

# **FIRE SAFETY INSPECTION REPORT**

**MURAD APPARELS LTD.  
SOUTH GOURIPUR, ASHULIA, SAVAR, DHAKA**

**OTHER FACTORIES: NONE**



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



September 3, 2014

## **SUMMARY**

**Murad Apparels Ltd. was surveyed for fire safety on 9/3/2014 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
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F-1	Fire Rated Construction	Two (2) unsealed penetrations from the utility room are located in the northeast exit stair enclosure on the ground floor.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.	Within 3 months
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F-2	Fire Rated Construction	Unsealed penetrations are located in the fire-rated floor/ceiling assemblies. Specifically boiler piping from the utility room to the first floor, east office room and an electrical riser adjacent to the northeast exit stair.	Provide a minimum 2-hr fire-rated shaft for the electrical riser to separate the utility riser from each floor level.  Seal the boiler piping penetrations in the floor/ceiling assembly to maintain the fire separation.	Within 3 months
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F-3	Fire Rated Construction	<p>Rooms used for combustible storage were not separated by fire-rated construction. Specifically, the building had dedicated storage rooms on the ground floor (bonded warehouse, finished goods storage).</p>	<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"> <li>- Maximum height of 2.4m and maximum area of 23m<sup>2</sup></li> <li>- If sprinkler protected: maximum height of 3.66m and maximum area of 93m<sup>2</sup></li> </ul> <p>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.</p>	Within 3 months
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F-4	Fire Rated Construction	Areas used for combustible storage, open to the factory floor, were not separated by fire-rated construction. Specifically, storage was open to the factory floor on the ground floor.	<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"> <li>- Maximum height of 2.4m and maximum area of 23m<sup>2</sup></li> <li>- If sprinkler protected: maximum height of 3.66m and maximum area of 93m<sup>2</sup></li> </ul> <p>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m.</p>	Within 3 months
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F-5	Fire Rated Construction	<p>The ground floor boiler, generator and transformer room (utility room) is not separated by fire-rated construction and open to the factory floor due to openings, a non-rated door and penetrations.</p> <p>The boilers, generators and transformer were not separated from each other.</p>	<p>Separate the utility room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.</p> <p>Separate all utilities from other utilities.</p>	Within 3 months
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F-6	Fire Rated Construction	The south, exterior exit stair had unprotected openings to the building interior.	Seal the unprotected openings adjacent to and extending at a distance of up to 10 ft. beyond the ends of the south, exterior exit stair.	Within 3 months
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F-7	Fire Rated Construction	The exit discharge path serving the northeast exit stair (along the north side of the building) and the exit discharge path serving the south exit from the ground floor utility room (along the east side of the building) are less than 10 ft. wide, 7 ft. and 6 ft., respectively, and not separated from the building interior.	Seal all penetrations and openings to the interior of the building along the discharge paths, up to a height of 10 ft., to provide a minimum 1-hr fire separation.  For the northeast exit stair, alternatively provide a second remote discharge path to the public way.	Within 6 months
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F-8	Egress	Storage was located in the west and northeast exit stairs on the ground floor and in the northeast exit stair on the first floor.	Remove all storage from exit stairs and egress paths.	Immediate
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F-9	Egress	Egress doors and gates with locking features are provided at building exits, exit stairs and along egress routes. 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-10	Egress	The exit capacity of the Building 2 dining/canteen room (343) is not adequate for the maximum occupant load (500).	Immediately reduce the occupant load to not more than available exit capacity.  If an increased occupant load is required in the future, provide an additional exit stair (s).	Immediate
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F-11	Egress	Collapsible gates are provided at building exits, exit stairs and along egress routes.	Replace all gates 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-12	Egress	The west exit stair was unenclosed on the first floor and open to the factory floor.	Enclose all exit stairs in 2-hr fire-rated construction on all floors.	Within 3 months
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F-13	Fire Protection	The conventional 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-14	Fire Protection	No records of inspection, testing, and maintenance of the fire alarm system were provided during the inspection.	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 manual activation points are located in the middle of the factory floor instead of adjacent to the exit stair entrances.	Relocate the fire alarm manual activation points adjacent to the exit stair entrances.	Within 6 months



F-16	Fire Protection	<p>A functional test of the fire alarm system was performed during the inspection. The fire alarm was not audible in the utility room and based off observation, it does not appear to provide adequate audible notification coverage throughout other factory areas.</p>	<p>Provide additional notification appliances such that the fire alarm system is audible throughout the building in accordance with NFPA 72.</p>	<p>Within 6 months</p>
F-17	Egress Lighting	<p>The exit signage to the south exterior exit stair was not illuminated (burned out, broken, etc.).</p> <p>The placement of this sign was in a location such that it was not readily visible from the factory floor.</p>	<p>Regularly inspect all exit signage and replace/install lights as needed to illuminate signs.</p> <p>Relocate the exit signage such that it is readily visible from the factory floor.</p>	<p>Within 1 month</p>



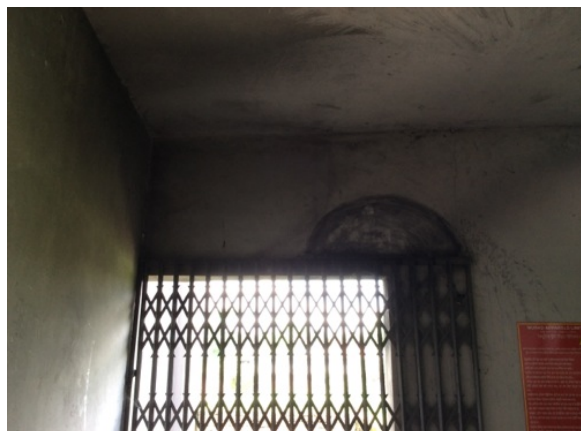
F-18 Egress Lighting

Exit signs were not provided at all exits. Specifically, one (1) to each of the first floor northeast and southeast exit stairs, two (2) from the east, first floor office room, one (1) from the ground floor bonded warehouse and two (2) from the east, ground floor utility room.

Provide exit signs above all exits to the exterior and all doors to the exit stairs.

Within 1 month





F-19	Egress Lighting	<p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along all egress routes throughout the building.</p> <p>Also, emergency lighting was not observed in all exit stairs and the ground floor utility room and bonded warehouse.</p>	<p>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.</p>	Within 3 months
F-20	Egress Lighting	<p>No records of inspection, testing, and maintenance of the emergency lighting system were provided during the inspection.</p>	<p>Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site.</p>	Within 3 months