

FIRE SAFETY INSPECTION REPORT

KNIT RADIX LIMITED

ACCORD ID: 11974

Shasongaon, Enayetnagar, Fatulla (23.625139, 90.470706).

Other Factories: None



Inspected By: Md. Shabbir Hossain & Pantha Pallob Das
Date: 09 January, 2017

Fire Safety Inspection Report

Factory Name: Knit Radix Limited

Summary

Knit Radix Limited complex was surveyed for fire safety on 09/01/2017 by the Accord Inspection Team. The purpose of the 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.



Findings & Recommendations :

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:

Sl No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	The generators and compressors are neither internally nor entirely fire separated by fire rated construction due to openings, non-rated doors, and penetrations in utility building (south-east corner of main building).	Separate the generator and compressor room by minimum 2-hr fire rated construction with 1.5-hr opening protective assemblies like fire rated door. When located to the exterior of a building, 3m (10 ft.) separation is required. Provide proper ventilation and consult a qualified engineer.	Within 3 months





2	Fire Rated Construction	The boiler room on 3rd floor of main building is not fire separated by fire rated construction barrier.	Separate the boiler room by minimum 2-hr fire rated construction with 1.5-hr opening protective assemblies like fire rated door. When located to the exterior of a building, 3m (10 ft.) separation is required. Provide proper ventilation and consult a qualified engineer.	Within 3 months
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3	Fire Rated Construction	<p>The substation room, ST meter room and gas meter room on ground floor is not fire separated by fire rated construction due to unprotected openings and penetrations.</p>	<p>Separate the substation, gas meter and ST meter room by minimum 2-hr fire rated construction with 1.5-hr opening protective assemblies like fire rated door. When located to the exterior of a building, 3m (10 ft.) separation is required. Provide proper ventilation and consult a qualified engineer.</p>	<p>Within 3 months</p>
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4	Fire Rated Construction	<p>Rooms used for combustible storage are not separated by fire rated construction.</p> <p>(Bonded warehouse-1&2 on ground floor and finished fabrics store on 6th floor).</p>	<p>Separate the dedicated storage rooms by minimum 1-hr fire-rated construction. Provide 0.75 hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction.</p>	Within 3 months
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5	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor by fire rated construction due to unprotected door openings.	<p>The exit stair enclosure shall be provided with a minimum 1-hr fire resistance rating for buildings with 3 or fewer stories and a minimum of 2- hr. fire resistance rating for buildings 4 or more stories.</p> <p>Provide 0.75 hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated fire rated barrier construction for building with 3 or fewer stories. Provide 1.5 hr. fire rated door and seal all penetrations and openings by 2 hr. fire rated fire rated barrier construction for building with 4 or more stories.</p> <p>Provide a fire-resistive rated assembly between the exterior exit stairs and the building up to 10 ft. beyond the end of the stair to achieve the required separation. The rated assembly shall be approved and/or designed by a qualified fire protection engineer.</p> <p>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.</p>	Within 3 months
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6	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. (BUS BAR penetration on north-east corner).	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation.	Within 3 months
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7	Fire Rated Construction	<p>The dining area is not separated from adjacent floor area by fire rated construction.</p> <p>Location: 6th floor</p>	<p>Separate the dining area by minimum 3-hr fire-rated construction having a direct access to exit stair. Sealed/or protected all openings to maintain the required fire separations.</p>	<p>Within 3 months</p>
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8	Egress	<p>Non-compliant exit doors installed in various location of the buildings. (Sliding door available in the north-east corner exit discharge position, collapsible door on 2nd floor's office and steel rolling down type doors on warehouses).</p>	<p>Replace all non-compliant exit door (collapsible gates/ sliding doors/ rolling shutter) along the means of egress with side-hinged, swinging egress doors.</p> <p>If locks are required for security reasons, utilize specialized door locking features complying with NFPA101.</p>	<p>Within 1 month</p>
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9	Egress	Egress doors/gates with locking features not complying with NFPA101 are provided at north-east corner exit discharge position, 2nd floor's office and warehouses on ground floor and sample section on 2nd floor.	Remove locking features from all egress doors/gates. If locks are required for security reasons, utilize specialized door locking features complying with NFPA101.	Immediate
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10	Egress	The egress for south-east stair has interrupted by obstruction (manual fire fighting equipment).	Remove storage from the exit stairs and egress path.	Immediate
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11	Egress	The day-care room is located on the 2nd floor of the building which is violation of ACCORD Standard- 3.4.2.1.1	Day-care shall be located on the ground floor with a maximum travel distance of 9 m (30 ft) or may be located one story above the level of exit discharge where direct access to an exit enclosure is provided.	Within 3 months
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12	Egress	Handrails are not provided on both sides of the exit stairs.	Provide handrails on both sides of the exit stair. New handrails shall have a minimum height of 865 mm (34 in.) and a maximum height of 965 mm (38 in.) as measured from the leading edge of the tread. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.)	Within 3 months
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13	Egress	The evacuation map does not match with the existing floor plan	The evacuation map shall be as built and shall be posted inside of floor near each exit of each floor	Within 3 months
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14	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes and at exit stairs on all floors of the main building.	Test the emergency lighting system on each floor and provide additional emergency fixtures to supply adequate illumination along the means of egress. Provide a minimum illumination of 10 lux at the floor level within exit stairs and along exit discharge paths and a minimum 2.5 lux along exit access aisles.	Within 3 months
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15	Egress Lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: All floors of the main building.	Illuminated directional signs shall be provided where there is a change in the direction for the path of travel and the direction to an exit is not obvious.	Within 3 months
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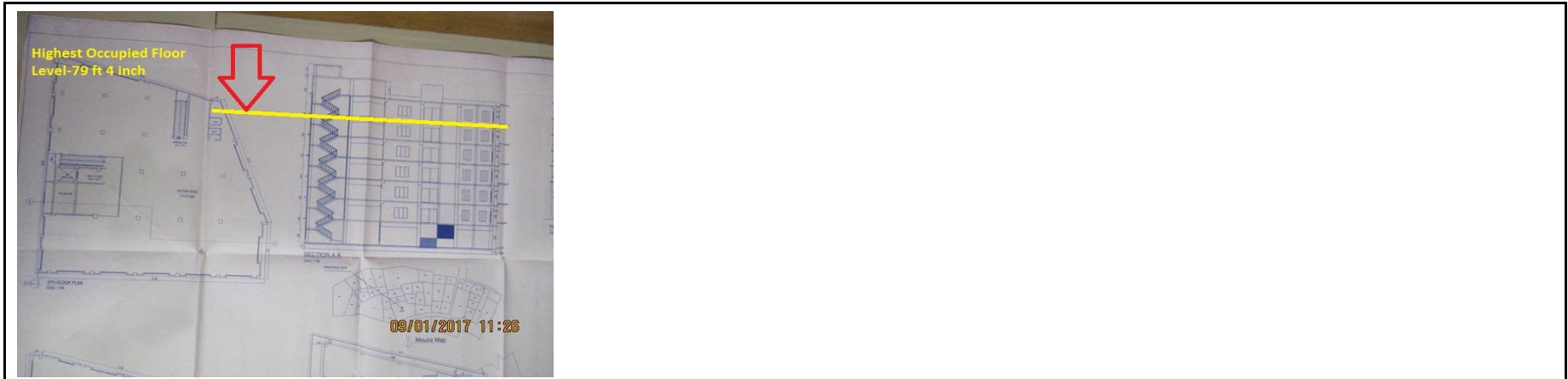


