

FIRE SAFETY INSPECTION REPORT

**ARMANA APPAREL LTD.
232-234, TEJGAON INDUSTRIAL AREA**

**OTHER FACTORIES: ARMANA FASHION LTD AND
SHANTAL WASHING LTD**



ACCORD
on Fire and Building Safety in Bangladesh

April 17, 2014

SUMMARY

Armana Apparel Ltd. was surveyed for fire safety on 4/17/2014 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 boiler room on the Fourth Floor & generator room ground floor is not separated by fire-rated construction (openings, non-rated doors, penetrations).	Separate the boiler & generator room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations	Within 3 months

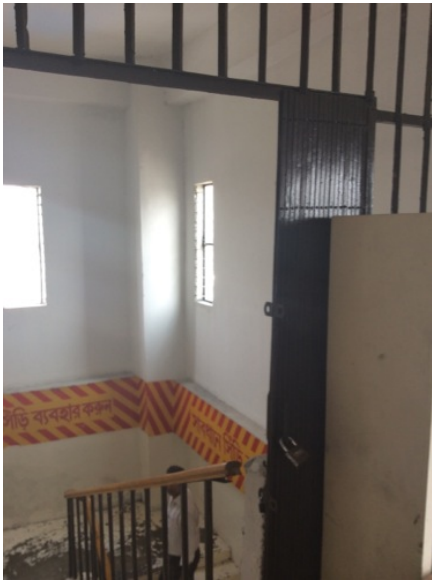


F-2	Fire Rated Construction	Areas used for combustible storage are not separated by fire-rated construction. Many of the floors have finished goods open to production processing.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. Where separate storage rooms are not feasible, 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	The exit stairs are not separated from work areas, 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-4	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level.	Within 3 months
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Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.





F-5	Egress	Egress doors / gates with locking features are provided at building exits, exit stairs, along egress routes, exit discharge. All sliding gates were 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 exit stair on a number of floors throughout the factory	Remove all storage from exit stairs and egress paths.	Immediate
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F-7	Egress	Storage was located in the egress paths between stair corridors and office spaces.	Keep egress paths and stairs clear of storage.	Immediate
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F-8	Egress	Exit capacity is not adequate for the occupant load on floors 7 and 9. Exit capacity is 323 occupants. Floor 7 has 366 occupants. Floor 9 has 375 occupants.	Reduce occupant load to not more than available exit capacity immediately. In the future, if a greater occupant load is desired, provide additional exits.	Immediate
F-9	Egress	Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, exit discharge on all floors.	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 a number of floors due to structural column layout and machinery placement on floor plan.	Provide minimum aisle widths of 36-in.	Within 3 months
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F-11	Egress	The day-care room on the fourth floor does not have direct access to an exit stair.	Provide a minimum 2-hr fire-rated exit corridor between the day-care room and exit stair.	Within 3 months
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F-12	Egress	The east most facing exit stair discharges inside the building at ground level with a 25ft unprotected corridor before exiting the main building.	Provide 2-hr fire-rated exit passageway leading directly outside (vestibules to separate any storage areas).	Within 6 months
F-13	Fire Protection	The building height was noted to be 27.54m therefore 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-14	Fire Protection	Inspection, testing, and maintenance of 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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