

INITIAL FIRE SAFETY INSPECTION REPORT

P.N. Composite Limited (Extension)

Factory ID: 24235

ADDRESS: Ambag Konabari, Gazipur-1700

Geographical Coordinates of factory building: 24.020776, 90.321482

Other Factories: None



Inspected By: Md. Rakibul Alam & Md. Anisuzzaman

Date: 11-October-2021

Fire Safety Inspection Report

P.N. Composite Limited (Extension)

Summary:

P.N. Composite Limited (Extension) complex was surveyed for fire safety on **11/10/2021** by The RSC 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 RSC. 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 fire safety non-compliant issues identified during the inspection. Recommendations have been provided to address each issue with specific remediation timeline.

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 RSC for approval.

Table-1: Findings & Recommendations for all buildings

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	Elevator shafts are provided and open into the N-W exit Enclosure as well as factory floor. Location: Dyeing building, Knitting building	Modify the stair enclosure and elevator opening arrangement in a way to satisfy Accord standard 6.14.3. For new construction, elevators shall not open into an exit enclosure as per ACCORD-6.14.3. Elevator landing door shall be of 1.5-hr fire rated as per Accord standard 4.6 and shall be open in factory floor .	Within 4 months
 				

F-2	Fire Rated Construction	Chemical storage area is not separated by fire-rated construction due to unsealed penetrations and openings. Location: 3rd floor of dyeing building & chemical dispensing unit	Separate the chemical storage room by 4-hr fire rated construction. Seal all penetrations and protect the openings to maintain the required fire separations. Keep 16-points MSDS of all chemicals in the storage area. Ensure that the building/room houses chemical is Type-1 construction. As per BNBC, chemical storage room shall be Type-1 construction (Table-3.2.4 of BNBC-2006). Follow section-2.13 and Table 3.2.1 of BNBC-2006 for the guideline.	Within 3 month
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F-3	Fire rated construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: 2nd floor of dyeing building, 5th floor of Knitting Building.	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45 m and maximum area of 23 m² and is separated by a minimum 3.0 m (10ft) from other storage areas and they do not exceed 10 percent of the building area of the story in which they occur. If sprinkler protected, Maximum height 12 ft (3.66 m) and maximum area of 1000 ft² (93 m²) and separated by a at least 25 ft (7.62 m) from other storage areas and does not constitute more than 10 percent of the building area or 4000 ft² (372 m²) of the sprinklered area, whichever is greater. or, Enclose the storage area from the surrounding occupancy with a minimum 1 hour construction.	Within 3 months
 				

F-4	Fire Rated Construction	Penetrations through fire rated floor/ceiling assemblies are not properly sealed all floor of levels. Location: BBT riser of Dyeing building and Knitting building.	Seal all penetrations and openings in floor/ceiling (full thickness of the floor/ceiling) assemblies by minimum 3-hr fire-rated materials to maintain the required fire-resistance rating. Or Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor if required.	Within 3 months
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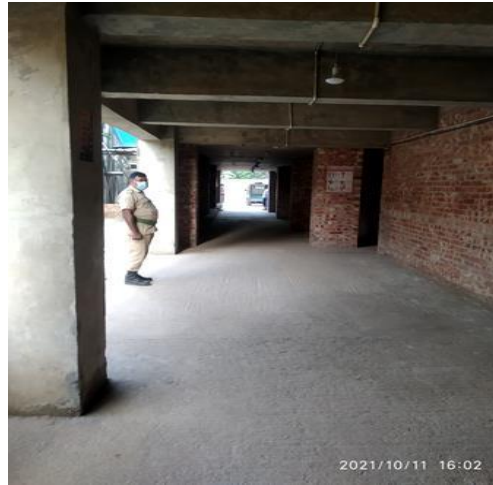


F-5	Fire Rated Construction	The newly constructed chemical dispensing building is steel construction which appears to be nonrated and were found in exposed condition.	New construction containing J occupancy shall be Type-1 construction in accordance with Accord standard 3.5.2.2 and BNBC-2006 Part-2, Table-3.2.4. Ensure fire resistive rated construction following Section 4.4 and Table 4.4.1 of the Accord Standard or Table 3.3.1 and Table 4.1.1 from BNBC-2006 Part 4. Consult a qualified fire protection engineer to achieve the required fire rating	Within 6 months
  				

