

FIRE SAFETY INSPECTION REPORT

**BARNALI TEXTILE & PRINTING
INDUSTRIES (PVT) LTD
285, (147/3 NEW) HAZARIBAG, GODNAIL**

OTHER FACTORIES: NONE



ACCORD
on Fire and Building Safety in Bangladesh

April 7, 2014

SUMMARY

Barnali Textile & Printing Industries (pvt) Ltd was surveyed for fire safety on 4/7/2014 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 - 3 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 - Barnali Textile and Printing Industries (pvt) Ltd

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Hazardous materials and flammable liquid storage area is not separated by fire-rated construction (openings, non-rated doors, penetrations). At time of inspection, above storage was present on the ground floor discharge area. Factory management stated this will be moved into new Building 2 on completion.	Separate the hazardous materials / flammable liquid 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 room is not separated by fire-rated construction (openings, non-rated doors, penetrations) located on the ground floors of building 1 and 2.	Separate the generator room by a minimum 2-hr fire-rated construction. Seal all unprotected openings to maintain the required fire separations	Within 3 months
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F-3	Fire Rated Construction	Areas used for combustible storage are not separated by fire-rated construction on the ground floor.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.	Within 3 months
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F-4	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
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F-5	Fire Rated Construction	The exit discharge path serving the building rear exit is less than 10 ft wide and is not separated from the building interior.	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft., to provide a minimum 1-hr fire separation. Alternatively, provide a second remote discharge path to the public way (only include this if feasible).	Within 6 months
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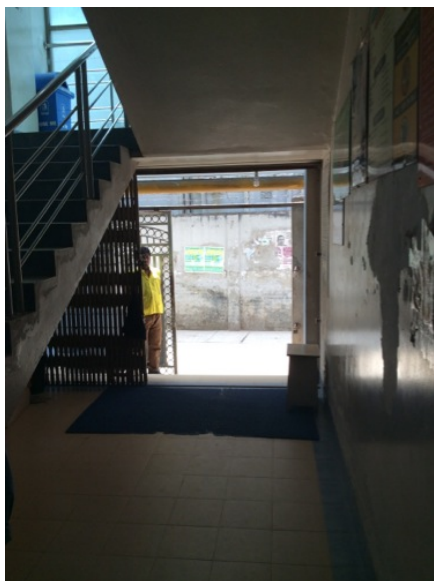
F-6	Egress	Egress doors and gates with locking features are provided at building exits, exit stairs, along egress routes and main exit discharge. All gates and doors were open and unlocked during the inspection.	Remove locking features from all egress doors and gates. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
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F-7	Egress	Storage was located in the exit stair such as trash cans at all exit stairwell landings.	Remove all storage from exit stairs and egress paths.	Immediate
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F-8	Egress	Collapsible gates and sliding doors are provided at building exits, exit stairs, along egress routes and main 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
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F-9	Egress	Egress door serving 50 or more occupants does not swing in the direction of egress travel at the sample section on the fourth floor.	Modify the egress door to swing in the direction of egress travel.	Within 3 months
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F-10	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-11	Fire Protection	Inspection, testing, and maintenance records for the fire alarm system were not in accordance with NFPA 72 requirements.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Within 3 months
F-12	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.	Provide automatic smoke detection throughout the building in accordance with NFPA 72.	Within 6 months



F-13	Egress Lighting	Inspection, testing, and maintenance records for the emergency lighting system were not in accordance with the ACCORD standards.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 months
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Table 2. Findings And Recommendations - Building 2 (Printing / Dining)

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Areas used for combustible storage on the ground and first floor 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





F-2	Fire Rated Construction	The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction. Steel gated sliding doors are present on each floor exit.	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-3	Fire Rated Construction	The generator and transformer room is not separated by fire-rated construction (openings, non-rated doors, penetrations) on the ground floor, open to main exit discharge routes.	Separate the generator transformer 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-4	Fire Rated Construction	The exit discharge path serving the rear exit exit is less than 10 ft wide and is not separated from the building interior.	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft., to provide a minimum 1-hr fire separation.	Within 6 months
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Alternatively, provide a second remote discharge path to the public way (only include this if feasible).



F-5	Egress	Egress doors gates with locking features are provided at building exits and main exit discharge. All gates and 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
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F-6	Egress	Storage was located in the egress paths exiting the ground floor yarn store.	Keep egress paths and stairs clear of storage.	Immediate
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F-7	Egress	Storage was located in the exit stairs such as trash cans and loose combustable storage.	Remove all storage from exit stairs and egress paths.	Immediate
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F-8	Egress	No evacuation plans present at exit stairwells, floor plate or floor plate entrances in the factory building.	Insert accurate evacuation plans on each floor plate entrance.	Immediate
F-9	Egress	Collapsible gates sliding doors are provided at building exits and main exit discharge points throughout the factory 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



F-10	Egress	The width of egress aisles is less than 36-in on the ground floor storage area.	Provide minimum aisle widths of 36-in.	Within 3 months
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F-11	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-12	Fire Protection	Inspection, testing, and maintenance records for the fire alarm system were not in accordance with NFPA 72 requirements.	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	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.	Provide automatic smoke detection throughout the building in accordance with NFPA 72.	Within 6 months



F-14	Egress Lighting	Inspection, testing, and maintenance records for the emergency lighting system were not in accordance with ACCORD requirements.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 months
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Table 3. Findings And Recommendations - Shed 1 (Dyeing Shed)

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	The boiler room is open and not separated by fire-rated construction (openings, non-rated doors, penetrations). All present throughout boiler and generator location.	Separate the boiler 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	Egress	Roller shutters with locking features are provided at building exits. 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-3	Egress	No Evacuation Plans noted at building exits.	Insert accurate evacuation plans at all building floor plate exits.	Immediate
F-4	Egress	Roller shutters are provided at building exits.	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-5	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
F-6	Fire Protection	Inspection, testing, and maintenance records for the fire alarm system were 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-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.	Provide automatic smoke detection throughout the building in accordance with NFPA 72.	Within 6 months



F-8	Egress Lighting	Inspection, testing, and maintenance records for the emergency lighting system were not available.	Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.	Within 3 months
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