

FIRE SAFETY INSPECTION REPORT

SAYEM FASHIONS LTD
KAMARJURI, NATIONAL UNIVERSITY

OTHER FACTORIES: RADIANT SWEATER IND. LTD.



ACCORD
on Fire and Building Safety in Bangladesh

August 24, 2014

SUMMARY

Sayem Fashions Ltd was surveyed for fire safety on 8/24/2014 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	Building 1 The ceiling construction of the seventh floor west half was from a combustible material.	Remove the combustible material from the ceiling of the Building 1 seventh floor..	Within 1 month
				
F-2	Fire Rated Construction	Building 1 The electrical shaft, located in the southwest corner, was not enclosed on the ground floor.	Enclose the electrical shaft on all floors.	Within 1 month



F-3	Fire Rated Construction	Building 2 The generator and transformer room, located on the ground floor is not separated by fire-rated construction due to non-rated doors, openings and penetrations. The generators and transformer were not separated from each other. Additional diesel fuel storage was present within the generator room.	Separate the generator and transformer room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations. Separate the generators from the transformer by 2-hr fire-rated construction. Separate the diesel fuel storage from the utility room by 2-hr fire-rated construction.	Within 3 months
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F-4	Fire Rated Construction	Building 1 The ground and first floor boiler rooms were not separated by fire-rated construction and open to the factory floors. Additional diesel fuel storage was located adjacent to the ground floor diesel boilers.	Separate the boiler rooms by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations. Separate the diesel fuel storage from the factory floor and ground floor boiler room by 2-hr fire-rated construction.	Within 3 months
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F-5	Fire Rated Construction	Building 1 Rooms used for combustible storage were not separated by fire-rated construction. Specifically, Building 1 had dedicated storage rooms on the ground (yarn store, packing section), first (metal free zone), second (accessory stores, knitting distribution), third (knitting distribution), sixth (linking distribution, knitting distribution) and seventh (distribution section) floors.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.	Within 3 months
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F-6	Fire Rated Construction	Building 1/2 Areas used for combustible storage, open to the factory floors, were not separated by fire-rated construction. Specifically, storage was open to the factory floor of Building 1 on all floors occupied by the factory (except the seventh) and in Building 2 on the third floor.	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	Fire Rated Construction	Building 1 Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Specifically, there were floor/ceiling penetrations (non rated electrical piping) on the fourth through seventh floors. The fourth floor had an opening in the floor assembly to the third floor.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers (electrical piping) 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-8	Fire Rated Construction	Building 1 The gas dryers (one (1) on the ground floor and (2) on the first floor) were not separated by fire-rated construction and open to the factory floors.	Separate the gas dryer areas 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-9	Fire Rated Construction	Building 3 Unsealed penetrations and openings are located in the exit stair enclosure on several floors.	Seal all penetrations and openings in the Building 3 exit stair enclosure walls to maintain the fire separation.	Within 3 months
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F-10	Fire Rated Construction	Building 3 Flammable liquid storage was present in the ground floor wastage godown and not separated by fire-rated construction due to openings and a non-rated door.	Separate the flammable liquid storage 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-11	Fire Rated Construction	Building 3 A room used for combustible storage on the ground floor (wastage godown) was not separated by fire-rated construction and open to the placket section.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.	Within 3 months
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F-12	Fire Rated Construction	Building 3	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-13	Fire Rated Construction	Building 1/2	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-14	Egress	Building 1/2	Remove all storage from all exit stairs and egress paths.	Immediate
Storage was located in all exit stairs. Specifically, there was storage on all floors, in each exit stair of Building 1 (trash bins). The southwest exit stair of Building 1 (also shared with Building 2) had water sinks by floor, at the main floor landings and a garment chute from the fifth to ground floor. The southeast exit stair of Building 1 had packaged box storage on the ground floor. The Building 2 exterior exit stair had storage (garment bags) at the fourth floor landing.				





F-15	Egress	Building 1	Immediately remove storage from the exit discharges or provide fire-rated separation of the storage areas.	Immediate
		Storage was open to the exit discharge of the ground floor central exit and southeast exit stair.		





F-16	Egress	Building 1/2	Remove locking features from all egress doors and gates.	Immediate
		Egress doors and gates with locking features are provided at building exits, exit stairs and at exit discharge throughout Building 1 and egress gates with locking features are provided at exit stairs, along egress routes and at exit discharge throughout Building 2.	If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	
		All gates and doors throughout were open and unlocked during the inspection.		



F-17 Egress

Building 3

Remove all storage from exit
stairs and egress paths.

Immediate

Storage was located in
the exit stair on the
ground floor (glass
panes).



F-18	Egress	Building 3	Remove locking features from all egress doors and gates.	Immediate
		Egress doors and gates with locking features are provided at exit stairs, building exits and at exit discharge.	If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	
		All gates and doors were open and unlocked during the inspection.		



