

FIRE SAFETY INSPECTION REPORT

Urmi Garments Ltd. (New Factory)

RSC ID: 24420

Google Coordinate: 23.7232118, 90.4884774
8/1, Staff Quarter Road, Daila, Demra, Dhaka-1361

Other Factories in the premises: None



Inspected By: Md. Ferdaus Jaman and Md. Abu Taher Khan

Date: 17-May-2022

Fire Safety Inspection Report

Urmi Garments Ltd. (New Factory)

Introduction:

Urmi Garments Ltd. (New Factory) complex was surveyed for fire safety on 17/05/2022 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 Accord. 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 Accord cannot accept general responsibility for omissions or errors arising from inaccuracies in this report from the information obtained. The findings and recommendations in this report are not intended to imply, guarantee, ensure or warrant compliance with any government regulations. Additionally, the results do not imply in any way that compliance with the findings or recommendations as stated in this report will eliminate all hazards, risks or exposures or that hazards, risks or exposures not referred to in this report do not exist. Compliance with the findings and recommendations stated in this report does not relieve the factory owner from obligation to comply with specific project requirements, industry standards, or the provisions of any local government regulations.

General Factory Information

Factory Building name(s): Building 1: 5 Storied RCC Main Production Building with partial basenent (G+4, RCC)

Building 2: 5 Storied RCC Warehouse Building (G+4, RCC)

Building 3: 2 Storied RCC Utility Building (G+1, RCC)

Building 4: 2 Storied RCC Guard House Building (G+1, RCC)

Factory Address: 8/1, Staff Quarter Road, Daila, Demra, Dhaka-1361

Findings & Recommendations :

The below table-1 summarizes the major fire safety issues identified during the inspection of all 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.

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-01	Fire Rated Construction	Building-01: The exit stairs are not separated from [work areas, other spaces] on each floor by fire-rated construction.	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. If fire rated doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system. 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 ACCORD /RSC Technical Guidelines (Standard) 6.8.3.1 If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-02	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: On 2nd and 3rd floor of production building (B-1)	Provide defined storage areas and limit the storage arrangement as follows: - 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. or 3. Enclose the storage area from the surrounding occupancy with a minimum 1-hour construction.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
		 		
F-03	Fire Rated Construction	Storage discharges directly into the exit stair discharge. Location: On ground floor of production building (B-1).	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 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-04	Fire Rated Construction	Exterior exit stairs are not properly separated from the building and stair exit discharge.	Exterior exit stairs shall be separated from the building with a rating requirement of 2 hr fire rating for 4 or more stories. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structure.	Within 3 months
				

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-05	Fire Rated Construction	The fire pump room is not provided with adequate fire separation. Location: Basement floor of production building (B-1).	Provide fire pump room with 2 hr rated fire separation when not sprinklered and 1 hr rated fire separation when provided with automatic sprinklers in accordance with NFPA 20 Or, Physically separate the pump room from the protected building by a minimum of 50 ft (15.3 m) in accordance with NFPA 20.	Within 3 months



SI No.	Category	Findings	Required Action	Remediation Time Frame
F-06	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies. Followings are the description of openings or penetrations indicating specific locations: 1. Passing of BBT through rated walls from MDB room to the production area in each floor of production building (B-1). 2. PVC pipes penetrate the floor slabs in toilet block of production building (B-1). 3. Floor penetrations due to fire alarm, IT and electrical cable riser in production building (B-1). 4. Compressor pipes penetrate the floor slabs of production building (B-1).	Seal all penetrations and openings in floor/ceiling (full thickness of the floor/ceiling) assemblies by fire rated materials to maintain the fire resistance rating. Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-07	Fire Rated Construction	Prayer area (E-4, capacity less than 300) was not separated by fire rated construction with adjacent store room. Location: On ground floor of production building (B-1).	Relocate the prayer area to or from this building to meet the requirement as per BNBC 2006, part 4 chapter 3 section 3.21.3 and table 3.2.1. Or, Prayer area shall be separated from Storage area by minimum 3hr fire rated separation. Seal and/or protect all openings to maintain the required fire separation. Also provide at least two means of exits leading directly to the street or leading to a corridor or open space having access to exits in two independent and different direction.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-08	Means of Egress	Storage was located in exit stair. Location: Stair-2 on ground floor of production building(B-1).	Remove storage from the exit stairs and egress path.	Immediately

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-09	Means of Egress	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-10	Means of Egress	Building did not have stair designation signs and occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-11	Means of Egress	The stair width exceeds 2.2 m (87 in.) but intermediate handrails were not provided. Location: Stair-1 and Stair-2 of production building (B-1).	Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.).	Within 3 months
				
F-12	Roof	Parapets or guards (partially) are not provided in occupied roof. Location: Production building (B-1)	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-13	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: 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
				

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-14	Egress Lighting ITM	Inspection, testing, and maintenance for the emergency lighting system were not in accordance with The ACCORD/ RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in the accordance with The ACCORD/ RSC Technical Guidelines (Standard). 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 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 6 months



SI No.	Category	Findings	Required Action	Remediation Time Frame
F-16	ITM of Fire Alarm & Detection system	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 and ACCORD/ RSC Technical Guidelines (Standard).	Within 1 month (after installation)
F-17	Fire Protection System	The existing building has an occupied floor greater than 10 meter (33 feet), therefore, standpipe system is required. The factory has installed automatic fire sprinkler system throughout the building in lieu of the detection system. So automatic fire sprinkler system is mandatory for this building. Location: Production building (B-1).	Submit the Fire Pump, Standpipe and Automatic Sprinkler System drawing NFPA 13, 14, 20, 22 and 24 to RSC for review. Once reviewed, install or modify the Automatic Sprinkler 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.	Design Review within 2 months and installation within 4 months.

