

INITIAL FIRE SAFETY INSPECTION REPORT

Fuli Industrial Ltd.

RSC ID: 25846

PLOT NO. 148-151, DEPZ (OLD ZONE), GANAKBARI, ASHULIA, SAVAR, DHAKA

23.95065,90.26531

Other Factories: N/A



Inspected By: Md.Sadid Rahman & Hasanat Alamgir Abeer

Date: 25-August-2024

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: For Building# 1,2,3,4,5

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The main structural element of the building is constructed by steel which is non-rated and were found in exposed condition without any fire protection. Location: Building-1.	Interim building shall be type-1 or type-2 construction as per Table 3.2.4 of BNBC-2006. Provide required fire rating on the structural elements by following Section 4.4 and Table 4.4.1 of the RSC Standard or Table 3.3.1 and Table 4.1.1 from BNBC Part 4. Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation has been reviewed from the RSC prior to install the passive fire protection system.	Within 6 Months
				

F-2	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces by fire rated construction due to opening. Location: Stair-C: Opening with DB room_Building-1 Stair-A: Toilet on the stair on Ground Floor_Building-1	Provide minimum 2-hr rated fire wall and 1.5-hr fire rated doors for buildings that are 4 or more stories. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. Remove the toilet area from stair encloser or maintain proper separation.	Within 3 Months
  				

F-3	Fire Rated Construction	Unprotected openings in the exterior wall in two consecutive floors lying within 1.5 m and vertical spread of fire is not restricted. Location: Building-1 (East side).	Opening in the exterior wall in two consecutive floors lying within 1.5 meter laterally shall be separated with a flame barrier projecting at least 75 cm from the external face of the exterior wall. The flame barrier shall have a fire resistance rating of not less than three-fourth hours as per BNBC 2006- Part-3: 3.1.7.2. Provide sunshades or cornices or projected wall at least 750 mm from the external face of the exterior wall.	Within 3 Months
				

F-4	Fire-Rated Construction	The exit stairs are not separated from other occupancy due to gap beneath the door has been found 25 mm. Location: Building-1.	Fire door shall install as per manufacturer guidelines. Clearance under the bottom of a door shall be a maximum of 3/4in. (19 mm). Moreover factory shall ensure the integrity of the fire rated door through proper datasheet, certificate and listing labeling.	Within 2 Months
				

F-5	Fire Rated Construction	The compressor room are not separated from other occupancies by fire rated construction due to non-rated steel strcture were found in exposed condition without any fire protection. Location: Building-1 (2nd floor).	The building shall be type-I or II construction. So, provide require rating in the structural element of the building.Consult with a qualified fire protection engineer. BNBC 2006-Table 3.2.4, Or relocate the compressor room exterior of the building by a mimimum 3m (10 ft.) spatial distance . Ensure proper ventilation for the compressor room. Moreover factory shall ensure the integrity of the fire rated door through proper datasheet, certificate and listing labeling.	Within 3 Months
 				

F-6	Fire rated Construction	Areas used for combustible storage open to the factory are not maintained or separated by fire rated construction. Location: 4th Floor_Building-1.	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 1 hr. fire rated fire rated barrier construction. 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 23m2 (250 ft2) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. - If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m2 (1000 ft2). -In process storage shall be limited to 10 percent of the building area of the story in which they occur.	Within 3 Months
 				

F-7	Fire Rated Construction	Elevator shaft are directly open into production floor without proper fire separation (Doors are not fire rated). Location: Building-1.	Ensure minimum 1.5-hr fire rating for the doors of elevator shafts otherwise close the shafts area with 2-hr fire rated construction barrier and 1.5-hr fire rated doors. So, rearrange the facility to provide separate enclosure for lifts. If not possible anyway provide a minimum 2-hr fire- rated elevator shaft with listed fire rated lift landing door to separate from each floor level. Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation has been reviewed from the RSC prior to install the passive fire protection system (If required).	Within 6 Months
 				

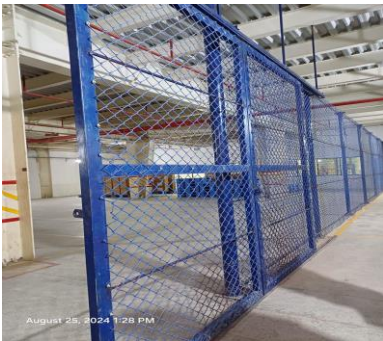
F-8	Fire Rated Construction	Unsealed penetrations and openings has been found due to cable riser and PVC pipe of toilet block area are located in the fire rated floor/ceiling assemblies. Location:Building-1.	Provide a minimum 2-hr fire-rated shaft to separate the sanitary pipe and cable riser from each floor level or seal all penetrations and openings in floors/ceiling assemblies by 3-hr fire-rated listed/certified materials. The installation of such fire-rated materials shall be following certified design.Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation has been reviewed from the RSC prior to install the passive fire protection system (If required).	Within 3 Months
  				

F-9	Fire Rated Construction	Exit discharge of Warehouse on ground floor has not been separated from Loading-Unloading area due to opening and damaged fire rated door (hardware, frame). Location: Building-1.	Separate the storage room by a minimum 1- hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations. Factory shall ensure that the maintenance work shall be done for the door hardware and accessories on a regular basis as per NFPA 80 and manufacturer's published guideline. Repair/ replace the hardware and accessories which are not functional or under unauthorized maintenance.	Within 3 Months
				

