

FIRE SAFETY INSPECTION REPORT

**FASHION FORUM LTD.
53-54, DIAKHALI, JAMGARA, SAVAR**



ACCORD
on Fire and Building Safety in Bangladesh

April 1, 2014

SUMMARY

Fashion Forum Ltd. was surveyed for fire safety on 4/1/2014 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.

Tables 1 - 4 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 - Main Building

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The generator room on the ground floor is not separated by fire-rated construction due to openings, a non-rated door, and unsealed penetrations.	Separate the generator room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations. Seal the existing generator room entrance and provide an exterior entrance from the adjacent alley.	Within 3 months





F-2	Fire Rated Construction	Areas used for combustible storage are not separated by fire-rated construction. The is a general store on the ground floor as well as storage on racks open to the factory floor for washing operations, the first, second, and third floors all have sub-stores, the fourth floor has a general store, and the fifth and sixth floors are dedicated storage floors. Reportedly all storage will be moved to the under construction seven (7) story building once complete. Based on observation during the inspection, the fifth and sixth floors and the ground floor fabric store all discharge to an exit stair.	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 23m² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. Where an exit stair discharges through a storage area, provide a 2-hr fire-rated vestibule with a 1-hr fire-rated door on the storage room side and a 1.5-hr fire-rated door on the exit stair side. Alternately, for the ground floor fabric store, seal the existing door with fire rated construction and	Within 3 months
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F-3	Fire Rated Construction	The exit stairs are not separated from work areas and 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. 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-4	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated ceiling assembly in the fourth floor general store and in the fire-rated floor/ceiling assembly on the factory floor on other levels due to electrical access panels.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level. Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.	Within 3 months
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F-5	Fire Rated Construction	The hazardous materials/flammable liquid storage area on the ground floor of the Main Building is not separated by fire-rated construction due to openings and a non-rated door.	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.	Within 3 months
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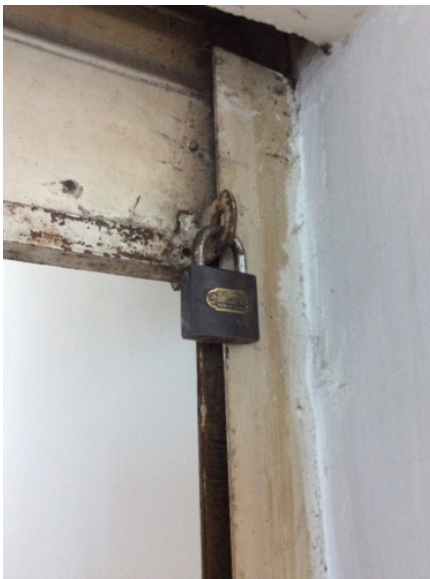
F-6	Fire Rated Construction	The gas fired dryers on the ground floor of the Main Building are not separated by fire-rated construction due to openings, penetrations, and non-rated doors.	Separate the gas fired dryers by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations	Within 3 months
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F-7	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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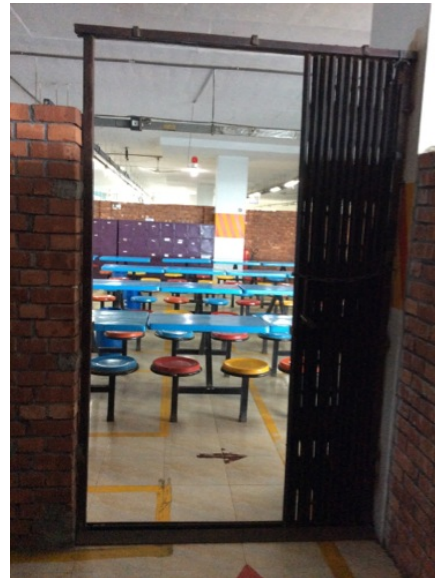
F-8	Egress	Egress doors and gates with locking features are provided at building exits, exit stairs, along egress routes, and at exit discharge. All gates and doors were open and unlocked during the inspection.	Remove locking features from all egress doors and gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
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F-9	Egress	Storage was located in all exit stairs.	Remove all storage from exit stairs and egress paths.	Immediate
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F-10	Egress	Collapsible gates and sliding doors are provided at building exits, exit stairs, along egress routes, and at exit discharge.	Replace all gates and 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.	Within 1 month
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F-11 Egress

Non serving electric appliances are located in the stairwells.

