

FIRE SAFETY INSPECTION REPORT

RIO FASHION WEAR LTD.

INDUSTRIAL PLOT NO. 3, MILK VITA ROAD
SECTION-7, MIRPUR, DHAKA, BANGLADESH

OTHER FACTORIES: RIO DESIGN LTD.



November 2, 2013

SUMMARY

Rio Fashion Wear Ltd. was surveyed for fire safety on 11/2/2013 by Hughes Associates, Inc. This summary identifies the major deficiencies that were identified during the inspection.

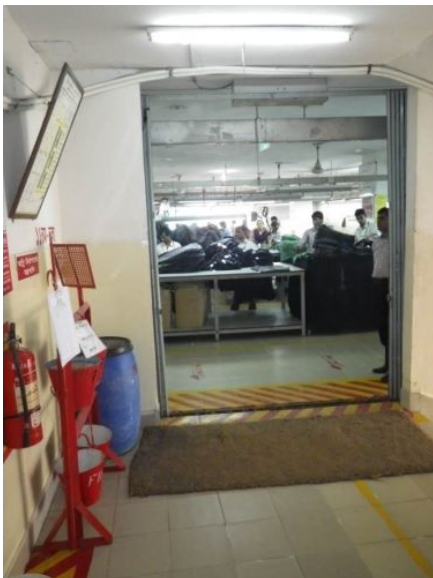
The purpose of this survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the Accord. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The 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 main exit stair is open to the work areas on each floor as well as storage, office and electrical rooms on several floor levels.	Provide minimum 1.5-hr fire rated doors to separate the exit stair from work areas and other building areas. 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



