

# INITIAL FIRE SAFETY INSPECTION REPORT

## Nofs Garments Ltd.

RSC ID: 24460

Plot -1/14,Road -1, Doyal Housing and Developers Ltd., Bosila, Mohammadpur, Dhaka

Other Factories: None



Inspected By: Pantha Pallob Das

Date: 14 August 2022

# Fire Safety Inspection Report

**Nofs Garments Ltd.**

## **Introduction:**

Nofs Garments Ltd. complex was surveyed for fire safety on 14/08/2022 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 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):** It is a rented under construction building. The building is designed as 9 storied building with a basement. Approval from RAJUK shown by factory management considering 9 storied building with a basement as a **commercial building**. Currently the building is 3 storied building with a basement (B+G+2). Factory management informed that the building will be vertically extended by 2 more floors as 3rd and 4th floor so, the building will be as B+G+4 whereas the structural design shown considering 8 storied with a basement.

## Findings & Recommendations :

Table 1 summarizes the major fire safety issues identified during the inspection. 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 review.

**Table-1:**

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The boiler room is not separated by fire rated construction due to openings, non-rated doors, and penetrations on ground floor.	Separate the boiler room by a minimum 1-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations. When located to the exterior of a building 3m (10 ft.) spatial distance shall be maintained around the boiler. Ensure proper ventilation for the boiler room.	Within 3 Months
				

F-2	Fire Rated Construction	The generator room is not separated by fire rated construction due to openings, non-rated doors, and openings on ground floor.	Separate the generator room by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations. When located to the exterior of a building 3m (10 ft.) spatial distance shall be maintained around the generator. Ensure proper ventilation for the generator room.	Within 3 Months
-----	-------------------------	--	--	-----------------



F-3	Fire Rated Construction	The substation room is not separated by fire rated construction due to openings, non-rated doors, and openings on basement floor.	Separate the substation room by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations. When located to the exterior of a building 3m (10 ft.) spatial distance shall be maintained around the substation. Ensure proper ventilation for the generator room. For Highrise building follow D.15 of BNBC-2006.	Within 3 Months
-----	-------------------------	---	--	-----------------



F-4	Fire Rated Construction	Rooms used for combustible storage are not separated by fire rated construction on basement.	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 0.75 hr. (45 Minutes) fire rated fire rated barrier construction.	Within 3 Months
-----	-------------------------	--	--	-----------------



F-5	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire rated construction on ground, 1st and 2nd floors.	<p>Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 0.75 hr. fire rated door and seal all penetrations.</p> <p>Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) , maximum area of 23m<sup>2</sup> (250 ft<sup>2</sup>) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage.</p>	Within 3 Months
-----	-------------------------	--	--	-----------------



F-6	Fire Rated Construction	The exit stair enclosures are not separated from work areas and other spaces on each floor by fire-rated construction.	<p>The exit stair enclosure shall be provided with a minimum of 2- hr. fire resistance rating. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated fire rated barrier construction.</p> <p>Provide a fire-resistive rated assembly between the exterior exit stairs and the building up to 10 ft. beyond the end of the stair to achieve the required separation. The rated assembly shall be approved and/or designed by a qualified fire protection engineer.</p> <p>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.</p>	Within 3 Months
-----	-------------------------	--	---	-----------------



F-7	Fire Rated Construction	<p>The exit discharge path was not fire separated with production floor. The passageway for stair-2 and egress court for stair-1 were not properly fire rated. The egress court was only 36 inch wide where unprotected openings within 10 ft height were available with production building.</p>	<p>Ensure that the passageway is fire rated by 2-hour including protection of unprotected opening by minimum 1.5 hour. An egress court serving as a portion of the exit discharge shall be open to the sky or provided with a fire resistance rated enclosure the same as the exit enclosure. Egress courts less than 3050 mm (10 ft) in width (as measured from the building and the adjacent property line) shall be provided with walls having a 1-hr fire resistance rated construction for a distance of 3050 mm (10 ft) above the floor of the court.</p>	Within 3 Months
-----	-------------------------	---	---	-----------------



