

FIRE SAFETY INSPECTION REPORT

Croydon-Kowloon Designs Ltd

ACCORD ID: 23641

Plot# 285-288, Dhaka EPZ (Extension Area), Ganakbari, Ashulia, Savar, Dhaka

Other Factories: None



Inspected By: Dalower Hossain & Pantha Pallob Das

Date: 08 July, 2019

Fire Safety Inspection Report

Croydon-Kowloon Designs Ltd.

Summary:

Croydon-Kowloon Designs Ltd. complex was surveyed for fire safety on 08/07/2019 by The Accord 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 Accord. 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. 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 Accord for approval.



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 Accord for approval.



Table-1:

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-01	Fire Rated Construction	The main structural element of the building is constructed by steel (Except stair enclosure portion) which is non-rated and were found in exposed condition without any fire protection.	The building shall be type-I construction. So, provide require rating in the structural elements of the building. Consult with a qualified fire protection engineer. BNBC 2006-Table 3.2.4	Within 6 months



F-02	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction. Fire rated door was not installed with stair-2 on ground floor installed fire doors were non-functional, unprotected penetrations were available in the fire rated wall of enclosure.	The exit stair enclosure shall be provided with a minimum 1-hr fire resistance rating for buildings with 3 or fewer stories and a minimum of 2-hr. fire resistance rating for buildings 4 or more stories. Provide 0.75 hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction for building with 3 or fewer stories. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated fire rated barrier construction for building with 4 or more stories. 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-03	Fire Rated Construction	Rooms used for combustible storage are not separated by fire rated construction due to unprotected penetrations of in fire wall and non-functionality of fire rated doors. The doors were kept open using magnetic door hold open device incorporating interfacing facility with fire alarm system but the fire alarm system installation was not complete. Location: Ground and 1st floor.	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.	Within 3 months
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F-04	Fire Rated Construction	Diesel fuel storage (8000 L) was located inside the generator room.	Remove all diesel fuel storage from the generator room and relocate to the exterior such that the diesel fuel storage is at least 10 ft from required egress paths. If located along egress paths or in a utility building, separate the diesel fuel storage with 2- hr fire rated construction.	Within 3 months
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F-05	Fire Rated Construction	MDB room was properly separated by fire rated construction but the installed fire rated door was not functional as required. Location: Ground floor of the main building.	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-06	Fire Rated Construction	The fire pump room is not provided with adequate fire separation.	Provide fire pump room with 2 hr rated fire separation in accordance with NFPA 20.	Within 2 months
F-07	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Utility riser on every floor and PVC pipe connected with store and toilet.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 2-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's datasheet.	Within 1 months



F-08	Fire Rated Construction	The egress court for southside & north-east side (stair-2) were less than 10 ft. wide but not separated from the building interior.	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-09	Fire Rated Construction	Elevator machine rooms were directly open to the stair enclosure without any fire separation.	Either redirect the door opening of machine room towards open roof or provide 1.5 hour fire rated opening protective assemblies. The selected assemblies shall be recognized 3rd party certified.	Within 3 months
 				



F-10	Means of Egress	Egress court on south side were temporarily obstructed as the path was in under construction process.	Finish the construction work immediately as the egress path shall be unobstructed all the time for safe evacuation during any emergency.	Immediately
				



F-11	Means of Egress	Obstructions was located inside of exit stair-3 on 2nd floor.	Remove all obstructions from exit stairs and egress paths.	Immediate
				



F-12	Means of Egress	Handrails were not provided on both sides of the southeast stair (stair-04) on all floors.	Provide handrails on both sides of the exit stair. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.). 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 1 month
				



F-13	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 3 months
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F-14	Egress Lighting	Exit sign not provided at every exit and other required location.	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 1 month
				
F-15	Egress Lighting	Manual on-off switch was provided for every exit signage.	Remove manual on/off switches from exit signage units to prevent them from being switched off.	Within 1 month





F-16	Egress Lighting	Exit signage was not functional (Non illuminated, broken etc.).	Regularly test the emergency lighting system/Exit signage on each floor and replace/repair lights as needed.	Within 1 month
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F-17	Fire Protection System	The Inspection, Testing & Maintenance documents of portable fire extinguisher was not as per NFPA-10.	Update the checklist following relevant standard NFPA-10.	Within 1 month
F-18	Fire Protection System	The highest occupied floor level measured more than 10 m where required standpipe system was not installed in accordance with the ACCORD standard. Note: Class-III standpipe system along with automatic sprinkler system was found under installation.	Provide class-III standpipe system althrough the building as per NFPA-14. Fire Pump installation shall comply NFPA-20. Prior final installation or modification submit drawing to ACCORD for review. Class-I standpipe system along with automatic sprinkler system accepted as per ACCORD Standard.	Design Submission within 1 month installation within 4 months.



  				
F-19	Fire Protection System (ITM)	Inspection, testing and maintenance (ITM) of the standpipe system is not in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25.	Within 01 month (After complete installation)
F-20	Fire Detection & Alarm System	The addressable detection and fire alarm system was not installed as per the requirement which was under installation process.	The fire detection & alarm system shall be installed as per NFPA-72, as automatic sprinkler system is considered as the replacement of detector so the sprinkler system installation shall be complaint as per NFPA-13 and the interfacing of sprinkler system with fire alarm system must be following NFPA-72. Prior installation or modification submit drawing to ACCORD for review.	Design Submission within 1 month installation within 4 months.



  				
F-21	Fire Detection and Alarm System (ITM).	Inspection, testing and maintenance (ITM) for the fire detection and alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire detection and alarm system and keep written records on-site, in accordance with NFPA 72.	Within 01 month (After complete installation)



F-22	Fire Protection System (ITM)	Inspection, testing and maintenance (ITM) of the automatic sprinkler system is not in accordance with NFPA 25.	Inspect, test and maintain the automatic sprinkler system and keep written records on-site, in accordance with NFPA 25.	Within 01 month (After complete installation)
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