

# **FIRE SAFETY INSPECTION REPORT**

**HANNAN KNITWEARS LIMITED**

**ACCORD ID: 12176**

**868, KOLMESSWAR (SHAHID SIDDIK ROAD),  
NATIONAL UNIVERSITY, DISTRICT- GAZIPUR.**

**OTHER FACTORIES: NONE**



**ACCORD**  
on Fire and Building Safety in Bangladesh

April 11, 2015

## **SUMMARY**

**Hannan Knitwears Limited was surveyed for fire safety on 4/11/2015 by Jensen Hughes. 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**

<b>No.</b>	<b>Category</b>	<b>Finding</b>	<b>Recommendation</b>	<b>Remediation Timeframe</b>
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F-1	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 for buildings that are 4 or more stories. 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.  Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets ACCORD standard 6.8.3.1.	Within 3 months
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F-2	Fire Rated Construction	Electrical panels were located in the exit stair enclosure.	Remove and re-locate all electrical panels from exit stair enclosures.	Within 3 months
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F-3	Fire Rated Construction	Storage room discharges directly into exit stair enclosures.	Openings from exit enclosure to storage spaces shall be provided with a vestibule with fire rated construction and openings.  Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storage room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
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F-4	Fire Rated Construction	Hazardous materials / flammable liquid storage area is not separated by fire-rated construction in the egress court.	Separate the hazardous materials / flammable liquid storage room by a minimum 2-hr fire-rated construction. Seal and protect all openings to maintain the required fire separations.	Within 3 months
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F-5	Fire Rated Construction	The industrial dryers are not separated by fire-rated construction on the ground floor.	Separate the industrial dryer area by a minimum 2-hr fire-rated construction. Seal and protect all openings to maintain the required fire separations. Provide proper ventilation and consult with a qualified engineer.	Within 3 months
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F-6	Fire Rated Construction	The boiler room is not separated by fire-rated construction due to opening and non-rated door on the ground floor.	Separate the boiler room by a minimum 1-hr fire rated construction for non-high rise. Seal and protect all openings to maintain the required fire separations. When located to the exterior of a building, 3m (10 ft.) separation is required. Provide proper ventilation and consult a qualified engineer.	Within 3 months
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F-7	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire-rated construction on all floors except first floor.	Provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) and maximum area of 23m <sup>2</sup> (250 ft <sup>2</sup> ) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m <sup>2</sup> (305ft <sup>2</sup> )  Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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F-8	Fire Rated Construction	Rooms used for combustible storage are not separated by fire-rated construction 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 2.45m (8ft.) and maximum area of 23m <sup>2</sup> (250 ft <sup>2</sup> ) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m <sup>2</sup> (305ft <sup>2</sup> )  Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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F-9	Egress	Building did not have stair designation signs at exit stairs. Building did not have occupant load signs on the floors.	Provide stair designation signs and occupant load signs at required locations.	Immediately
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F-10	Egress	Exit capacity (388) is not adequate for the occupant load (725) on the roof top.	Reduce occupant load immediately to not more than available exit capacity (388). Provide additional exits in the future to increase exit capacity.	Immediately
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F-11	Egress	Egress doors with locking features are provided along egress routes and exit stairs. Egress gates with locking features are provided at exit stairs. All doors were not 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 and ACCORD standard 6.8.2.	Immediately
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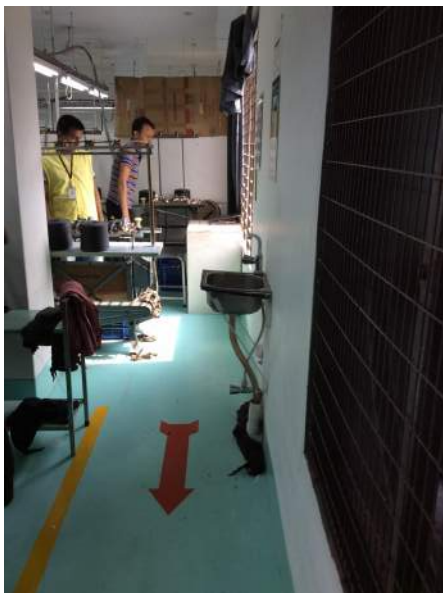
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F-12	Egress	Storage was located in the east exit stair on the ground floor.	Remove all storage from exit stairs and egress paths.	Immediately
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F-13	Egress	Obstructions were located in the egress paths on all floors except first floor and roof top.	Keep egress paths and stairs clear of storage.	Immediately
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F-14 Egress

Collapsible gates are used at building exits and exit stairs. Sliding doors are provided at exit stairs, along egress routes and exit discharge.

Replace all gates and sliding doors along the means of egress with side-hinged, swinging egress doors in accordance with ACCORD standard 6.8.1.

Within 1 month





F-15 Egress

The width of egress aisles is less than 36-in. on all floors except first floor and roof top.

Provide minimum aisle widths of 36-in.

Within 3 months





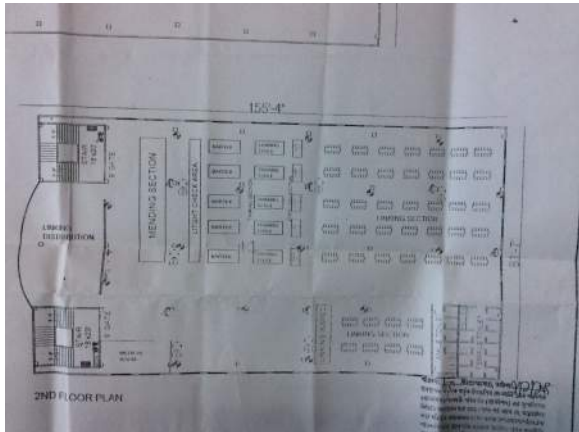
F-16 Egress

Common path of egress travel exceeds limit on all floors.

Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 23 m (75 ft.) or 30 m (100 ft.) when complete sprinkler protection is provided.

Within 3 months





F-17 Egress

Handrails are not provided on both sides of the exit stairs.

Provide handrails on both sides of the exit stairs. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.)

Within 3 months





F-18 Egress

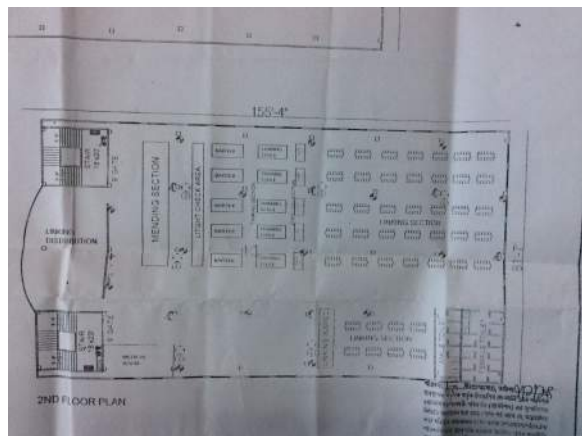
The number of required exits is not present in factory on the roof top.

The number of means of egress from any floor or story shall not be at less than 2 unless it meets ACCORD standard 6.6.2. When load exceeds 500 occupants the number of means of egress shall be at least 3. When load exceeds 1000 occupants the number of means of egress shall be at least 4.

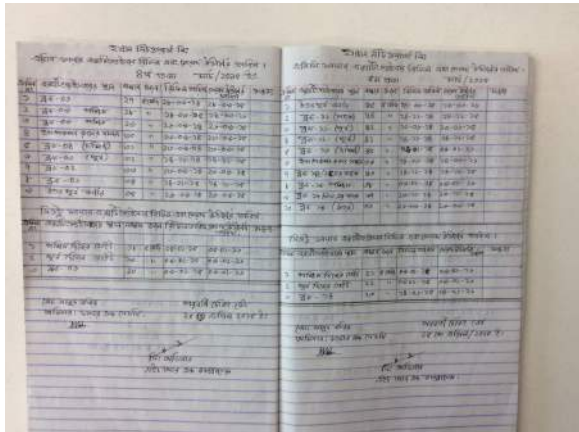
Within 6 months



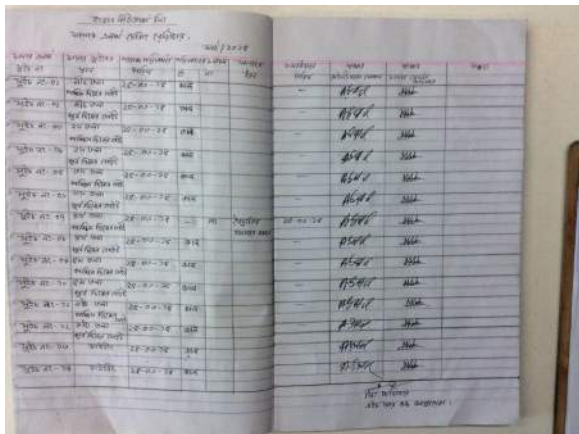
F-19	Egress	The exits are not remotely located from each other such that a single fire event could compromise both exits on all floors.	Provide additional exit to meet ACCORD standard 6.6.6.	Within 6 months
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F-20	Fire Protection	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records on-site, in accordance with NFPA 10.	Within 3 months
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F-21	Fire Protection	Inspection, testing and maintenance for 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
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F-22	Fire Protection	Fire department connection is not provided.	Provide fire department connection in accordance with ACCORD standard 5.5.4.	Within 3 months
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F-23	Fire Protection	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 14.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 14.	Within 3 months
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F-24	Fire Protection	Visible notification was not provided for the building in accordance with NFPA 72.	Provide visible notification for the building in accordance with NFPA 72.	Within 3 months
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F-25	Fire Protection	The required standpipe system is not installed in accordance with the ACCORD standard.	Install a new standpipe system in accordance with ACCORD standard 5.4 and NFPA 14.	Within 6 months
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A class III system shall be installed in buildings with the highest occupiable floor 10 m (33 ft.) above grade or more. A class I system shall be permitted in buildings protected throughout by an approved automatic sprinkler system.



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F-26	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.	Remove single-station smoke alarms. Provide automatic smoke detection throughout the building, tied into the fire alarm system, in accordance with NFPA 72.	Within 9 months
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F-27	Egress Lighting	Exit signage not illuminated above the door to the east exit stair on the roof top.	Regularly inspect all exit signage and replace/install lights as needed to illuminate signs. The source of illumination shall provide not less than 50 lux at the illuminated surface with a contrast of not less than 0.5. Approved self luminous signs which provide evenly illuminated letters having a minimum luminance of 0.2 cd/m <sup>2</sup> may also be used.	Within 1 month
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F-28	Egress Lighting	Exit signage was not provided above door to the west exit stair on the roof top.	Provide exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious.	Within 1 month
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