

FIRE SAFETY INSPECTION REPORT

MASTRADE

**HELAL COMPLEX (4TH-6TH FLOOR), PLOT # 72
BYPASS BISWA ROAD, MOGARTHAT, GAZIPUR**

**OTHER FACTORIES: RED FURY, LAZIM APPAREL,
NEEDLE TOUCH, ALL IN KOREA**



ACCORD
on Fire and Building Safety in Bangladesh

June 18, 2014

SUMMARY

Mastrade was surveyed for fire safety on 6/18/2014 by Hughes Associates, Inc. This summary identifies the major deficiencies that were identified during the inspection.

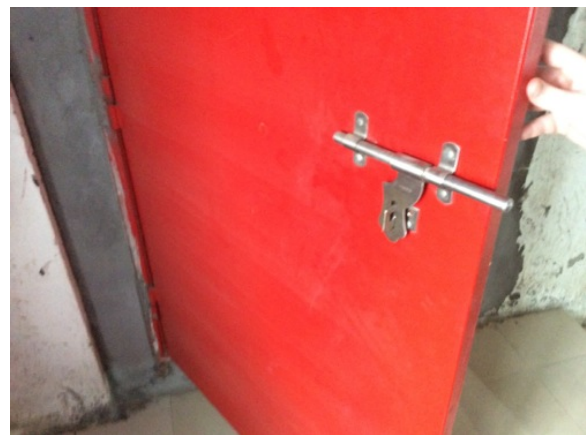
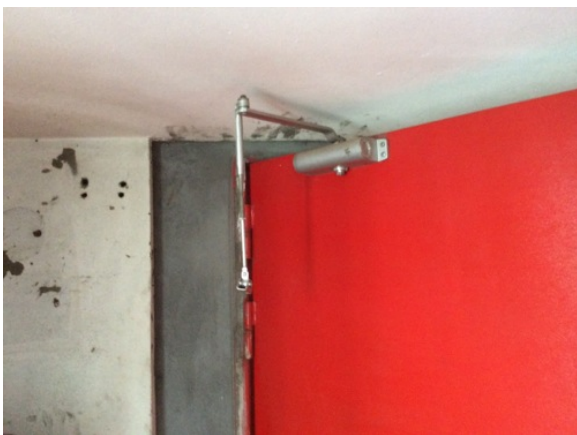
The purpose of this survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the Accord. The scope of this initial fire safety inspection was limited to the review and identification of major fire safety issues. The 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	The exit stairs are not separated from work areas on each floor by fire-rated construction. Swing doors provided do not have labels for listed assemblies, some doors do not have operable closers, and some have bolt locks. Location: At all floors.	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-2	Fire Rated Construction	Areas used for combustible storage are not separated by fire-rated construction. Location: All factory floors.	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-3	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Equipment cables penetrating floor in 4th floor IPS room.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level.	Within 3 months
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F-4	Fire Rated Construction	The boiler, generator, transformer rooms are not separated by fire-rated construction openings and non-rated. Location: Along the northwest exit stair discharge along the west side of the main building.	Separate the boiler, generator, and transformer rooms 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-5	Fire Rated Construction	The exit discharge path serving the northwest stair discharge exits past unprotected openings in the generator, transformer, and boiler 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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F-6	Egress	Egress doors / gates with locking features are provided at exit stairs and along egress routes. There were locking sliding gates, locking sliding doors, and bolts on swinging doors. There was a cage and door in the stairs at the mid landing below the 4th floor. All gates and doors were open and unlocked during the inspection. Location: At all factory floors.	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.	Remove all storage from exit stairs and egress paths.	Immediate
		Location: Storage in northwest and northeast stair on 6th floor. Storage under southeast stair at ground floor. Storage in northeast stair at ground floor and in adjacent non-factory building without separation.		





F-8	Egress	Collapsible gates / sliding doors are provided at exit stairs and along egress routes	Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors.	Within 1 month
		There were sliding gates and sliding doors that slide over swinging doors at exit stairs. There was a cage and door located in the stairs at the mid landing below the 4th floor.	If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	
		Location: At all factory floors.		



F-9

Egress

Handrails are not provided in the exit stair.

Provide handrails on at least one side of exit stair.

Within 3 months

Location: At the ground level of the northwest stair.



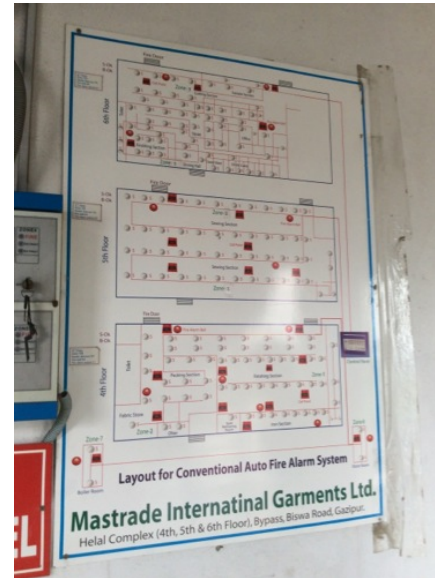
F-10	Egress	The width of egress aisles is less than 36-in.	Provide minimum aisle widths of 36-in.	Within 3 months
		Two aisles on 5th and 6th floor factory floors were less than required width.		



F-11	Egress	The day-care room does not have direct access to an exit stair. Day-care is located along the west wall of the 6th floor and is not adjacent to the northwest stair (closest stair).	Provide a minimum 2-hr fire-rated exit corridor between the day-care room and exit stair. or Relocate day-care room to ground floor with maximum travel distance of 9m (30 ft).	Within 3 months
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F-12	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-13	Fire Protection	Inspection, testing, and maintenance 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-14	Egress Lighting	Exit sign provided is improper signage. Exit sign directs occupants into storage cage instead of around it to the northeast stair on the 4th floor.	Provide exit signs correctly to direct occupants to the exit stair, not through the storage cage.	Within 1 month



F-15	Egress Lighting	Inspection, testing, and maintenance for the emergency lighting system were 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
F-16	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Warehouse on 4th floor does not have any lighting fixtures.	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

