

FIRE SAFETY INSPECTION REPORT

Green Fibre Composite Ltd.

Factory ID: 24480

Baniarchala, Mohoha Bhabanipur, Gazipur Sadar, Gazipur

23.91106347301488, 90.30300125990325

Other Factories in the Building/Premises: None



Inspected by: Md. Rakibul Alam and Nainin Nowrose

Date: 13 Nov 2022



Summary

Green Fibre Composite Ltd. complex was surveyed for fire safety on 13 Nov 2022 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 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 RSC for approval.



Table 1. Findings And Recommendations

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Protection	The fire pump set installation requires detailed review to confirm compliance with NFPA 20 and RSC Technical Guidelines (Standard).	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and then acceptance test.	Within 4 months
				
F-2	Fire Protection	The firefighting system (standpipe system) installation requires detailed review to conform compliance with NFPA 14. (Building-2 & 3)	Submit as built drawing, testing records, equipment certification and all relevant documents to the RSC for review, approval and then acceptance test.	Within 4 months





F-3	Fire Protection	The fire alarm system installation requires detailed review to confirm compliance with NFPA 72 and RSC standard. (All buildings).	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and then approval/acceptance test.	Within 4 months
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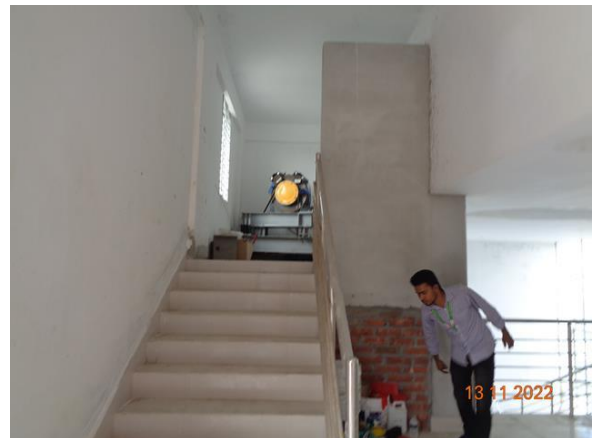
F-4	Fire Rated Construction	Exit stairs are not separated from work areas & other spaces on each floor by fire-rated construction due to unprotected openings and penetrations. (Fire door installation not completed at building-3)	Separate the exit stairs from work areas and other building spaces on all floor levels by minimum 2- hr fire-rated construction. Provide minimum 1.5- hr fire rated doors and seal all unprotected openings and penetrations to maintain the fire separation (10” wall).	Within 3 months
			Ensure that all fire doors are self-closing and positive latching, and are provided with fire exit (panic) hardware where serving production floors or assembly occupancies.	
			If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.	
			Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC 6.8.3.1.	





F-5	Egress	Building did not have stair designation sign, occupant load sign & floor level signs at all required locations.	Provide occupant load sign, stair & floor designation signs at required locations (all exits).	Within 1 month
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F-6	Fire Rated	Lift machine rooms not separated from exit stair enclosures.	Separate lift machine rooms by minimum 2-hr fire rated construction.	Within 3 months
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F-7	Egress	Elevator shafts provided in exit stair enclosures and production floor. (Both Building)	Modify the elevator and stair enclosure arrangement in a way to satisfy RSC standard 6.14.3. Elevator shall not open into an exit enclosure. Elevator landing door shall be of 1.5-hr fire rated when open into the floors.	Within 3 months
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F-8	Fire Rated Construction	Areas on the 2nd, 1st floor used for combustible storage open to the factory are not properly defined and/or not within limits. (Building-3)	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45m (8 ft) and maximum area of 23 m ² (250 ft ²). If sprinkler protected: maximum height of 3.66m (12 ft) and maximum area of 93m ² (1000 ft ²). Separate the areas of unenclosed combustible storage by a minimum clear distance of 3 m (10 ft).	Within 2 months
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F-9	Fire Rated Construction	Storage rooms (bonded warehouse, finished carton and other) discharges directly into the exit stair enclosures. (Building-3, Ground floor)	Openings from exit enclosure to storage room, generator and transformer spaces shall be provided with a vestibule with fire rated construction and openings as per RSC 6.14.3. Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the Store, generator, sub-station room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
F-10	Fire Rated Construction	Unsealed penetrations and openings are located in exit stair enclosures and separation walls.	Seal all penetrations and openings in exit stair enclosure and separation walls to maintain the required fire separation.	Within 2 months





F-11	Fire Protection	Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 20.	Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20.	Within 5 months
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F-12	Fire Protection	Inspection, testing and maintenance of the automatic fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the automatic fire alarm system and keep written records on-site, in accordance with NFPA 72.	Within 5 months
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F-13	Fire Protection	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 14.	Inspect, test and maintain the fire standpipe system and keep written records on-site, in accordance with NFPA 14.	Within 5 months
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F-14	Egress	Exit discharge path from building-3 is not connected to the internal road and not leveled surface.	Level the exit discharge path to ensure smooth and safe evacuation from building-3 and ensure that the path is slip resistant.	Within 1 month
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F-15	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. (Both 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 2 months
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F-16	Fire Rated Construction	Liquefied or compressed gas cylinders are located within the factory.	The storage or use of liquefied or compressed flammable gas cylinders shall be prohibited within the factory building as per RSC. Alternatively LPG/CNG cylinders are permitted to be stored in a separate dedicated building on the factory premises within its boundaries if the building meets the following conditions. 1. The storage building must be at least 3 meters away from any other building and boundaries. 2. The exterior walls of the building must have a fire resistance rating of 3 hours using noncombustible construction. 3. Doors and other openings in the exterior walls must be protected with suitable closing devices having a fire protection rating of 3 hours. 4. The building is to be used for no other purpose than the storage of LPG/CNG cylinders. 5. The building must be mechanically ventilated to control the accumulation of flammable vapors. 6. The installations must be approved and accepted by the requirements of the AHJ, Gas supply company regulations, manufacturers/supplier's instructions/guidance, CIOB and all other applicable agencies, codes and standards.	Within 3 months
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F-17 Fire Rated Construction

Unsealed utility pipe penetration is located in the fire-rated floor/ceiling assemblies

Penetrations of fire resistive rated assemblies shall be protected with listed through penetration fire stop system tested in accordance with ASTM E814 in accordance with RSC standard 4.7.

Within 3 months





F-18 Egress

The width of egress aisles is less than 36-in. at 1st and 3rd floor. (Reduced by iron table)

Provide minimum aisle widths of 36-in. Egress shall be free and unobstructed.

Within 3 months



F-19	Fire Rated Construction	Exit stairs are not separated from work areas & other spaces on each floor by fire-rated construction due to unprotected openings and penetrations. (Fire door installation not started at building-2).	<p>Separate the exit stairs from work areas and other building spaces on all floor levels by minimum 2- hr fire-rated construction. Provide minimum 1.5- hr fire rated doors and seal all unprotected openings and penetrations to maintain the fire separation (10" wall).</p> <p>Ensure that all fire doors are self-closing and positive latching, and are provided with fire exit (panic) hardware where serving production floors or assembly occupancies.</p> <p>If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.</p> <p>Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets RSC 6.8.3.1.</p>	Within 3 months
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