

# INITIAL FIRE SAFETY INSPECTION REPORT

**Four Design (Pvt.) Ltd**

**RSC ID: 24109**

**Plot#S-7,S-8, BSCIC,Hosiery I/E,Shashongaon,Fatullah,Narayanganj,Bangladesh.**

**Other Factories: None**



**Inspected By: Pantha Pallob Das & Md. Anisuzzaman**

**Date: 08-Feb-2021**

# Fire Safety Inspection Report

Four Design (Pvt.) Ltd

## Introduction:

**Four Design (Pvt.) Ltd.** complex was surveyed for fire safety on **08/02/2021** 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.

## 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 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 due to installation error of the fire rated doors. The gap in-between door and floor was more than 19 mm.	<p>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.</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> <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 ACCORD standard 6.8.3.1.</p>	Within 3 months



F-2	Fire Rated Construction	Elevator shafts are directly open into the inside of stair-1 & Stair-2.	For new construction, elevators shall not open into an exit enclosure as per ACCORD-6.14.3. So, separate the stair enclosure from elevator shaft although the building.	Within 3 months
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F-3	Fire Rated Construction	Penetrations in floor/ceiling assemblies are found unsealed on each level of all floors. Location: North side (Stair-3) Electrical riser on all floors of Production building-1	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
				
F-4	Fire Rated Construction	Lift shaft was not properly fire separated due to unprotected opening with production floor. Location: Stair-2 of production building -1	Seal all penetrations and openings in the wall (full thickness of the wall) assemblies by minimum 2-hr fire-rated materials to maintain the required fire-resistance rating.	Within 3 months



F-5	Fire Rated Construction	Boiler room are not properly fire separated by fire rated construction due to non functionality of fire door. Location : 9th floor of production building -1	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. Keep the fire rated doors close all time, if for functional reason require to keep open then interfacing facility with functional FACP Shall be ensured.	Within 3 months
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F-6	Fire Rated Construction	Room used for combustible storage on the 7th floor are not properly fire separated by fire rated construction due to non functionality of fire door. Location 7th floor of production building-1	Provide dedicated storage rooms separated by minimum 1 hr. fire rated construction. 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.	Within 3 months
				

F-7	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 at 3th floor of production building 01	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.</p> <p>Or,</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"> <li>1. General Condition: Maximum height of 2.4m and maximum area of 23m<sup>2</sup>. Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.</li> <li>2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m<sup>2</sup>. Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.</li> </ol>	Within 3 months
				
F-8	Fire Rated Construction	Exit discharge path(passageway) are not properly fire separated by fire rated construction due to unprotected opening & penetration. Location: production building 01	Separate the exit passageway (ceiling, floor, wall etc.) by 2- hr. fire-resistance rated construction and shall terminate at an exit discharge.	Within 3 months



F-9	Fire Rated Construction	Liquefied or compressed gas cylinders were located within the factory near utility building-02.	The storage or use of liquefied or compressed flammable gas cylinders shall be prohibited within the factory building as per ACCORD -3.4.2.1.11 standard. So remove LPG/CNG from the Factory.	Within 1 Month
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F-10	Means of Egress	The egress path along means of egress has interrupted by obstruction. Location: Bottom of pocket gate of stair -1 & Stair-2 ground floor of production building-1	Means of egress shall be maintained continuously free and clear of all obstructions.	Within 1 month
				
F-11	Means of Egress	Stair designation is not posted at the exit stair at all level. Location : production building-1	Stair designation shall be posted at the entrance to exit stair at all level.	Within 1 month
F-12	Means of Egress	The egress path along the means of egress has been interrupted by obstruction/storage. Location: west side of 4th floor production 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).	Immediately



F-13	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed each floor all level. Location : Production building-1	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-14	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: Production building -1	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 3months
F-15	Fire Alarm & Detection System	Fire alarm system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards.	Submit design to RSC for review and modify installation if required. Installation of Fire Alarm system should be in accordance with ACCORD standard and NFPA 72.	Design within 2 months, Install within 4 months (If modification required)



F-16	Fire Protection System(Standpipe)	The Sprinkler and Standpipe System requires detailed review to confirm compliance with NFPA 13, 14 and ACCORD standards. Fire Pump NFPA-20.	Submit design to RSC for review and modify installation if required. Installation of Standpipe system should be in accordance with ACCORD standard and NFPA 14, 20, 22 and 24.	Design within 2 months, Install within 4 months (If modification required)
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