F-6	Means of Egress	A single means of egress is provided first floor mezzanine of dyeing building where travel distance is exceeded.	Provide additional means of egress. Or Reduce the travel distance within limit. Ground or basement story is allowed a maximum of 50 occupants and 23 m (75ft) travel distance. The second story is allowed a maximum of 30 occupants and 23 m (75ft) travel distance. All other stories require a minimum of 2 egress exits.	Within 3 months
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F-7	Means of Egress	Width of exit stairs are less than 1.5 m (60 in.). Location: Both exit stair of dyeing building and knitting building.	Provide exit stair minimum clear and unobstructed width of 1.5 m (60 in.) in accordance with Accord standard 6.5.6.2.1.	Within 4 months
F-8	Means of Egress	Exit stairs do not discharge directly to the outside. Location: Dyeing building.	Modify stair to discharge directly outside. Or Provide 2-hr fire-rated exit passageway leading directly outside (vestibules to separate any storage areas). Or Provide sprinkler protection for discharge floor in accordance with NFPA 13 meeting Accord 6.17.3..	Within 6 months



F-9	Means of Egress	The egress path along the means of egress has been interrupted by obstruction and aisles are not marked at 2nd floor of dyeing building.	Aisles shall be provided with a minimum unobstructed clear- with of 0.9m (36 in). Means of egress shall be maintained continuously free and clear of all obstructions/storage.	within 3 months
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F-10	Means of Egress	Fire evacuation maps is not posted at the entrance of all exit stair all floors. Location: All building	Updated Fire evacuation maps shall be posted at the entrance to each exit/exit stairs.	Within 1 month
F-11	Means of Egress	Exits are not remotely located from each other such that a single fire event could compromise both exits. Location: Dyeing building.	Modify exit arrangement to meet Accord 6.6.6. or Provide additional exit(s) to meet Accord 6.6.6.	Within 4 months



F-12	Egress lighting	Emergency lights not illuminated during testing (burned out, broken, etc.). Location : Several location of several floor of Dyeing building	Regularly inspect all emergency lighting system as per Accord standard and replace/install lights as needed to illuminate signs.	Within 1 month
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F-13	Egress Lightning	Exit sign not provided at required exit. Location: Several location of new Dyeing building.	Lighted exit signs shall be placed at entrance to an exit. Additional exit signs (directional) shall be placed throughout the facility anywhere the continuation of the egress is not obvious. Lighted exit signs shall be provided with either battery backup or uninterruptable power supply systems and shall be continuously illuminated.	Within 3 month
F-14	Egress Lightning	Manual on-off switch is provided for [emergency lighting / exit signage] units. Location: All building	Remove manual on/off switches from emergency lighting / exit signage units to prevent them from being switched off.	Within 1 month
				

F-15	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: All 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 1 month
F-16	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes . Location: All building	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
F-17	Egress lighting	Exit signs were placed in areas that were not exits. Location: Dyeing building	Remove exit signs from noted areas to avoid confusion from actual exits.	Within 1 week
F-18	Fire Protection	The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72. Location: All building	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Design within 2 months, Install within 4 months.



F-19	Fire Protection	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 ,20 ,22 & 24 Location: All building	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval/acceptance test.	Design within 2 months, Install within 4 months.
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F-20	Fire Protection	The high-rise building has an occupied floor greater than 23 meter (75 feet) and is not provided with automatic sprinkler protection. Location: New Dyeing building, Connecting part building	Provide automatic sprinkler protection throughout the building in accordance with NFPA 13 and ACCORD standards.	Design within 2 months, Install within 6 months
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F-21	Fire Protection	Automatic sprinkler protection is not required in the building based on the height of the highest occupiable floor however in present condition Knitting building are interconnected with Dyeing building (requires a sprinkler system) through the connecting building without having appropriate building spatial distance (fire separation distance as per BNBC-2006, Table 3.2.2) and complete separation hence sprinkler protection is required for the Knitting building as a directly connected combined building.	Provide automatic sprinkler protection throughout the building in accordance with NFPA 13 and ACCORD standards.	Design within 2 months, Install within 6 months
F-22	Fire Protection	Inspection, testing, and maintenance for the Sprinkler system is not in accordance with NFPA 13,25 or as per Accord standard.	Inspect, test and maintain the sprinkler system in accordance with NFPA 13,25 or as per Accord standard and keep written records on-site.	Within 9 Months
F-23	Fire Protection	Fire pump installation requires detailed review to confirm compliance with NFPA 20 and ACCORD standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval.	Design within 2 months, Install within 4 months.

F-24	Fire Rated Construction	Doors are fire rated reported by management where credibility shall be ensured (credible 3rd party certificates and certification tag/mark). Location: Dyeing building, knitting building and Connecting building	Ensure minimum 2-hr fire credible rating for the doors of elevator shafts.	Within 3 Months
F-25	Fire rated construction.	Storage room/floor discharges directly into exit stair enclosure. Location: 1st & 2nd floor of Knitting Building.	Openings from exit enclosure to storage spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1.5-hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storage room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
 				

F-26	Means of Egress	A single means of egress is provided from 4th floor storage and office sections/rooms where dead-end distance exceeds 15 m (50 ft) limit.	Reconfigure the egress arrangement to reduce the maximum dead-end distance to not more than 15 m (50 ft) in accordance with ACCORD standard 6.13.3.	Within 3 months
				