F-19	Egress	Fire drills were conducted for all factory buildings every three (3) months.	Conduct fire drills in accordance with The ACCORD Standard (at least every two (2) months).	Within 1 month
F-20	Egress	Building 1/2 Both the Building 2 exterior exit stair and the Building 1 southwest exit stair (also the Building 2 exit stair) discharge to unprotected openings from the Building 2, ground floor utility room.	Provide separation of the Building 2, ground floor utility room from the discharge of both exit stairs. If the maximum travel distance to an exit from the ground floor utility room of Building 2 is less than 26 ft., a single exit is permitted from the room.	Within 1 month



F-21	Egress	Building 3 An inadequate number of emergency evacuation plans and no manual firefighting equipment was provided.	Provide emergency evacuation plans and manual firefighting equipment in Building 3 as per The ACCORD Standard.	Within 1 month
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F-22	Egress	Building 1/2	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
		Collapsible gates and sliding doors are provided at building exits, exit stairs, along egress routes and at exit discharge throughout Building 1 and collapsible gates are provided at exit stairs throughout Building 2.		



F-23	Egress	Building 3	Replace all gates sliding doors along the means of egress with side-hinged, swinging egress doors.	Within 1 month
		Collapsible gates and sliding door are provided at exit stairs and at exit discharge.	If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	



F-24	Egress	Building 2	Modify the egress doors to swing in the direction of egress travel.	Within 3 months
		The fourth floor door to the Building 1 southwest exit stair and the exterior, main entrance factory gates do not swing in the direction of egress travel.		



F-25	Egress	Building 1	Relocate the day-care room to a location where there is direct access to an exit stair. Alternately, provide a minimum 2-hr fire-rated exit corridor between the day-care room and the exit stair. Alternately, relocate the day-care room to a ground floor room where the maximum travel distance to the nearest exit is 9m (30 ft).	Within 3 months
		The second floor day-care room does not have direct access to an exit stair. The approximate travel distance to the southeast exit stair is 27 ft.		
 				

F-26	Egress	Building 3	Provide additional, remote means of egress from Building 3.	Within 3 months
		A single means of egress is provided from the second to fourth floors. Due to the travel distances on the ground and first floor, a single exit is permitted on those floors.		



F-27	Egress	Building 1/2 The first to fourth floor exits of Building 2 are not remotely located from each other (required approximate spacing 38 ft, actual approximate spacing 18 ft) and the ground floor exits of Building 1 are not remotely located from each other (required approximate spacing 86 ft, actual approximate spacing 54 ft), such that a single fire event could compromise the exits in each building.	Provide an additional remote exit on the first to fourth floors of Building 2 and on the ground floor of Building 1. Alternately, provide sprinkler protection on the first to fourth floors of Building 2 and on the ground floor of Building 1, in accordance with NFPA 13.	Within 6 months
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F-28	Egress	Building 2	Provide fire-rated separation of the Building 2 exterior exit stair extending at a distance of 10 ft. from all sides of the exit stair. If the Building 2 exterior exit stair is relocated to provide exit remoteness throughout the first to fourth floors, ensure that the new location of the exit stair meets the separation requirements.	Within 6 months
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F-29 Fire Protection Building 1/2

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-30	Fire Protection	Building 3	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-31	Fire Protection	Building 1/2	No record of inspection, testing, and maintenance of the fire alarm system was provided at the time of the inspection.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months
F-32	Fire Protection	Building 3	No record of inspection, testing, and maintenance of the fire alarm system was provided at the time of the inspection.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months

F-33	Fire Protection	Building 1/2	Remove single-station smoke alarms. Provide automatic smoke detection throughout all factory buildings, tied into the fire alarm system, in accordance with NFPA 72.	Within 6 months
		Buildings are equipped with single-station smoke alarms. Smoke alarm activation sounds only a local alarm and does not provide automatic fire alarm notification of occupants.		



F-34	Fire Protection	Building 3	Remove single-station smoke alarms. Provide automatic smoke detection throughout the building, tied into the fire alarm system, in accordance with NFPA 72.	Within 6 months
		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.		



F-35	Egress Lighting	Building 1	Provide exit signs above all exits to the exterior and all doors to the exit stairs.	Within 1 month
		Exit signage not provided from the first floor office area and to the first floor southeast exit stair.		



F-36	Egress Lighting	Building 1/2 Some exit signage was not illuminated (burned out, broken, etc.). Specifically, an exit sign from the Building 1, seventh floor dining area and all exit signs on the fourth floor of Building 2.	Regularly inspect all exit signage and replace/install lights as needed to illuminate signs.	Within 1 month
 				
F-37	Egress Lighting	Building 3 None of the exit signage was illuminated (burned out, broken, etc.). Reportedly the Building 3 exit signs were not illuminated because electricity was disconnected to the building at the time of the inspection.	Regularly inspect all exit signage and replace/install lights as needed to illuminate signs.	Within 1 month



F-38	Egress Lighting	Building 1/2 Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along all egress routes.	Test the emergency lighting system on each floor of every building and provide additional emergency fixtures to ensure 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
F-39	Egress Lighting	Building 1/2 No record of inspection, testing, and maintenance for the emergency lighting system was provided at the time of the inspection.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 months

F-40	Egress Lighting	Building 3 No record of inspection, testing, and maintenance for the emergency lighting system was provided at the time of the inspection.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 months
F-41	Egress Lighting	Building 3 Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along all egress routes. Also, the single exit stair is provided with no emergency lighting.	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