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-18	Fire Protection System	Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 20.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20 and ACCORD/ RSC Technical Guidelines (Standard).	Within 1 month (after installation)

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-19	ITM of Fire Protection System	Inspection, testing, and maintenance for the standpipe system is not in accordance with NFPA 25 or as per ACCORD/ RSC Technical Guidelines (Standard).	Inspect, test and maintain the stanpipe system in accordance with NFPA 25 or as per ACCORD/ RSC Technical Guidelines (Standard) and keep written records on-site.	Within 1 month (after installation)
F-20	ITM of Fire Protection System	Inspection, testing and maintenance of the automatic sprinkler system is not in accordance with NFPA 25 or as per ACCORD/ RSC Technical Guidelines (Standard).	Inspect, test and maintain the automatic sprinkler system and keep written records on-site, in accordance with NFPA 25 and ACCORD/ RSC Technical Guidelines (Standard) (After installation).	Within 1 month (after installation)
F-21	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 ACCORD/ RSC Technical Guidelines (Standard).	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-22	Human Element Program	Fire drills are not conducted as per ACCORD Standard. (Fire drill conducted for all buildings at a time).	Fire drill shall be conducted in accordance with BNBC Part 4 Appendix A.	Within 1 month
F-23	Fire Rated Construction	B-3 Generator room and boiler room was not separated by fire rated construction. Location: On ground floor of Utility building (B-3).	Provide minimum 2-hr fire rated construction from each other. Seal all penetrations and openings in floor/ceiling/wall (full thickness of the floor/ceiling) assemblies by fire rated materials to maintain the fire resistance rating.	Within 3 month



SI No.	Category	Findings	Required Action	Remediation Time Frame
F-24	Fire Rated Construction	B-3 Compressor room and LT panel room was not separated by fire rated construction. Location: On 1st floor of Utility building (B-3).	Provide minimum 2-hr fire rated construction from each other. Seal all penetrations and openings in floor/ceiling/wall (full thickness of the floor/ceiling) assemblies by fire rated materials to maintain the fire resistance rating.	Within 3 month



Findings & Recommendations :

The below table-2 summarizes the major fire safety issues identified during the inspection of all 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.

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-25	Fire Rated Construction	Building-02 The exit stairs are not separated from [work areas, other spaces] on each floor by fire-rated construction.	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. If fire rated doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system. 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 ACCORD/ RSC Technical Guidelines (Standard) 6.8.3.1 If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-26	Fire Rated Construction	Storage discharges directly into the exit stair discharge. Location: On 2nd and 3rd floor of warehouse building (B-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

SI No.	Category	Findings	Required Action	Remediation Time Frame
		 		
F-27	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies. Followings are the description of openings or penetrations indicating specific locations: 1. Passing of BBT through rated walls from MDB room to the production area in each floor of production building (B-2). 2. PVC pipes penetrate the floor slabs in toilet block of production building (B-2). 3. Floor penetrations due to fire alarm/ IT/ electrical cable riser in production building (B-2).	Seal all penetrations and openings in floor/ceiling (full thickness of the floor/ceiling) assemblies by fire rated materials to maintain the fire resistance rating. Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
		  		
F-28	Fire Rated Construction	Unsealed penetrations and openings are located in the exit stair enclosures. Location: On all floors of warehouse building (B-2)	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separations.	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-29	Means of Egress	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-30	Means of Egress	Building did not have stair designation signs and occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-31	Means of Egress	The stair width exceeds 2.2 m (87 in.) but intermediate handrails were not provided. Location: Stair-1 of warehouse building (B-2).	Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.).	Within 3 months
				
F-32	Roof	Parapets or guards (partially) are not provided in occupied roof. Location: Production building (B-1)	Provide parapets or guards with a minimum height of 1067mm (42 inch.).	Within 3 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-33	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: Several floors of production building (B-2).	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
				

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-34	Egress Lighting ITM	Inspection, testing, and maintenance for the emergency lighting system were not in accordance with The ACCORD/ RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in the accordance with The ACCORD/ RSC Technical Guidelines (Standard). Keep written records on-site.	Within 3 months
F-35	Fire Alarm & Detection system	Fire alarm and detection system installation complete which requires detailed review to confirm compliance with NFPA 72 and 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 6 months

SI No.	Category	Findings	Required Action	Remediation Time Frame
				
F-36	ITM of Fire Alarm & Detection system	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 and Accord/ RSC Technical Guidelines (Standard).	Within 1 month (after installation)

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-37	Fire Protection System	The existing building has an occupied floor greater than 10 meter (33 feet), therefore, standpipe system is required. The factory has installed automatic fire sprinkler system through the building in lieu of the detection system. So automatic fire sprinkler system is mandatory for this building. Location: Production building (B-2).	Submit the Fire Pump, Standpipe and Automatic Sprinkler System drawing NFPA 13, 14, 20, 22 and 24 to RSC for review. Once reviewed, install or modify the Automatic Sprinkler 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.	Design Review within 2 months and installation within 4 months.
				
F-38	Fire Protection System	Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 20.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20 and ACCORD/ RSC Technical Guidelines (Standard).	Within 1 month (after installation)

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-39	ITM of Fire Protection System	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25 and Accord/ RSC Technical Guidelines (Standard). (After installation).	Within 1 month (after installation)
F-40	ITM of Fire Protection System	Inspection, testing and maintenance of the sprinkler system is not in accordance with NFPA 25.	Inspect, test and maintain the sprinkler system and keep written records on-site, in accordance with NFPA 25 and Accord/ RSC Technical Guidelines (Standard). (After installation).	Within 1 month (after installation)
F-41	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 Accord/ RSC Technical Guidelines (Standard).	Within 3 month