

FIRE SAFETY INSPECTION REPORT

MUAZUDDIN TEXTILE LTD.

**PLOT # 235/236, EAST CHANDURA, SHIFIPUR,
KALIAKOR, GAZIPUR**



ACCORD
on Fire and Building Safety in Bangladesh

March 18, 2014

SUMMARY

Muazuddin Textile Ltd. was surveyed for fire safety on 3/18/2014 by Hughes Associates, Inc. This summary identifies the major deficiencies that were identified during the inspection.

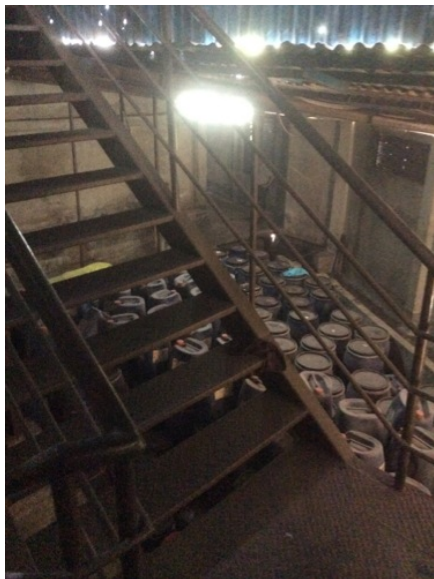
The purpose of this survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the Accord. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The 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	<p>Hazardous materials and flammable liquid storage area is not separated by fire-rated construction (openings, non-rated doors, penetrations).</p> <p>Base of stairwell on North Side of building.</p>	<p>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.</p>	<p>Within 3 months</p>



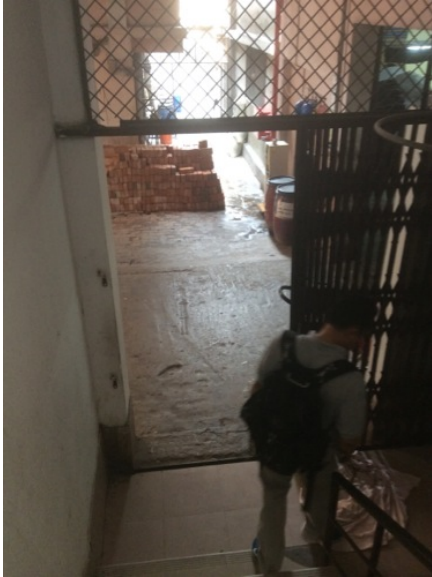
F-2	Fire Rated Construction	<p>The boiler / generator / transformer room is not separated by fire-rated construction (openings, non-rated doors, penetrations). They are in a separate building but that building is connected to the main factory building.</p>	<p>Separate the boiler / generator / transformer room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations</p>	<p>Within 3 months</p>
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F-3	Fire Rated Construction	<p>Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. There were holes in the ceilings of all floors.</p>	<p>Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level. Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.</p>	<p>Within 3 months</p>
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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	Areas used for combustible storage throughout the factory are not separated by fire-rated construction.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.	Within 3 months
			<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>	



F-6	Egress	<p>Egress doors / gates with locking features are provided at building exits, exit stairs, along egress routes, exit discharge.</p> <p>Locations:</p> <p>All Exits</p> <p>Doors were unlocked at time of inspection.</p>	<p>Remove locking features from all egress doors / gates.</p> <p>If locks are required for security reasons, utilize special door locking features complying with NFPA 101.</p>	Immediate
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F-7 Egress

Storage was located in the exit stairs.

Remove all storage from exit stairs and egress paths.

Immediate



F-8 Egress

Storage was located in the egress path.

Keep egress paths and stairs clear of storage.

Immediate



F-9 Egress

Exit stair door does not swing in the direction of egress travel.

Modify the egress door to swing in the direction of egress travel.

Within 1 month

Locations:
All exits



F-10	Egress	Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, and exit discharge.	Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors.	Within 1 month
		Locations:	If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	
		All exits		



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	The high-rise building has an occupied floor greater than 23m (75 ft) and is not provided with automatic sprinkler protection. The large occupant loads, heavy fuel loading, and anticipated extended egress times warrant sprinkler protection.	Provide automatic sprinkler protection throughout the building in accordance with NFPA 13.	Design within 6 months, install within 12 months
F-13	Fire Protection	The building was not equipped with automatic smoke detection.	Provide the single-station smoke alarms with automatic smoke detectors tied into the fire alarm system in accordance with NFPA 72. 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 month
F-14	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-15	Fire Protection	The fire alarm system does not appear to provide adequate audible notification coverage. All Floors.	Provide additional notification appliances such that the fire alarm system is audible throughout the building in accordance with NFPA 72.	Within 6 months



F-16 Egress Lighting

Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.

All areas

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



