

INITIAL FIRE SAFETY INSPECTION REPORT

KiDO BD Co., Limited

RSC ID: 24835

[Geographical Location: 23.6734° N, 90.5278° E](#)

Plot-117, 125 & 126, Adamjee EPZ, Siddhirganj, Narayanganj.

Other Factory : None



Inspected By: Md. Kamrul Hasan & Hamed Mustakim

Date: 02 January 2024

Fire Safety Inspection Report

KiDO BD Co., Limited

Introduction:

KiDO BD Co., Limited complex was surveyed for fire safety on **02 January 2024** 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):

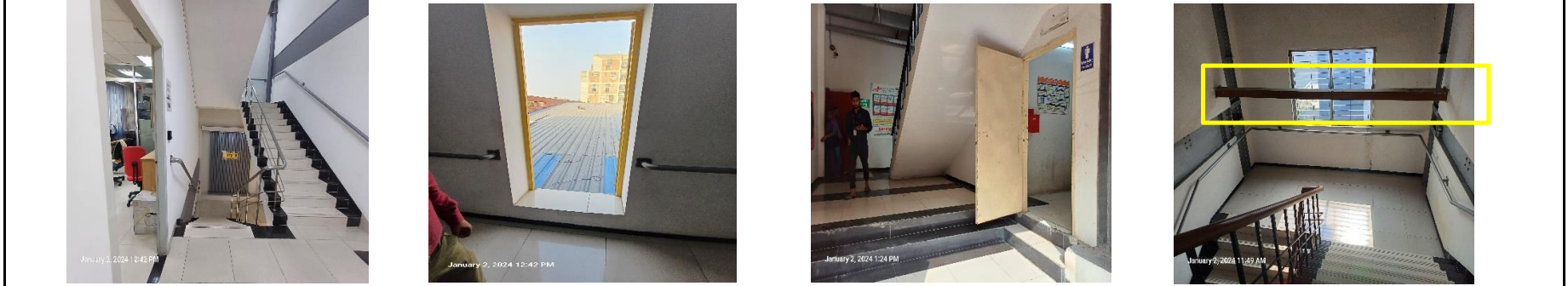
SI	Name	Construction year	Type
01	Main Building	Construction year : Dec-2009 to Nov-2011. Occupied year : Aug-2022 Approval Date: 12-Aug-2009	Existing Construction
02	Utility Building	Construction year : Dec-2009 to Nov-2011. Occupied year : Aug-2022 Approval Date: 12-Aug-2009	Existing Construction
03	Security and Fire control	Construction year : Dec-2009 to Nov-2011. Occupied year : Aug-2022 Approval Date: 12-Aug-2009	Existing Construction
04	RMS Room & Chemical Store	Construction year : Dec-2009 to Nov-2011. Occupied year : Aug-2022 Approval Date: 12-Aug-2009	Existing Construction
05	Dining & Canteen shed	Construction year : Dec-2009 to Nov-2011. Occupied year : Aug-2022 Approval Date: 12-Aug-2009	Existing Construction
06	Wastage shed	Construction year : Dec-2009 to Nov-2011. Occupied year : Aug-2022 Approval Date: 12-Aug-2009	Existing Construction
07	Driver shed	Construction year : Nov-2023 to Dec-2023. Occupied year : Dec-2023 Approval Date: 12-Aug-2009	Existing Construction
08	Car parking shed	Construction year : Aug-2022 to Nov-2022 Occupied year : Aug-2022 Approval Date: 12-Aug-2009	Existing Construction

Factory Address: Plot-117, 125 & 126, Adamjee EPZ, Siddhirganj, Narayanganj.

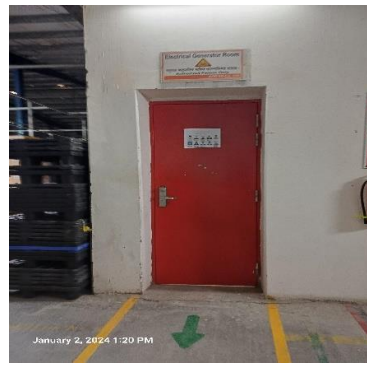
Findings & Recommendations :

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.

