

FIRE SAFETY INSPECTION REPORT

FARIHA KNIT TEX LTD.

BAROIBOGH, ENAYET NAGAR, FATULLAH,
NARAYANGANJ, BANGLADESH

OTHER FACTORIES: NONE



ACCORD
on Fire and Building Safety in Bangladesh



April 2, 2014

SUMMARY

Fariha Knit Tex Ltd. was surveyed for fire safety on 4/2/2014 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 - 4 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 - Building 1 (Including Shed 1)

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The hazardous materials storage room on the ground floor of Building 1 is not separated by fire-rated construction due to openings and non-rated doors.	Separate the hazardous materials 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
F-2	Fire Rated Construction	The generator/transformer room (Sub Station 1) is not separated by fire-rated construction due to openings and non-rated doors.	Separate Sub Station 1 by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations	Within 3 months



F-3	Fire Rated Construction	Areas used for combustible storage throughout Building 1 (ground floor and areas on the above 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 23m ² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m ² Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.	Within 3 months
-----	-------------------------	---	--	-----------------





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
-----	-------------------------	--	---	-----------------



F-5	Fire Rated Construction	<p>Unsealed penetrations (hydrant piping) are located in the fire-rated floor/ceiling assemblies. There was also an atrium in Building 1 from the ground to fourth floor.</p>	<p>Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level.</p> <p>Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.</p>	Within 3 months
-----	-------------------------	---	---	-----------------



F-6	Fire Rated Construction	Unsealed penetrations and openings are located in exit stair enclosures.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.	Within 3 months
-----	-------------------------	--	---	-----------------



F-7	Egress	Egress doors with locking features are provided at building exits, exit stairs, along egress routes, and at exit discharge. All gates/doors were open and unlocked during the inspection.	Remove locking features from all egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
-----	--------	---	--	-----------



F-8	Egress	Storage was located all exit stairs of Building 1.	Remove all storage from exit stairs and egress paths.	Immediate
-----	--------	--	---	-----------





F-9 Egress

Sliding doors are provided at exit discharge of Building 1 and Shed 1.

Replace all sliding doors along the means of egress with side-hinged, swinging egress doors.

Within 1 month

If locks are required for security reasons, utilize special door locking features complying with NFPA 101.



F-10	Egress	Both interior exit stairs in Building 1 discharge inside the building at ground floor to storage areas.	Provide 2-hr fire-rated exit passageway leading directly outside (vestibules to separate any storage areas). Alternately, provide sprinkler protection for discharge floor in accordance with NFPA 13.	Within 6 months
F-11	Fire Protection	The older fire alarm system is antiquated, not a listed system, and does not provide alarm and notification features consistent with acceptable standards.	Remove the older fire alarm system and expand the newer system to provide coverage in accordance with NFPA 72.	Design within 4 months, install within 9 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	Fire Protection	Smoke detector placement of newly installed detectors was observed to be incorrect on the ground floor of Building 1 and Shed 1.	Install smoke detectors in accordance with NFPA 72.	Within 3 months



F-14	Fire Protection	The building is equipped with some 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.	Within 6 months
------	-----------------	---	---	-----------------



F-15	Egress Lighting	Lighted exit signage not provided on the second floor of Building 1.	Provide exit signs above all exits to the exterior and all doors to the exit stairs.	Within 1 month
------	-----------------	--	--	----------------



F-16 Egress Lighting

Based on the number and location of emergency lights observed in Building 1 and Shed 1, adequate illumination levels are not anticipated 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

Table 2. Findings And Recommendations - Building 2

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction.	<p>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.</p> <p>If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.</p>	Within 3 months





F-2	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies in exit stairwell.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level.	Within 3 months
			Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.	



F-3	Egress	Egress doors/gates with locking features are provided at building exits, exit stairs, along egress routes, and at exit discharge. 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
-----	--------	---	--	-----------



F-4	Egress	Storage was located in the exit stair number 3.	Remove all storage from exit stairs and egress paths.	Immediate
-----	--------	---	---	-----------



F-5 Egress

Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, exit discharge throughout factory.

Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors.

Within 1 month

If locks are required for security reasons, utilize special door locking features complying with NFPA 101.





F-6	Fire Protection	Inspection, testing, and maintenance records for the fire alarm system does not meet 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-7	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.	Within 6 months



F-8	Other	Pull stations, manual alarm activation button, fire extinguisher blocked.	Move storage and maintain unobstructed access to fire protection equipment.	Immediate
-----	-------	---	---	-----------



F-9	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes throughout the factory.	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
-----	-----------------	---	--	-----------------



Table 3. Findings And Recommendations - Building 3

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Areas used for storage are not separated by fire-rated construction both floors.	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.</p> <p>Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows:</p> <ul style="list-style-type: none"> - Maximum height of 2.4m and maximum area of 23m² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m² <p>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.</p>	Within 3 months



F-2	Fire Rated Construction	The exit stairs are not separated from work 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-3	Egress	Egress doors / gates with locking features are provided at building exits, exit stairs, along egress routes, exit discharge.	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





F-4 Egress

Storage was located in the exit stair both exits.

Remove all storage from exit stairs and egress paths.

Immediate





F-5	Egress	The width of egress aisles is less than 36-in.	Provide minimum aisle widths of 36-in.	Immediate
-----	--------	--	--	-----------



F-6	Egress	Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, exit discharge.	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
-----	--------	---	--	----------------




F-7	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.	Within 1 months
				
F-8	Fire Protection	Inspection, testing, and maintenance records for the fire alarm system does not meet NFPA.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months
F-9	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes both floors.	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



Table 4. Findings And Recommendations - Building 4

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The boiler/generator/transformer room (Sub Station 2) is not separated by fire-rated construction due to openings, non-rated doors, and penetrations.	Separate the Sub Station 2 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 exit stairs are not separated from work areas and other spaces on each floor by fire-rated construction.	<p>Provide minimum 1.5-hr fire rated doors, enclose the stairs in 2-hr fire rated construction, 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.</p> <p>If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.</p>	Within 3 months



F-3	Fire Rated Construction	Areas used for combustible storage on the ground floor are not separated by fire-rated construction and open to the factory floor.	Provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.4m and maximum area of 23m ² - If sprinkler protected: maximum height of 3.66m and maximum area of 93m ²	Within 3 months
			Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.	



F-4	Fire Rated Construction	Areas used for combustible storage on the first floor are not separated by fire-rated construction.	Provide dedicated storage rooms separation by minimum 1-hr fire-rated construction.	Within 3 months
-----	-------------------------	---	---	-----------------



F-5	Egress	Egress doors with locking features are provided at exit discharge of Building 4. All gates/doors were open and unlocked during the inspection.	Remove locking features from all egress doors. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
-----	--------	--	--	-----------

F-6	Egress	Sliding doors are provided at exit discharge on the ground floor of Building 4.	Replace all 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
-----	--------	---	--	----------------



F-7	Fire Protection	The older fire alarm system is antiquated, not a listed system, and does not provide alarm and notification features consistent with acceptable standards.	Remove the older fire alarm system and expand the newer system to provide coverage in accordance with NFPA 72.	Design within 4 months, install within 9 months
F-8	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-9	Fire Protection	The building is equipped with some 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.	Within 6 months



F-10	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes in Building 4.	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
------	-----------------	--	--	-----------------