1 month
F-27	Egress Lighting	The directional signs are not provided where there is a change in direction and where the continuation of the egress path is not obvious.	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-28	Egress Lighting ITM	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 3 months