

FIRE SAFETY INSPECTION REPORT

TOSRIFA INDUSTRIES LTD

135 GOPALPUR, MUNNU NAGAR, TONGI, GAZIPUR

OTHER FACTORIES: FASHION ASIA LTD.



ACCORD
on Fire and Building Safety in Bangladesh

March 27, 2014

SUMMARY

Tosrifa Industries Ltd was surveyed for fire safety on 3/27/2014 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 - 2 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 - Tosrifa Industries Ltd.

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The transformer, compressor and generator rooms are not separated by fire-rated construction (openings, non-rated doors, penetrations).	Separate the transformer, generator and compressor 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	The boiler room and EMR are not separated by fire-rated construction (openings, non-rated doors, penetrations).	Separate the boiler room and EMR 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-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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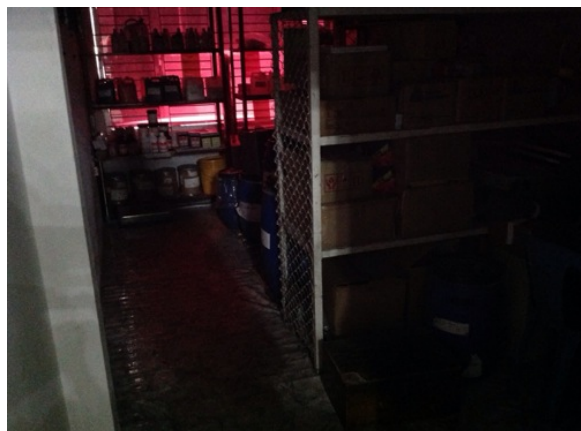
F-4	Fire Rated Construction	Unsealed penetrations and openings are located in the SE and NE exit stairs enclosures.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.	Within 3 months
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F-5	Fire Rated Construction	Areas used for combustible storage in the G,1,2 and 3rd floors and storage rooms in the 1st and 6th floors 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
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F-6	Fire Rated Construction	Hazardous materials and flammable liquid storage area in the ground and 1st floors are not separated by fire-rated construction (openings, non-rated doors, penetrations).	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-7	Egress	Egress doors / gates with locking features are provided at building exits and exit stairs All gates/doors were open and unlocked during the inspection.	Remove locking features from all egress doors / gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
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F-8	Egress	Storage was located in several exit stairs.	Remove all storage from exit stairs and egress paths.	Immediate
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F-9	Egress	Exit stair door and egress door serving 50 or more occupants does not swing in the direction of egress travel at the 6th floor	Modify the egress door to swing in the direction of egress travel.	Within 3 months
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F-10	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-11	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-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	Exit sign not provided at exit at the 6th floor (office)	Provide exit signs above all exits to the exterior and all doors to the exit stairs.	Within 1 month
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F-14	Egress Lighting	Emergency lighting did not function in test mode (burned out, broken, etc.) at the 6th floor	Regularly test the emergency lighting system on each floor and replace/repair lights as needed.	Within 1 month
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F-15	Egress Lighting	Manual on-off switches in several floors are provided for emergency lighting / exit signage units.	Remove manual on/off switches from emergency lighting / exit signage units to prevent them from being switched off.	Within 1 month
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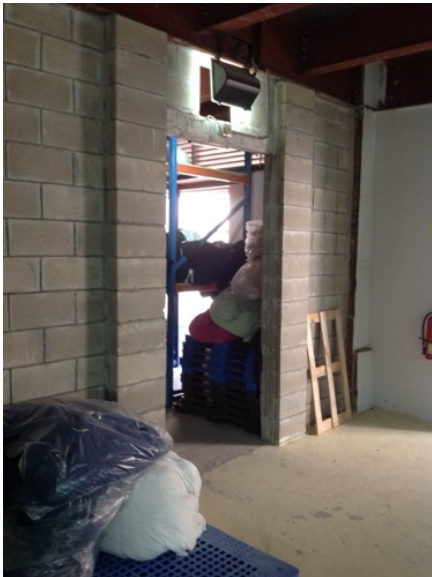
Table 2. Findings And Recommendations - Tosrifa Industries Ltd. (6 Stories Building)

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The boiler, generator and transformer rooms are not separated by fire-rated construction (openings, non-rated doors, penetrations).	Separate the boiler, generator and transformer rooms by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations	Within 3 months





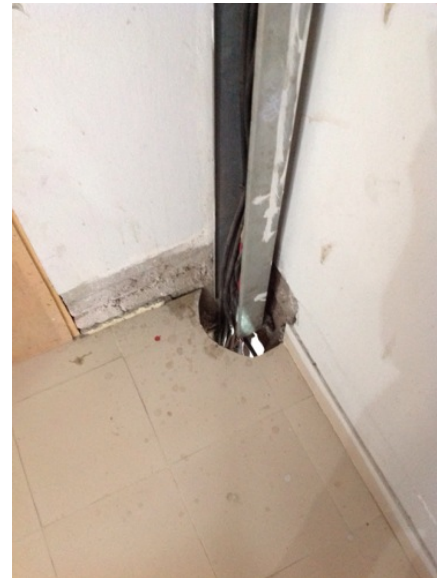
F-2	Fire Rated Construction	Areas used for combustible storage are not separated by fire-rated construction at the ground, 1, 2 and 3rd floors.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, provide defined storage areas 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
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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 exit stairs 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 openings at the 3rd floor 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. Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.	Within 3 months
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F-6	Egress	Egress doors / gates with locking features are provided at building exits All gates/doors were open and unlocked during the inspection.	Remove locking features from all egress doors / gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
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F-7	Egress	Storage was located in the exit stairs.	Remove all storage from exit stairs and egress paths.	Immediate
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F-8	Fire Protection	The fire alarm system is not installed in this building.	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-9	Fire Protection	This building is not installed fire notification device.	Configure the fire alarm system to initiate automatic occupant notification on all floor levels to facilitate whole-building evacuation upon any manual fire alarm station activation.	Within 1 months
F-10	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-11	Fire Protection	The fire detection system is not installed in this building.	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