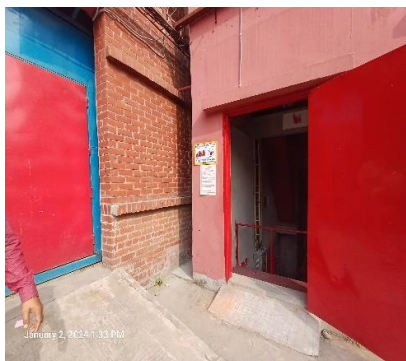
Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction due to:- * Toilets open to stair-5. * Penetrations through water pipe & cable. * Unprotected loading/unloading area. * Unprotected opening. * Stair-1 not protected from shed-1 & server room.	Provide minimum 1.5-hr fire rated doors for buildings. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. 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. Penetrations into and through an exit enclosure shall be prohibited with the exception of required exit doors, sprinkler piping, standpipes, electrical raceway for fire alarm equipment, and electrical conduit serving the exit enclosure.	Within 3 months
				

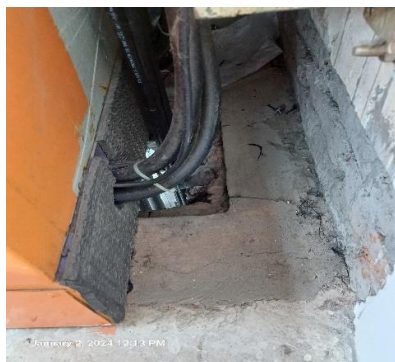
2	Fire Rated Construction	The compressor rooms on the north-east corner of the main building on the ground floor are not separated by fire rated construction due to openings, non-rated doors, and penetrations.	Any room or space housing boilers or other heat producing equipment shall be separated from other occupancies by a minimum 1 hour construction or by a minimum spatial separation of 3 m (10 ft) where located exterior to the building.	Within 3 months
 				
3	Fire Rated Construction	The two generator rooms located in the Generator room on the Ground floor & north-east corner of the Main Building is not separated by fire rated construction due to openings, non-rated doors, and penetrations.	Generator sets shall be separated from all other occupancy areas by a minimum 2 hour construction or by a minimum spatial separation of 3 m (10 ft) where located exterior to the building. Exhaust shall be in accordance with NFPA 37. All exhaust systems shall discharge to the exterior of the building in a safe location.	Within 3 months



