

INITIAL FIRE SAFETY INSPECTION REPORT

Mosharaf Apparels Studio Ltd.

RSC ID: 24194

ADDRESS: Baniarchala, Bhabanipur, Gazipur Sadar, Gazipur.

Other Factories:(M.N Dying, Printing & Washing building)



Inspected By: Md. Rafat Arefin & Md. Anisuzzman

Date: 12-Aug-2021 & 18-Aug-2021

Fire Safety Inspection Report

Factory Name: Mosharaf Apparels Studio Ltd.

Introduction:

Mosharaf Apparels Studio Ltd.complex was surveyed for fire safety on 12-Aug-2021 & 18-Aug-2021 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.

Findings & Recommendations :

Table 1- summarizes 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 approval.

Table-1:(Findings & Recommendations)

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	Exit Enclosures are not properly fire separated from other occupancy on each floor by fire rated construction. Location: Building 01	Provide minimum 2-hr fire rated separation exit enclosure. Provide minimum 1.5-hr fire rated doors and seal all unprotected openings and penetration to separate the exit stairs from work areas and other building spaces on all floor levels. The clearance under the bottom of a fire door shall be a maximum of 19mm. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.	Within 3 months

				
F-2	Fire Rated Construction	Elevator shafts are directly open into the production floor without proper fire separation. Location: Building 01	Ensure minimum 2-hr listed/3rd part certified fire rated lift landing doors for elevator shafts otherwise close the area of the shaft with a 2-hr fire-rated construction barrier.	Within 3 months



F-3	Fire Rated Construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy which are not separated by fire rated construction. Location: ground ,1st ,2nd & 3rd floor of building 01	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Or, Where separate storage rooms are not feasible, 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.	Within 3 months
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F-4	Fire Rated Construction	Compressors are not properly separated from other surrounding occupancy by fire rated construction due to unprotected opening. Location: first floor of building 01	Compressors shall be separated from the other surrounding occupancy by a minimum 2-hr fire-rated construction (wall, floor, slab, etc.). Seal all penetrations and openings (door, window, etc.) by minimum 1.5-hr fire-rated materials to maintain the fire separation as required. All exhaust systems shall discharge to the exterior of the building in a safe location. Or, Relocate the compressor to the exterior of the building and maintain a minimum 3m (10 ft.) spatial separation distance from the building.	Within 3 months
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F-5	Fire Rated Construction	Room used for combustible storage are not properly fire separated by fire rated construction due to unseal Penetrations & non functional fire door. Location: 3rd floor of building 01	Provide dedicated storage rooms separated by minimum 1 hr. fire rated construction. Seal all unprotected openings and penetration. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors. If fire doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.	Within 3 months
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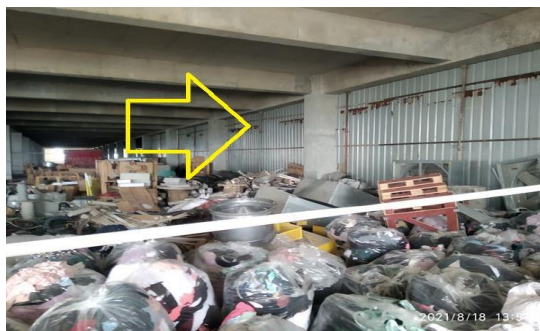
F-6	Fire Rated Construction	Penetrations through fire rated floor/ceiling assemblies are not properly sealed all floor of levels. Location: South-East Cable Riser ,standpipe riser of Building-01.	Seal all penetrations and openings in floor/ceiling (full thickness of the floor/ceiling) assemblies by minimum 3-hr fire-rated materials to maintain the required fire-resistance rating. Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor if required.	Within 3 months
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F-7	Fire Rated Construction	The exit discharge path (Egress Court) was less than 10 ft wide and was not separated from the building interior. Location: East side of the building 01.	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft. to provide a minimum 2-hr fire separation.	Within 3 months
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F-8	Fire Rated Construction	The Dining area is not separated by fire rated construction with the adjacent production occupancies(present temporary storage) Location: 4th floor of building-01.	Separate the dining area from production & other occupancies(present temporary storage) by minimum 3-hr fire rated construction. Provide rated exit passageways leading directly to the exit stairs of the same resistance rating.	Within 3 months
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F-9	Fire Rated Construction	Prayer room is not properly fire separated from other occupancy by fire rated construction. Location: 2nd floor of building 01	Separate the Prayer area from production & other occupancies by minimum 3-hr fire rated construction. Provide rated exit passageways leading directly to the exit stairs with the same resistance rating. OR Relocated the prayer room.	Within 3 months
				

F-10	Fire Rated construction	Chemical (including oxidizing agent) dispensing room located at mezzanine floor is not properly fire separated from ground floor (dyeing section) by fire rated construction. Location: Building 01	Provide minimum 1-hr fire rated separation. Seal all unprotected openings and penetration.	Within 3 months
				

F-11	Fire Rated Construction	The fire pump room was not properly separated from other occupancy by fire rated construction.	Provide fire pump room with 2 hr. rated fire separation by fire rated construction. Seal all unprotected opening & penetrations.. 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
 				

F-12	Mean of egress	Handrails are not provided on the exit stair. Location: Building 01	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	Within 2 months
				
F-13	Fire Rated Construction	Unprotected vertical shaft (chute) connecting multiple floor(Store & production floor) were observed in the building 01	Provide a minimum 1-hr fire-rated shaft closure/door to separate the duct from each floor if required.	Within 3 months