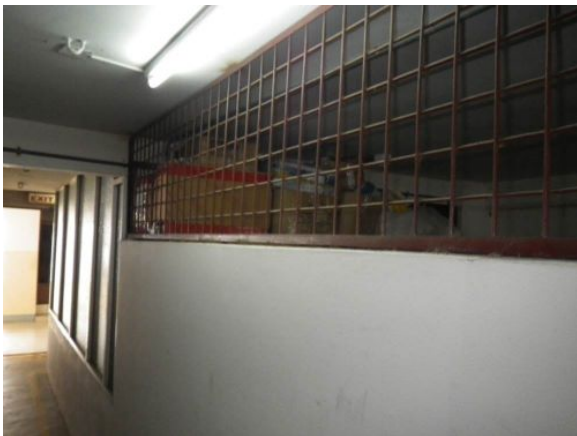
F-2	Fire Rated Construction	The rear exit stair has been provided with self-closing steel doors to separate the work areas. However, the stair is open on several floor levels to the bathrooms, which are connected to the general work area compromising the stair enclosure.	Provide minimum 1.5-hr fire rated doors or seal the openings to separate the exit stair from restroom areas on all floor. Ensure that the fire doors separating the work areas are kept closed or are automatic-closing and positive latching.	Within 3 months
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F-3	Fire Rated Construction	The self-closing steel doors separating the rear exit stair from the work areas on each floor are normally kept open, reportedly to be closed by workers as they exit.	Maintain the doors separating the exit stair from the work areas in the closed position. 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	Areas used for combustible storage on production floors and are not separated by fire-rated construction.	Provide dedicated storage rooms separated by minimum 1 hr fire-rated construction on all production floors where transient storage is required for operations. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4 m 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
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F-5	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.	Within 3 months
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F-6	Fire Rated Construction	The boiler room on the 10th floor is not separated from the work area by fire-rated construction (open transom).	Seal and/or protected all openings to provide a minimum 2-hr fire separation of the boiler room.	Within 3 months
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F-7	Fire Rated Construction	The elevator hoistway opens directly into the main exit stair enclosure. The machine room atop of the hoistway is not separated by fire-rated construction.	Provide a minimum 2-hr fire separation of the elevator machine room from the exit stair.	Within 3 months
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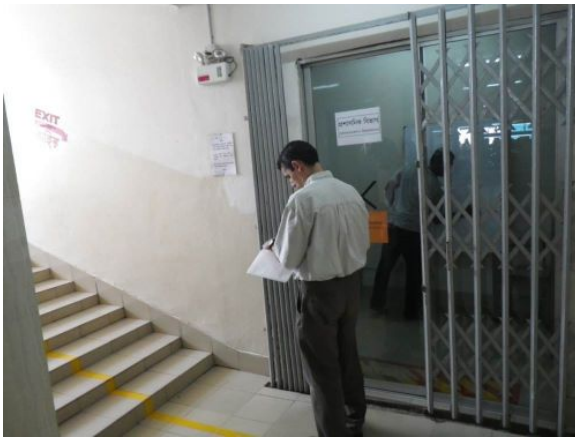
F-8	Egress	Collapsible (concertina) gates with locks are provided along means of egress, including exit stairs, exit access, and exit discharge. Note - all gates were open and unlocked during the inspection.	Remove all collapsible gates at exit stairs and along the means of egress. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Within 1 month
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F-9	Egress	The rear exit stair does not allow re-entry into the building once the fire doors are closed.	Provide door hardware and appropriate signage to allow re-entry from the exit stair to the main floor areas at not less than every fifth floor level.	Within 3 months
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F-10	Egress	The main exit stair is not provided with handrails.	Provide handrails on both sides of the exit stair.	Within 3 months
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F-11	Egress	The door serving the rear exit stair at Level 12 (dining) does not swing in the direction of egress travel.	Modify the stair door to swing in the direction of egress travel. Relocate the door and provide a landing inside the stair at least 1 m in length such that the door does not swing over the stair.	Within 3 months
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F-12	Egress	The main exit stair discharges inside the building on the ground floor. Basement and ground floor areas used for combustible storage are not separated from the exit discharge lobby.	Provide minimum 2-hr fire separation between the exit stair discharge lobby and all storage areas on the basement and ground floors. Provide vestibules with minimum 1.5-hr fire doors to protect any openings in the fire separation walls.	Within 6 months
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F-13	Fire Protection	An older, antiquated fire alarm system is installed along with a newer system.	Remove the fire alarm components of the older system (smoke detectors, fire alarm switches) ensuring that the newer fire alarm system provides adequate smoke detection and manual activation coverage in accordance with NFPA 72. The existing PA system can continue to be used for non-fire alarm related purposes.	Design within 4 months, install within 9 months
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F-14	Fire Protection	The high-rise building 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
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F-15	Fire Protection	Activation of the fire alarm system by a manual fire alarm station provides automatic occupant notification only on the floor of alarm and not throughout the building.	Configure the fire alarm system to initiate automatic occupant notification on all floor levels to facilitate whole-building evacuation upon alarm.	Within 1 months
F-16	Fire Protection	The fire alarm system is not regularly tested and maintained.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months
F-17	Fire Protection	Based on the number and location of notification appliances observed, the fire alarm system does not appear to provide adequate audible notification coverage on the production floor levels. Note – the system was tested on one of the floors and was not audible from all areas.	Provide additional fire alarm appliances to provide audible coverage throughout the building in accordance with NFPA 72 criteria. Where required based on ambient noise conditions (during operations), provide visual notification appliances.	Within 6 months





F-18	Fire Protection	Smoke detector activation does not provide automatic fire alarm notification of occupants. Automatic notification is provided only by the manual fire alarm stations.	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-19	Egress Lighting	A manual switch is provided to turn off illuminated exit signs.	Remove manual switches for exit sign lights and ensure exit signs are illuminated at all times.	Within 1 month



F-20	Egress Lighting	Emergency lighting is provided on the floors and in the exit stairs. The adequacy of the system was not fully tested. Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated for all floor levels 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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F-21	Egress Lighting	The wiring for normal and emergency power of emergency lighting is routed through the same locations via unprotected vertical risers.	Provide separation of normal and emergency power wiring and enclose vertical utility risers between floor levels in shaft construction having a minimum 2-hr fire rating.	Within 3 months
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