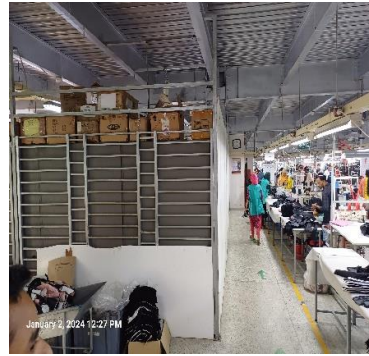
4	Fire Rated Construction	The fire pump room is not provided with adequate fireseparation. (Utility Building)	Provide fire pump room with 2 hr rated fire separation when not sprinklered and 1 hr rated fire separation when provided with automatic sprinklers, in accordance with NFPA 20. In the case exterior it shall be 50 ft away from another occupancy.	Within 3 months
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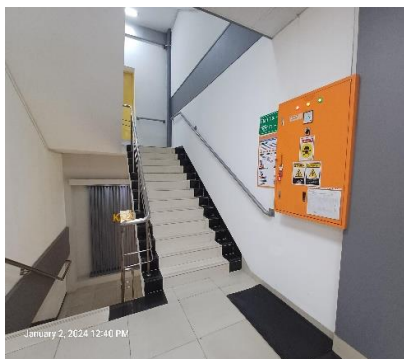
5	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies due to both sanitary line & cable riser. (Main Building)	Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level or seal all penetrations and openings in floors/ceiling assemblies by 2-hr fire rated listed/certified materials. The installation of such fire rated materials shall be following certified design.	Within 3 months
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6	Fire Rated Construction	Storage of combustible materials were located at Ground floor, first floor, second floor and third floor which is not properly separated from other occupancies by fire rated construction and not maintained as per standard. (Admin Store on 1st floor; sub-store on 2nd floor; storages on 3rd floor; Cartoon store, Packing store, Warehouse & finished goods store on ground floor) (Main Building)	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. 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
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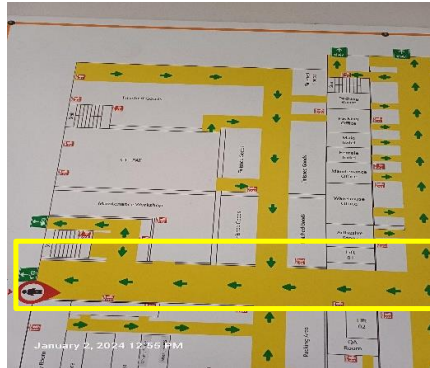
7	Fire Rated Construction	Electrical distribution panel board were located in the exit stair-1 enclosure. (Main Building)	Remove and re-locate all electrical panels & distribution board from exit stair enclosures.	Within 3 months
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8	Fire Rated Construction	The substation room is not separated by fire rated construction due to openings, non-rated doors, and penetrations on the ground floor at Main building. (Main Building)	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.	Within 3 months
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9	Fire Rated Construction	Exit access corridors serving the south exit of packing area, finished goods store & packing inspection area on the ground floor of the main building is not fire separated. (Main Building)	Exit access corridors serving an occupant load exceeding 30 shall be separated by walls having a fire resistance rating of 1 hr unless provided with automatic sprinkler protection throughout the story or building.	Within 3 months
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10	Fire Rated Construction	Elevator shafts are directly open into the floor. (Main Building)	Modify the elevator shaft as per RSC Technical Guideline (Standard) V1-6.14.3. An exit stairway shall not be built around a lift shaft unless both of them are located in a smoke proof enclosure and made of a material with fire resistance rating required for the type of construction of smoke proof enclosure. So, rearrange the facility to provide separate enclosure for lifts. If not possible anyway then provide a minimum 2-hr fire-rated elevator shaft with listed fire rated lift landing door to separate from each floor level.	Within 3 months
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11	Fire Rated Construction	Discharge path of the north-east side of the main building is less than 10 ft. wide which is not separated from the building interior. (Main Building)	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.	Within 3 months
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12	Means of egress	Fire evacuation map was not posted at all the entrance to each exit stair and some were found not updated as per on-site. (Main Building)	Fire evacuation maps shall be posted at the entrance to each exit stair.	Within 1 month
13	Means of egress	Doors width of the stair-4 in a means of egress found 30 in. (Main Building)	Doors in a means of egress shall have a minimum width of 0.8 m (32 in.).	Within 3 months



14	Means of egress	Egress door of the exit stair-5 serving 50 or more occupants but does not swing in the direction of egress travel. (Main Building)	Modify swing direction of egress doors to the direction of egress travel. Doors serving an occupant load of more than 50 shall swing in the direction (out-ward) of egress travel .	Within 3 month
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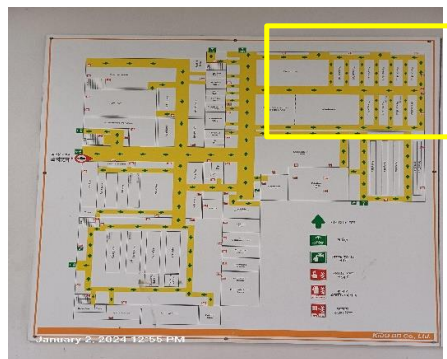
15	Means of egress	Uneven path of travel in the north-east side of the main building was observed in exit access. (Main Building)	Level the exit discharge path to the public way.	Within 1 month
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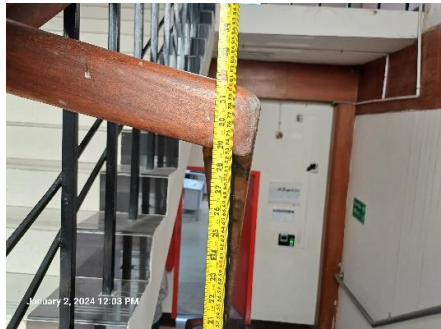
16	Means of egress	Aisles not provided in some areas and not properly marked on the 1st & 3rd floor. (Main Building)	Provide minimum aisle widths of 36-in and mark properly.	Within 1 month
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17	Means of Egress	Travel distance of egress exceeds limit on the ground floor, shed portion (warehouse) of the main building. (Main Building)	Reconfigure the egress arrangement or provide an additional exit so that the travel distance shall not exceed 23 m (75 ft).	Within 2 months
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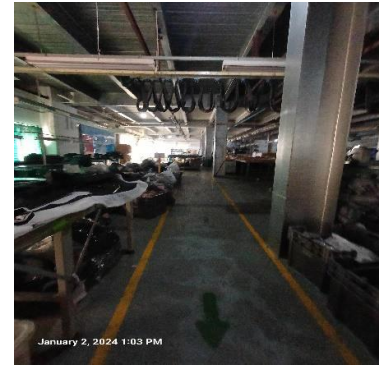
18	Means of Egress	Handrails height found 32 inches in the exit stair. (Main Building)	Provide handrails on both side of the stairs which have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread.	Within 2 months
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19	Means of egress	Occupiable roofs provided with parapets or guards (34 in.) which is less than 42 in. (Main Building)	All occupiable roofs shall be provided with parapets or guards with a minimum height of 1067mm (42 in.).	Within 1 month
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20	Emergency Lighting	Directional sign not provided at all required locations on the 1st floor. (Main Building)	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
21	Emergency 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. (All Building)	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 2 months