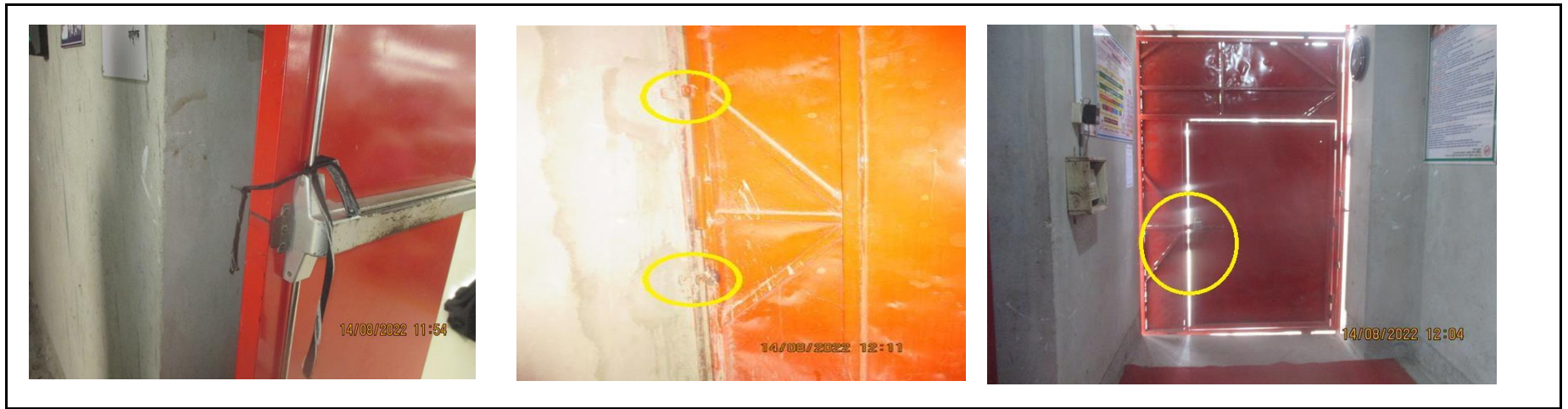
F-8	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. The penetrations created due to passing electrical cables floor to floor.	<p>Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 3-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's guideline.</p> <p>or,</p> <p>Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor if required.</p> <p>(Considering future extension and type-I construction).</p>	Within 3 Months
-----	-------------------------	--	--	-----------------



F-9	Fire Rated Construction	The parapet of the building measured less than 42 inch in height.	The parapets or guards shall be with a minimum height of 1067 mm (42 in.) following RSC Technical Guideline (Standard)-6.12.2.4.	Within 3 Months
-----	-------------------------	---	--	-----------------



F-10	Means of Egress	<p>Egress doors and gates with locking features are provided at building exits. All doors and gates were open and unlocked during inspection.</p> <p>(2 Exits at discharge level).</p>	<p>Remove locking features from all egress doors and gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101 and ACCORD standard 6.8.2.</p>	Immediately
------	-----------------	--	--	-------------



F-11	Means of Egress	Storage was located in the egress path on 1st & 2nd floors.	Keep egress paths and stairs clear of storage.	Immediately
------	-----------------	---	--	-------------



F-12	Means of Egress	Storage was located inside of stair on basement level.	Remove all storage from exit stairs.	Immediately
------	-----------------	--	--------------------------------------	-------------



F-13	Means of Egress	Building did not have stair designation signs and occupant load signs at required locations on all floors	Provide stair designation signs and occupant load signs at required locations.	Within 1 Month
------	-----------------	---	--	----------------



F-14	Means of Egress	The slope of ramp on ground floor is steeper than 1:12 which is a violation of RSC Technical Guideline (Standard) section 6.10.	Modify the ramp where the slope shall not be steeper than 1:8 (considering existing ramp). Ramps shall be provided with handrails on both sides of the ramp.	Within 1 Month
------	-----------------	---	--	----------------




F-15	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs on all floors.	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-16	Egress Lighting	Exit signage was not provided along a path of egress. This is typical on all floors.	Provide exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious.	Within 1 Month
------	-----------------	--	---	----------------



F-17	Egress Lighting	<p>Inspection, testing and maintenance for the emergency lighting system was not in accordance with The RSC Technical Guideline (Standard).</p>	<p>Inspect, test and maintain the emergency lighting system in the accordance with The RSC Technical Guideline (Standard). Keep written records on-site.</p>	<p>Within 1 Month</p>
------	-----------------	---	--	-----------------------

F-18	Egress Lighting	Manual on-off switch is provided for exit signage at the door to the egress balcony on the 1st floor	Remove manual on/off switches from exit signage units to prevent them from being switched off.	Within 1 Month
				

F-19	Inspection, Testing and Maintenance (ITM) of Fire Extinguisher.	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-20	Fire Detection and Alarm System (FADS).	The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards.	Replace the fire alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72. Complete the fire alarm installation as per NFPA 72. Submit drawings, testing records, equipment certification and other relevant documentation to the RSC prior installation for review.	Design within 2 Months and Installation within 6 months.



F-21	Inspection, Testing and Maintenance (ITM) of FADS.	Inspection, testing and maintenance for the fire detection and alarm system was not in accordance with standard.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.	1 Month after installation
------	--	--	--	----------------------------