

FIRE SAFETY INSPECTION REPORT

SHAGORE GARMENTS LTD
AMIR COMPLEX, PLOT #43, SECTOR #3, UTTARA



ACC  **RD**
on Fire and Building Safety in Bangladesh

March 19, 2014

SUMMARY

Shagore Garments Ltd was surveyed for fire safety on 3/19/2014 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	The basement level generator and transformer rooms are not separated by fire-rated construction (openings, non-rated doors, penetrations). The boilers located on Levels 4, 5, and 8 are not separated by fire-rated construction (openings, non-rated doors, penetrations).	Separate the utility rooms by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations	Within 3 months



F-2	Fire Rated Construction	Areas used for combustible storage are not separated by fire-rated construction. Locations include Levels 4, 5, 8, 9, 10.	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 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 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-5	Fire Rated Construction	Unsealed penetrations and unprotected openings are located in the elevator shaft ways.	Provide minimum 1.5-hr fire rated doors and seal all unprotected openings to elevator shafts.	Within 3 months
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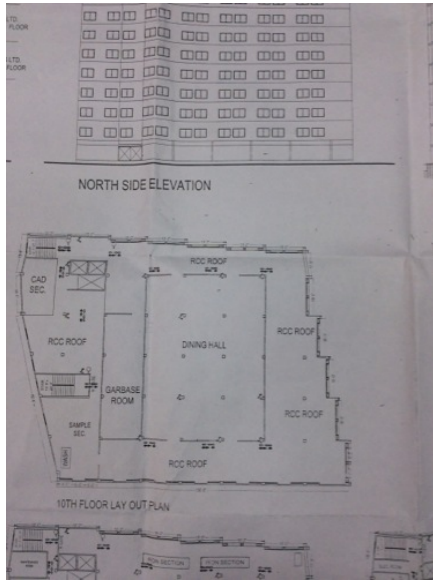


F-6	Egress	<p>Egress doors / gates with locking features are provided at building exits, exit stairs, along egress routes, and means of exit discharge.</p> <p>All gates/doors within the factory were open and unlocked during the inspection.</p> <p>Gates/doors at Market entrances/exits were closed and locked during the time of the inspection. These gates force occupants discharging from the east stairwell to travel to the same building exit as the southeast stairwell.</p>	<p>Remove locking features from all egress doors / gates including Market entrances/exits that serve the high-rise.</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	Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, and means of exit discharge.	Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
				

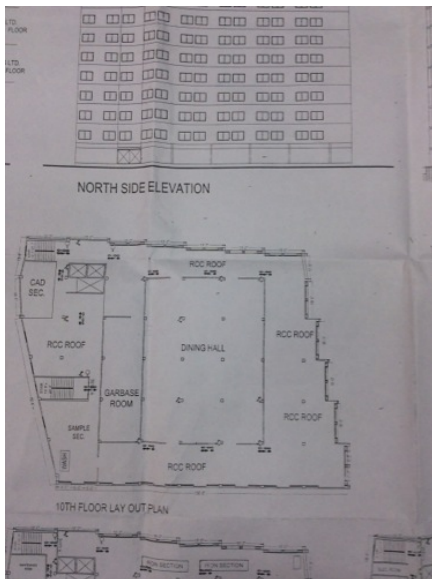
F-8	Egress	Exit capacity of 383 persons is not adequate for the occupant load of Levels 8 (391 people) and 10 (720 people).	The building owner should reduce occupant load to not more than 383 persons per floor or provide additional exits.	Within 3 months
		Additionally, a minimum of three exits are required to serve Level 10 which has an occupant load in excess of 500 people.		



F-9	Egress	The high-rise is served by two stairwells that are located 70 ft from one another. The exits are not remotely located from each other such that a single fire event could compromise both exits.	Provide sprinkler protection in accordance with NFPA 13.	Within 3 months
F-10	Egress	Storage was located in the exit stairs.	Remove all storage from exit stairs and egress paths.	Within 3 months



F-11	Egress	Occupants of the Level 10 dining room must travel a common path of egress up to 280 ft (85 m) in order to reach the two available stairwells. An alternative exit passageway would require travel through the Sample area.	Reconfigure the egress arrangement to provide a second pathway north of the dining room leading to the east stairwell. It is not recommended that this pathway travel through the Sample area.	Within 3 months
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F-12	Egress	Level 9 is divided into two areas, offices and cutting. Each area has direct access to one stairwell. Secondary egress to an alternate stairwell requires passage through a storage room.	Separate storage area as mentioned in other recommendation. Provide a means for exit access to both stairwells without requiring passage through the storage room.	Within 3 months
F-13	Egress	<p>Exit discharge capacity is not adequate for the occupant load.</p> <p>Gates/doors at Market entrances/exits were closed and locked during the time of the inspection. These gates force occupants discharging from the east stairwell to travel to the same building exit as the southeast stair.</p>	Provide additional exits from the Market by replacing locked gates with doors having panic hardware.	Within 3 months



F-14	Egress	<p>The southeast exit stair discharges inside the building to the elevator lobby on the ground floor.</p> <p>The east stair discharges on the ground floor into the Market.</p>	<p>Provide 2-hr fire-rated exit passageways from each stairwell leading directly outside. Exit passageways should lead to separated building exits.</p>	<p>Within 6 months</p>
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F-15	Fire Protection	<p>The fire alarm system is antiquated, not a listed system, and does not provide alarm and notification features consistent with acceptable standards.</p>	<p>Replace the fire alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72.</p>	<p>Design within 4 months, install within 9 months</p>
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F-16	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
F-17	Fire Protection	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-18	Fire Protection	The fire alarm system does not appear to provide adequate audible notification coverage based upon functional test conducted on Levels 9 and 10.	Provide additional notification appliances such that the fire alarm system is audible throughout the building in accordance with NFPA 72.	Within 6 months

F-19	Fire Protection	The building is equipped with single-station smoke alarms. Smoke alarm activation sounds only a local alarm and does not provide automatic fire alarm notification of occupants.	Replace the single-station smoke alarms with automatic smoke detectors tied into the fire alarm system. Configure the fire alarm system to initiate occupant notification upon activation of any two smoke detectors in addition to the manual fire alarm stations.	Within 6 months
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F-20	Egress Lighting	Additional exits signs will be required on Levels 9 and 10 following reconfiguration of egress pathways.	Provide directional exit signs to all exit stairs.	Within 3 months
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