

FIRE SAFETY INSPECTION REPORT

SATURN TEXTILES LTD.(WOVEN DIVISION)

2/6, DARUL AHSAN ROAD, AUSEPARA, TONGI

OTHER FACTORIES: NONE



ACCORD
on Fire and Building Safety in Bangladesh

April 30, 2014

SUMMARY

Saturn Textiles Ltd.(Woven Division) was surveyed for fire safety on 4/30/2014 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	Areas used for combustible storage are not separated by fire-rated construction. Cutting and finishing floors had large quantities of storage on the factory 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



F-2	Fire Rated Construction	The boiler and transformer on the ground floor and the generator in the basement are not separated by fire-rated construction.	Separate the boiler, generator, transformer rooms by a minimum 2-hr fire-rated construction. Seal and/or protect 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 or storage areas 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
 				
F-4	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies via a cable chase near the east wall of the building and the improperly sealed empty elevator shaft.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level. Seal all penetrations and openings in wall at open elevator shaft to maintain the fire separation.	Within 3 months



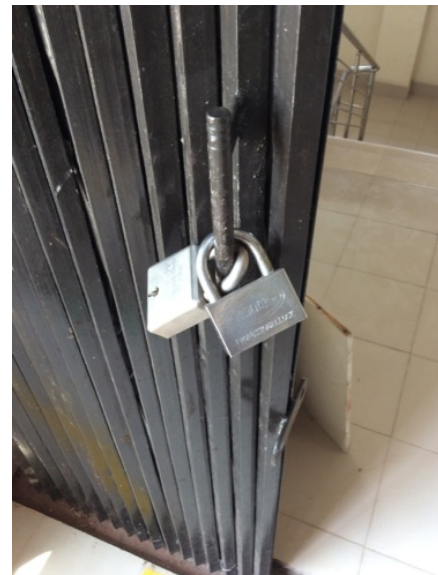
F-5	Fire Rated Construction	Combustible liquids and flammable gases are not separated by fire-rated construction. CNG tanks are stored in the boiler room and a diesel tank is stored close the generator	Separate the combustible liquid and flammable gas storage by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations.	Within 3 months
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F-6	Fire Rated Construction	Storage rooms used for combustible storage 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-7	Egress	Egress doors and gates with locking features are provided at building exits, exit stairs, along egress routes, and at exit discharge at various locations throughout the building. All gates/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.	Immediat
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F-8	Egress	Combustibles were found in the exit stairs. Trash cans were located on every floor of the SE and N exit stairs. Waste bags were located in the SW stairwell. Storage was located at the base of the N and SE stairwells	Remove all combustibles and storage from exit stairs and egress paths.	Immediat
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F-9	Egress	Storage was located in the egress path in the ground floor fabric store. Also, product overflowed into aisles in some locations on the finishing floors. Additionally, folding tables were present in egress aisles on several floors.	Keep egress paths and stairs clear of storage.	Immediat
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F-10	Egress	Collapsible gates are provided at building exits, exit stairs, along egress routes, and at exit discharge at various locations throughout the building.	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.	Within 1 month
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F-11	Egress	The width of egress aisles is less than 36-in around the exterior of the finishing floors where product is stored.	Provide minimum aisle widths of 36-in.	Within 3 months
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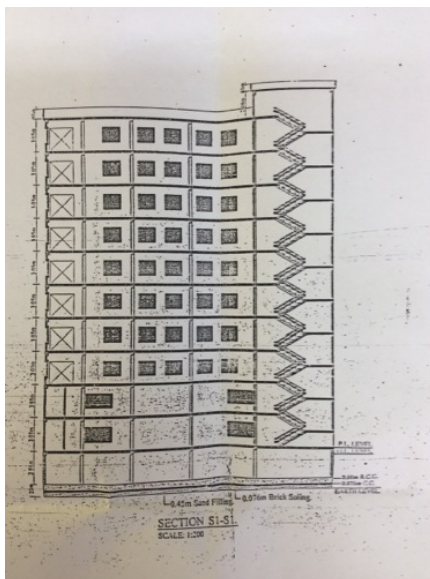
F-12	Egress	The SW exit stairs discharges inside the building. Egress from the building can be achieved either by exiting the stair on the ground floor and following a non-FR passageway to the SE exit stair or by exiting the stair in the basement and traveling to the exit ramp on the east side of the building.	Modify stair to discharge directly outside. -OR- Provide 2-hr fire-rated exit passageway leading directly outside (vestibules to separate any storage areas).	Within 6 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.	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	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-16	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. Design in accordance with NFPA 72.	Within 6 months
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F-17	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes on all floors. Additionally, egress lighting on floors were located above work tables, as opposed to egress paths.	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-18	Egress Lighting	Manual on-off switch is provided for emergency lighting on ninth floor and some stair emergency lighting.	Remove manual on/off switches from emergency lighting units to prevent them from being switched off.	Within 3 months
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