

FIRE SAFETY INSPECTION REPORT

**INDESORE SWEATER FACTORY
DEGER CHALA, NATIONAL UNIVERSITY, GAZIPUR
SADAR, GAZIPUR-1704.**

OTHER FACTORIES: NONE



ACCORD
on Fire and Building Safety in Bangladesh

August 14, 2014

SUMMARY

Indesore Sweater Factory was surveyed for fire safety on 8/14/2014 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	The boiler area and generator room were not separated by fire-rated construction. The boiler area on the ground floor was open to the surrounding washing section. The generator room in the basement was not provided with a fire-rated door and had unprotected openings (vents).	Separate the boilers and generators 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	Rooms used for combustible storage are not separated by fire-rated construction. Specifically, rooms on the ground (bonded warehouse) and second (accessory store) floors.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.	Within 3 months
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F-3	Fire Rated Construction	Areas used for combustible storage, open to the factory floor, are not separated by fire-rated construction. Specifically, storage was open to the factory floor on the basement, ground, first, second and third floors. Also, there were distribution counters, located in two (2) separate areas, on the second, third and fourth floors. A packing section was located on the first 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-4	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-5	Fire Rated Construction	The electrical, maintenance and engineering (EME) shaft, present between all floors, is not separated by fire-rated construction. The shaft had unprotected openings and penetrations on all floors.	Separate the EME shaft 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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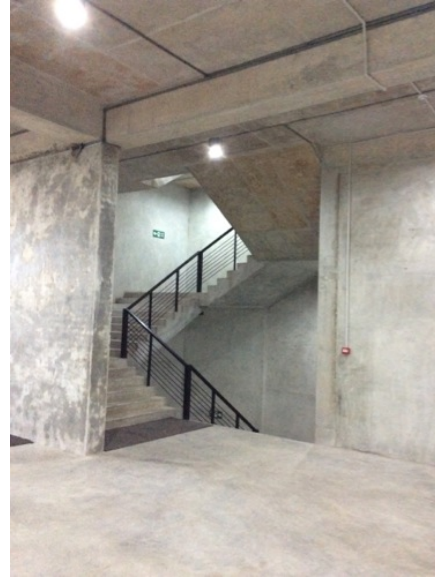




F-6	Fire Rated Construction	The two (2) gas dryers in the ground floor washing section were not separated by fire-rated construction and open to the factory floor.	Separate the gas dryers by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.	Within 3 months
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F-7	Fire Rated Construction	The northeast and southwest exit stairs were not enclosed in fire-rated construction in the basement or on the ground floor.	Enclose the northeast and southwest exit stairs in 2-hr fire-rated construction on all floors.	Within 3 months
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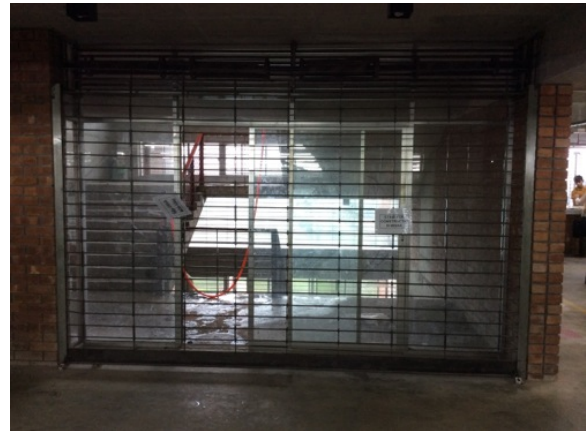
F-8	Fire Rated Construction	The southwest cargo lift shaft was sealed on all floors but the basement.	Seal the cargo lift shaft on all floors.	Within 3 months
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F-9	Fire Rated Construction	The reported pump room, accessed from the ground floor from within the southeast exit stair, is not separated by fire-rated construction and open to the exit stair.	Separate pump 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-10	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, except the gates to the southeast exit stair, 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-11	Egress	Storage was located in the northwest and southeast exit stairs on the ground floor.	Remove all storage from exit stairs and egress paths.	Immediate
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F-12	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-13	Egress	Common path of egress travel exceeds 30 m. and travel distance exceeds 60 m. An excessive travel distance/common path of travel (approximately 220 ft.) was present from the rear southeast and southwest exit discharges to the front, main sliding doors from the factory premise.	Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 30 m. and the travel distance to not more than 60 m.	Within 3 months
F-14	Egress	The swing doors passing through the two main sliding doors from the factory premise to the main road, located at the northeast and northwest corners of the property, did not swing in the direction of egress travel.	Modify the egress doors to swing in the direction of egress travel.	Within 3 months



F-15	Egress	No handrails were present on the stairs to the main, front entrance of the building.	Provide intermediate handrails for the stair.	Within 3 months
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F-16	Egress	Based off observations during the inspection, the fifth floor is to be divided into two separate sections. The northern half will be an office area and the southern half will be the dining room. The dining room is to be provided with three (3) exits, direct access to the southeast and southwest exit stairs and a door that will provide access to the northern half of the floor and thus either the northeast or northwest exit stairs. The combined exit capacity of the southeast and southwest exit stairs is 560 occupants.	To meet egress requirements for the expected occupant load (1000), the northern egress door from the dining room is required to have a clear width of approximately 70 in. As per The ACCORD Standard, any space with 1,000+ occupants is required to have four (4) exits. If the occupant load of the fifth floor dining area does in fact reach 1000+, another means of egress will be required. The 70 in. door width can be divided between two separate exits.	Within 3 months
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F-17	Egress	The two main sliding doors from the factory premise to the main road, located at the northeast and northwest corners of the property, were not remotely located.	Provide an additional remote exit for egress from the factory premise.	Within 6 months
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F-18	Fire Protection	At the time of the inspection the fifth floor was under construction and not provided with fire alarm system components, smoke/heat detectors, emergency lighting, exit signage, emergency evacuation plans, manual fire fighting equipment, fire hoses, or portable fire extinguishers.	Before occupied for normal operations, provide all systems for the fifth floor in accordance with The ACCORD Standard.	Immediate
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F-19	Fire Protection	Inspection, testing, and maintenance of the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months
F-20	Fire Protection	Inspection, testing, and maintenance of the automatic sprinkler system is not in accordance with NFPA 25.	Inspect, test and maintain the automatic sprinkler system, and keep written records on-site, in accordance with NFPA 25.	Within 3 months
F-21	Egress Lighting	Exit signs and emergency lighting were not provided to or within the southeast exit stair on any floor. At the time of the inspection the stair was only being utilized for construction workers.	Before utilizing the stairs for normal operations, provide exit signs above the entrance to the southeast stair on all floors. Also provide emergency lighting within the exit stairs so that a minimum illumination of 10 lux at the floor level is achieved.	Within 1 month
F-22	Egress Lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 months