

FIRE SAFETY INSPECTION REPORT

**KC LIENGRIE LTD.
57/1, WATER WORKS ROAD, GODNAIL**

OTHER FACTORIES: NONE



ACCORD
on Fire and Building Safety in Bangladesh

Bangladesh Accord
Foundation

April 16, 2014

SUMMARY

KC Liengrie Ltd. was surveyed for fire safety on 4/16/2014 by Hughes Associates, Inc. This summary identifies the major deficiencies that were identified during the inspection.

The purpose of this 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.

Table 1. Findings And Recommendations

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	<p>Hazardous materials / flammable liquid storage area is not separated by fire-rated construction (openings, non-rated doors, penetrations).</p> <p>It was located on the ground floor.</p>	<p>Separate the hazardous materials / flammable liquid storage room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.</p>	Within 3 months



F-2	Fire Rated Construction	Areas used for combustible storage are not separated by fire-rated construction. Locations: First Floor.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4m and maximum area of 23m ² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m ² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.	Within 3 months
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F-3	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction.	Provide minimum 1.5-hr fire rated doors and 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.	Within 3 months
			If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.	



F-4	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level.	Within 3 months
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F-5	Fire Rated Construction	Unsealed penetrations and openings are located in exit stair enclosures.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.	Within 3 months
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F-6	Egress	<p>Egress doors / gates with locking features are provided at building exits, exit stairs, along egress routes, and exit discharge.</p> <p>Most gates/doors were open and unlocked during the inspection. The ground floor had locked doors.</p>	<p>Remove locking features from all egress doors / gates.</p> <p>If locks are required for security reasons, utilize special door locking features complying with NFPA 101.</p>	Immediate
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F-7	Egress	<p>Storage was located in the egress path.</p> <p>Locations: Ground Floor.</p>	<p>Keep egress paths and stairs clear of storage.</p>	Immediate
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F-8 Egress

Storage was located in the exit stair.

Remove all storage from exit stairs and egress paths.

Immediate



F-9	Egress	Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, and exit discharge.	Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors.	Within 1 month
		Locations: All Floors.	If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	



F-10	Fire Protection	The high-rise building has an occupied floor greater than 23m (75 ft) and is not provided with automatic sprinkler protection. The large occupant loads, heavy fuel loading, and anticipated extended egress times warrant sprinkler protection.	Provide automatic sprinkler protection throughout the building in accordance with NFPA 13.	Design within 6 months, install within 12 months
		Building is 81ft tall to highest occupied floor.		

F-11	Fire Protection	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.	Within 3 months
F-12	Fire Protection	Inspection, testing, and maintenance records for the fire alarm system were not available.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months
F-13	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Locations: All Floors.	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-14	Egress Lighting	Exit sign not provided at exit. Along exits paths and exit stairs on multiple floors.	Provide exit signs above all exits to the exterior and all doors to the exit stairs.	Within 3 months