

FIRE SAFETY INSPECTION REPORT

MEGHNA KNIT COMPOSITE LTD GILARCHALA, SREEPUR, GAZIPUR



April 8, 2014

SUMMARY

Meghna Knit Composite Ltd was surveyed for fire safety on 4/8/2014 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 building has unprotected openings less than 10 ft from the adjacent Dyeing section.	Separate the boiler building exterior walls with 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. Locations include Levels Ground, 1, 2, 3, 4, and 5.	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 north exit stairs are not separated from each floor by fire-rated construction. The south exit stairs are separated by red metal doors for which the factory does not currently have certification demonstrating the doors to be fire doors.	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.	Within 3 months
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If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.



F-4	Fire Rated Construction	Hazardous materials / flammable liquid storage areas are not separated by fire-rated construction (openings, non-rated doors, penetrations). Locations: -Level 1 Storage Area -Ground Floor Dyeing Section Storage Area -Ground Floor Storage underneath Softeners -Hydrose storage adjacent to Dyeing Section exit access	Separate the hazardous materials / flammable liquid storage in rooms having 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	Elevator shafts (both current and future) have unprotected openings to adjacent stairwells.	Separate the elevator shaft ways and machine rooms with 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-6	Fire Rated Construction	Utility shafts have unprotected openings to factory floors.	Separate the utility shafts with 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-7	Fire Rated Construction	Unprotected openings are located between Level 1 knitting and Ground floor Dyeing section including a chute for material transfer and vents.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation. Remove chute.	Within 3 months
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F-8	Egress	Egress doors / gates with locking features are provided at building exits, exit stairs, along paths of egress, and means of exit discharge. Most gates/doors within the factory were open and unlocked during the inspection.	Remove locking features from all egress doors / gates that serve the high-rise. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Immediate
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F-9	Egress	Collapsible gates / sliding doors are provided at building exits, exit stairs, along egress routes, and means of exit 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.	Immediate
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F-10	Egress	Exit capacity of 706 persons is not adequate for the occupant load of Levels 3 (742 people) and 4 (746 people).	The building owner should reduce occupant load to not more than 706 persons per floor or provide additional exits.	Within 3 months
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F-11	Egress	Storage and assorted combustibles were located in the exit stairs including trash cans, a prayer room, and garment materials.	Remove all storage from exit stairs and egress paths.	Within 3 months
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F-12	Egress	The northwest and northeast exit stairs discharge through vestibules that also serve as entrances to the Ground Floor area of the building.	Provide 2-hr fire-rated exit passageways from each stairwell leading directly outside. Exit passageway should be separate from Dyeing area entrance.	Within 6 months
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F-13	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-14	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-15	Fire Protection	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-16	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.	Replace the single-station smoke alarms with automatic smoke detectors tied into the fire alarm system. 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 6 months



F-17	Fire Protection	The fire alarm system does not appear to provide adequate audible notification coverage based upon functional test performed on Levels 2 and 3.	Provide additional notification appliances such that the fire alarm system is audible throughout the building in accordance with NFPA 72.	Within 6 months
F-18	Egress Lighting	Directional exit signs on all levels typically point only to the northwest stairwell.	Provide directional exit signage to direct occupants to the closest available exit.	Within 3 months