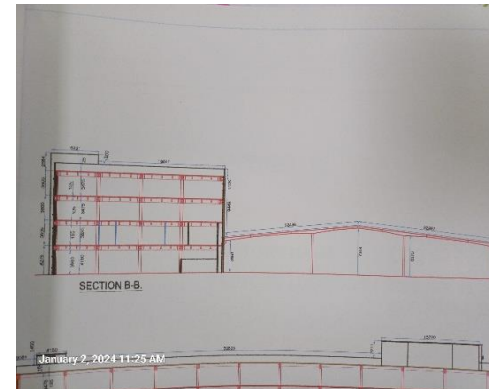
22	ITM Emergency Lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The RSC Technical Guidelines (Standard). (All Building)	Inspect, test and maintain the emergency lighting system in accordance with The RSC Technical Guidelines (Standard). Keep written records on-site.	Within 2 months
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23	Fire Alarm & Detection system	Automatic fire alarm and detection system installation has been found complete which requires detailed review to confirm compliance with NFPA 72 and The RSC Technical Guidelines (Standard). (All Building)	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, 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/modification within 4 months
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24	Fire Protection System (Standpipe)	The building has highest occupiable floor level more than 11 meter (33 ft.) which requires standpipe system. (Main Building)	Submit the standpipe system drawing to RSC for review. Once the design is reviewed, install and modify the standpipe system throughout the building in accordance with review comment, RSC Standard and NFPA 14, 20, 22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 2 month and installation within 4 months (If require).
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25	Fire Protection System (Sprinkler)	Existing buildings greater than 2 stories (4 stories) with nonrated construction exceed 2000 m ² per floor (approx. 3514 m ² per floor) where automatic sprinkler protection required for the building. (Main Building)	Submit the sprinkler system drawing to RSC for review. Once the design is reviewed, install and modify (if required) the sprinkler system throughout the building in accordance with review comment, RSC Standard and NFPA 13,20,22 and 24. After installation the owner shall conduct internal testing and commissioning and then contact the RSC for witness of final acceptance testing.	Design Review within 2 month and installation within 4 months (If require).
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26	ITM of Fire Alarm System	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per RSC standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 (Table-14.3.1) or as per RSC standard.	Within 1 Month after installation.
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27	ITM of Standpipe System	Inspection, testing and maintenance for the standpipe system was not in accordance with standard.	Inspect, test and maintain the standpipe system in accordance with of NFPA 25 and keep written records on-site.	Within 1 Month after installation.
28	ITM of Pump System	Inspection, testing, and maintenance for the Fire pump & water system is not in accordance with NFPA 25 or as per RSC standard.	Inspect, test and maintain the fire pump & water system and keep written records on-site, in accordance with NFPA 25 or as per RSC standard.	Within 1 Month after installation.
29	ITM of Sprinkler System	Inspection, testing, and maintenance for the sprinkler system is not in accordance with NFPA 25, 13 or as per RSC standard.	Inspect, test and maintain the sprinkler system and keep written records on-site, in accordance with NFPA 25, 13 or as per RSC standard.	Within 1 Month after installation.

30	ITM 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 on- site, in accordance with NFPA 10 and RSC Technical Guidelines.	Within 1 month
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