16	Fire Detection and Alarm System	The fire alarm and detection system is not installed as per NFPA-72, moreover the cables used for the system is not listed.	<p>Modify the fire detection and alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72.</p> <p>Design shall be submitted to ACCORD Chief Safety Inspector for review prior to modification of the system.</p>	Design within 4 months and installation within 9 months.
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17	Fire Detection and Alarm System (ITM).	Inspection, Testing and Maintenance (ITM) for the fire detection and alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire detection and alarm system and keep written records on-site, in accordance with NFPA 72.	Within 01 month (After complete installation)
18	Fire Protection System	The existing high-rise building with an occupiable floor greater than 23 m (75 ft) above the finished grade is not protected with an approved automatic sprinkler system. The large occupant loads, heavy fuel loading, and anticipated extended egress times warrant sprinkler protection.	Provide an automatic sprinkler and required standpipe protection throughout the building in accordance with NFPA 13, 14, 20, 22 and 24.	Design within 4 months and installation within 9 months.





19	Fire Protection System (ITM)	Inspection, testing and maintenance for the standpipe/ automatic sprinkler system not available in accordance with NFPA-25.	Inspect, test and maintain the standpipe/ automatic sprinkler system in the accordance with NFPA-25. Keep written records on-site.	Within 01 month (After complete installation)
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