Remove and relocate the non serving electric appliances to the exterior of the stairwells.

Within 3 months



F-12	Egress	The northwest stairwell discharge path (uncovered) to assembly point, with less than 10 ft. building separation, has unprotected openings at a height of less than 10 ft.	Seal all penetrations and openings to the interior of the building, up to a height of 10 ft., to maintain the fire separation. Alternately, provide 1--hr fire-rated separation up to a height of 10 ft.	Within 3 months
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F-13	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.	Design within 4 months, install within 9 months
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F-14	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. Building height 77 ft. at highest occupied level.	Provide automatic sprinkler protection throughout the building in accordance with NFPA 13.	Design within 6 months, install within 12 months
F-15	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. Install new detectors in accordance with NFPA 72.	Within 1 months



F-16	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-17	Egress Lighting	Based on the number and location of emergency lights observed in the Main Building, adequate illumination levels are not anticipated along egress routes throughout the building.	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

Table 2. Findings And Recommendations - Shed 01

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Areas used for combustible storage in Shed 01 are not separated by fire-rated construction.	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 23m² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.	Within 3 months



F-2	Egress	Egress doors with locking features are provided at building exits of Shed 01. All doors were open and unlocked during the inspection.	Remove locking features from all egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
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F-3	Egress	Sliding doors are provided at some building exits of Shed 01.	Replace all 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.	Within 1 month
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F-4	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.	Design within 4 months, install within 9 months
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F-5	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
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F-6	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-7	Egress Lighting	Based on the number and location of emergency lights observed in Shed 01, adequate illumination levels are not anticipated along egress routes.	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
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Table 3. Findings And Recommendations - Shed 02

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The boiler room adjacent to Shed 02 is not separated by fire-rated construction due to openings and a non-rated door.	Separate the boiler room 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	Egress	Egress doors with locking features are provided at building exits of Shed 02. All doors were open and unlocked during the inspection.	Remove locking features from all egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate



F-3	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.	Design within 4 months, install within 9 months
F-4	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-5	Fire Protection	The building was 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



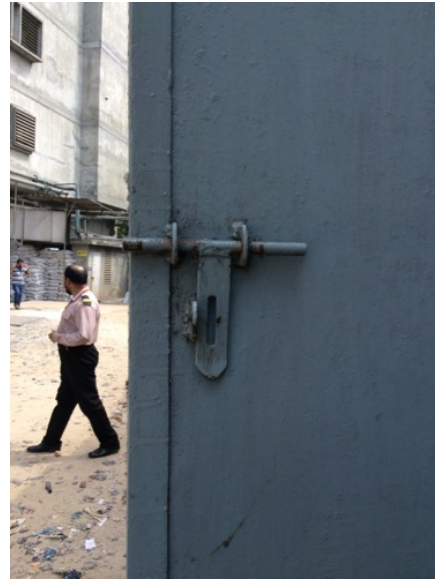
F-6	Egress Lighting	Based on the number and location of emergency lights observed in Shed 02, adequate illumination levels are not anticipated along egress routes.	Test the emergency lighting system and provide additional emergency fixtures to provide adequate illumination along the means of egress. 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
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Table 4. Findings And Recommendations - Shed 04

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Areas used for combustible storage in Shed 04 are not separated by fire-rated construction.	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 23m² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.	Within 3 months



F-2	Egress	Egress doors with locking features are provided at building exits of Shed 04. All necessary exits were open and unlocked during the inspection.	Remove locking features from all egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
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F-3	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.	Design within 4 months, install within 9 months
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F-4	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-5	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



F-6	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes of Shed 04.	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
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