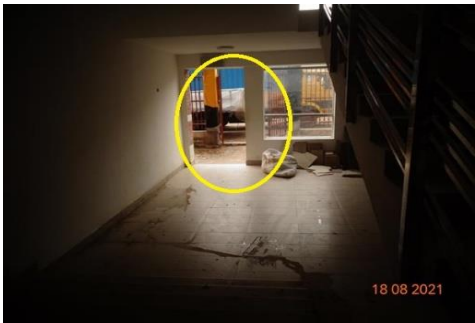


F-14	Fire Rated Construction	The fire doors provided at several floors were held open manually. The door holding devices were not interfaced with fire alarm system. These might compromise the rating of the exit stair enclosure in case of emergency. Location: Utility Building.	If fire rated doors are required to be held open for functional reasons, provide magnetic door hold open devices tied to the fire alarm system. Each & every component of fire doors shall be put through proper maintenance for proper functioning & sustainability.	Within 3 months
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F-15	Means of Egress	The egress path along the means of egress has been interrupted by obstruction/storage and aisles are not marked at several floor of building 01.	Means of egress shall be maintained continuously free and clear of all obstructions/storage. Or Aisles shall be provided with a minimum unobstructed clear- with of 0.9m (36 in).	within one month
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F-16	Means of Egress	The means of egress (six) of the ground floor on the discharge point is very narrow comparing to stair width which increases the possibility of bottlenecking of the discharge system. Location: Six(6) means of egress of the ground floor of building 01	Modify the width of the means of egress on the ground floor.	Within 3 months
 				
F-17	Means of Egress	Electrical panel boards (DB) are located on the inside of Exit stair. Location: Building 01	Remove electrical panel boards from exit stairs.	Within 1 month

				
F-18	Means of Egress	Tripping hazard was observed means of egress Location: building 01	Remove all types of tripping hazards of the means of egress. Means of egress shall be maintained continuously free and clear of all obstructions	Within 1 month
				
F-19	Means of Egress	The exit discharge path (Egress Court) are obstructed by construction materials Location: West side of the building 01.	Means of egress shall be maintained continuously free and clear of all obstructions	Within 1 months



F-20	Means of Egress	Fire evacuation maps is not posted at the entrance of all exit stair. Location: Building 01	Updated Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
F-21	Means of Egress	Guards are not provided at falling hazards located at various locations of the building 01	Provide all guards with a minimum height of 1067mm (42 inch.).	Within 1 month



F-22	Means of Egress	Building did not have stair designation signs & exit designation signs at required locations.	Provide stair designation sign & exit designation sign at each floor entrance from the stair to the floor in English and Bengali. Signs shall indicate the name of the stair and the floor level. Signs shall be posted adjacent to the door.	Within 1 month
F-23	Means of Egress	Building did not have occupant load signs at required locations.	Post the occupant load for every assembly and production floor in a facility in a conspicuous space near the main exit or exit access doorway for the space.	Within 1 month
F-24	Egress Lighting	Exit sign not provided at required exit. Location: Building 01.	Lighted exit signs shall be placed at entrance to an exit. Additional exit signs shall be placed throughout the facility anywhere the continuation of the egress is not obvious. Lighted exit signs shall be provided with either battery backup or uninterruptable power supply systems and shall be continuously illuminated.	Within 3 month



F-25	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: Building 01	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-26	Egress lighting	Emergency lights not illuminated during testing (burned out, broken, etc.). Location : Several location several floor of building 01	Regularly inspect all emergency lighting system as per Accord standard and replace/install lights as needed to illuminate signs.	Within 1 month



F-27	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes . Location: Building 01	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 3 months
F-28	Egress Lightning	Manual on-off switch is provided for [emergency lighting / exit signage] units.	Remove manual on/off switches from emergency lighting / exit signage units to prevent them from being switched off.	Within 1 month



F-29	Egress lighting(ITM)	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 3 months
F-30	Fire Alarm & Detection System (FADS)	An addressable fire alarm & detection system installation was ongoing during inspection day. The Required Fire Alarm system is not installed in accordance with the ACCORD standard and NFPA-72. Location: Building 01,Utility building & shed building(Childcare & security)	Design & Installation of Fire Alarm & Detection system shall be in accordance with ACCORD standard and NFPA 72. Submit design, documents and calculations to RSC for review prior installation/modification. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design within 2 months, Install within 4 months.

F-31	Fire Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per Accord standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 or as per Accord standard.	Within 1 Month after installation.
F-32	Fire Protection System(Standpipe)	The Required Standpipe System is not installed in accordance with the ACCORD standard and NFPA-14, 20, 22 and 24. Location: Building 01	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with Accord 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 fire protection System(Standpipe) installation.	Design within 2 months, Install within 4 months.
F-33	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per Accord standard.	Inspect, test and maintain the standpipe system in accordance with NFPA 25 or as per Accord standard and keep written records on-site.	Within 1 Month after installation.
F-34	Fire Protection System(ITM of fire pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25 or as per Accord standard.	Inspect, test and maintain the fire pump in accordance with NFPA 25 or as per Accord standard and keep written records on-site.	Within 1 Month after installation.

F-35	Fire Protection System(Extinguisher)	Portable fire extinguishers are not install at 4th floor as per standard.	Portable fire extinguishers shall be installed throughout building in accordance with BNBC Part 4 Section 4.10 and NFPA 10 and maximum travel distance to the nearest until shall not exceed 30m.	Within 3 months
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