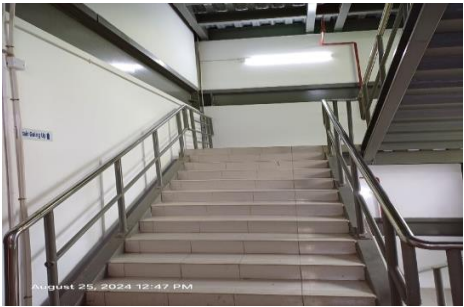
F-10	Mean of Egress	Storage room discharges directly into the exit stair enclosure. Location: Stair-C of Ground Floor_Building-1.	Openings from exit enclosure to storage spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1.5-hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storage room side as per 6.14.3-RSC Technical Guidelines Standard V1.0. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 Months
 The image is a fire safety plan for Fuli Industrial Ltd. It shows a detailed layout of the building with various rooms and areas labeled. A yellow circle highlights a specific area in the top left corner of the plan, which corresponds to the location mentioned in the table: Stair-C of Ground Floor_Building-1. The plan includes a legend and a title 'FULI INDUSTRIAL LTD'.				

F-11	Mean of Egress	Single exit has been provided on ground floor from Needle Detector Room where travel distance has been found more than 180 feet. Location: Building-1.	The number of means of egress from any floor, story or portion thereof shall not be less than 2 except where a single exit is permitted by 6.6.2, a single means of egress is permitted by 6.6.5 or where a greater number is required by 6.6.3 of RSC Technical Guidelines Standard. Provide Additional exit from the Finishd Goods Store and Needle Detector Room.	Within 3 Months
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F-12	Mean of Egress	Sliding door has been found at Needle Detector Room. Moreover, Egress door on exit discharge serving 50 or more occupants does not swing in the direction of egress travel. Location: Ground Floor and 5th Floor _Building-1.	All doors in a means of egress shall be of the side-hinged swinging type. Roll-down and sliding gates and shutters shall not be allowed. Doors serving an occupant load of more than 50 shall swing in the direction of egress travel.	Within 3 Months
 				

F-13	Mean of Egress	Exit stairs serve more than 5 stories and do not have required re-entry provisions on all floors. Location: Building-1.	Every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC standard 6.8.3.1.	Within 1 Month
F-14	Mean of Egress	Aisle marking has not been marked properly. Location: Ground,3rd to 5th Floor_Building-1.	Aisles mark shall be provided at required places with a minimum unobstructed clear-width of 0.9 m (36 in.).	Within 1 Month
				

F-15	Means of Egress	Occupant load sign, updated evacuation map & stair designation sign were found missing at the required locations on all floors. Location: Building-1.	Provide occupant load sign & evacuation plans at required locations. Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 Month
				
F-16	Means of Egress	Stair width was found less than 1.5m (60 inches) (Stair A: 52", Stair B: 51", Stair C: 51") Location: Building-1.	In new and interim construction, stairs shall have a minimum width of 1.5 m (60 in.) for all industrial occupancies as per 6.5.6.2.1 of the RSC Technical Guidelines Standard. Modify the stair and handrail to achieve the required width.	Within 3 Months
				

F-17	Means of egress	Landing has not been provided for Stair -A and C on 5th Floor. Location: Building-1.	Landings with same width as the stair clear width shall be provided at each level and at intermediate landings.	Within 3 Months
 				
F-18	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: 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 3 Months
				

F-19	Means of Egress	Directional Exit signage was not provided along the path of egress where there is a change in the direction for the path of travel and the direction to an exit is not obvious. Location: Building-1.	Provide directional 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. Lighted directional signs shall be provided with either battery backup or uninterruptable power supply systems and shall be continuously illuminated.	Within 1 Month
				
F-20	Human Element Programme	Fire Drills are not conducted at required intervals as per RSC Standard.	Fire drills shall be conducted on regular basis as per the RSC Standard 13.2	Within 1 Month
F-21	Human Element Programme	The required no smoking signs are not present in the factory.	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 Month

F-22	Fire Alarm & Detection System (FADS)	Automatic fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC standards.	Design & Installation of Fire Alarm & Detection system shall be in accordance with RSC standard and NFPA 72. Submit as-built design, documents and calculations to RSC for review prior installation/modification. After installation/modification, 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 Review within 2 months and installation within 4 months.
 				
F-23	Fire Detection System (ITM of FADS)	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 Table-14.3.1 of NFPA 72.	Within 1 Month after installation.

F-24	Fire Protection System(Standpipe & Automatic Sprinkler System)	The existing building has an occupied floor greater than 10 meter (33 feet), therefore, standpipe system is required. Moreover, the factory has installed automatic fire sprinkler system throughout the building in lieu of the detection system. So automatic fire sprinkler system is also mandatory for this building. Location: Building-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 of the system, factory 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-25	Inspection, testing, and maintenance of the Fire Pump (ITM).	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 25.	Within 1 Month after installation.
F-26	Fire Protection System(ITM of Sprinkler & Standpipe)	Inspection, testing, and maintenance for the automatic fire sprinkler & Standpipe system are not in accordance with NFPA 13,14 and 25 or as per RSC standard.	Inspect, test and maintain the fire pump and standpipe system, and keep written records on-site, in accordance with NFPA 13,14 and 25 or as per RSC standard.	Within 1 Month after installation.

F-27	Fire Protection System(ITM of 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 on- site, in accordance with NFPA 10 and RSC standards.	Within 1 Month after installation.
F-28	Fire Protection System(ITM of Emergency Lighting System)	Inspection, testing and maintenance for the emergency lighting system was not in accordance with The RSC standard.	Inspect, test and maintain the emergency lighting system in the accordance with The RSC standard. Keep written records on-site.	Within 1 Month after installation.