

FIRE SAFETY INSPECTION REPORT

4 Stitch Knit Composite Ltd.

ACCORD ID: 23698

West Shaildubi, Ward: 05, Post office & P.S: Kashimpure, Gazipur-1346

23.958419, 90.307375

Other Factories: None



Inspected by: Md. Rakibul Alam & Md. Jobaidul Islam

Date: 21 July 2019



Summary

4 Stitch Knit Composite Ltd. complex was surveyed for fire safety on 21 July 2019 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.



Table 1. Findings And Recommendations

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	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.	<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.</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 ACCORD standard 6.8.3.1.</p>	Within 3 months





F-2 Egress Egress gates on the all floor with locking features are provided at all exits & exit discharge.

Remove locking features from all egress gates.

Immediately

If locks are required for security reasons, utilize special door locking features complying with ACCORD standard 6.8.2.



F-3	Fire Rated Construction	Room on the ground floor used for combustible storage is not separated by a minimum 1-hr fire-rated construction and door has no certification tag.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction and 0.45-min listed door.	Within 3 months
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F-4	Fire Rated Construction	Unsealed electrical shaft is 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 and seal all penetrations in floor/ceiling assemblies to maintain the fire separation.	Within 3 months
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F-5	Fire Rated Construction	The generator room and substation is not separated by fire-rated construction.	Separate the generator room by a minimum 2-hr fire-rated construction. Seal and/or protect all openings to maintain the required fire separations. Provide proper ventilation and consult a qualified engineer.	Within 3 months
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F-6	Fire Rated Construction	Areas on the 2nd floor used for combustible storage open to the factory is not properly defined and/or not within limits.	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 3 months
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F-7	Fire Rated Construction	The mezzanine floor exceed allowable limit and not separated from ground floor.	Separate the mezzanine floor from ground floor by fire rated construction barrier. Seal or/and protected all non openings and penetrations to maintain the required rating.	Within 3 months
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F-8 Fire Rated Construction

Exterior exit stair is not properly separated the building interior.

Exterior exit stairs shall be separated from the building with a rating requirement of 2-hr fire rating for 4 or more stories. The rating of the exterior wall shall extend 3.05 m(10 ft) beyond the ends of the stair structure.

Within 3 months



F-9	Fire Rated Construction	Unsealed penetrations and openings are located in exit stair enclosures.	Seal all penetrations and openings in exit stair enclosure walls to maintain the required fire separation. Penetrations into and through an exit enclosure shall be prohibited with the exception as per Accord 6.14.4.	Within 3 months
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F-10	Egress	Outward swinging type doors are not provided at the building exits, exit stairs, along egress routes and exit discharge.	Replace all gates, sliding doors and rolling shutters along the means of egress with side-hinged, swinging egress doors, swinging in the direction of egress travel. If locks are required for security reasons, utilize special door locking features complying with NFPA 101.	Within 1 month
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F-11 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 automatic fire alarm system in accordance with NFPA 72 and ACCORD standards.

Design within 3 months
Install within 6 months



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 10 months
F-13	Fire Protection	The factory building has an occupied floor greater than 10m (33ft) and is not provided with standpipe system as per NFPA 14 and fire pump as per NFPA 20.	Provide standpipe system protection and fire pump in accordance with NFPA 14 and NFPA 20 standards respectively.	Design within 3 months Install within 6 months
F-14	Fire Protection	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 14.	Inspect, test and maintain the automatic sprinkler system and keep written records on-site, in accordance with NFPA 14.	Within 10 month
F-15	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 10 month
F-16	Egress	Fire evacuation maps is not posted at the entrance of the exits at most of the floors.	Fire evacuation maps shall be posted at the entrance to each exits and exit stairs.	Within 1 month



F-17	Egress Lighting	Exit signage not illuminated (burned out, broken, etc.).	Regularly inspect all exit signage and replace/install lights as needed to illuminate signs. The source of illumination shall provide not less than 50 lux at the illuminated surface with a contrast of not less than 0.5. Approved self-luminous signs which provide evenly illuminated letters having a minimum luminance of 0.2 cd/m ² may also be used.	Within 1 month
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F-18	Egress Lighting	Manual on-off switch is provided for emergency lighting and exit signage units.	Remove manual on/off switches from emergency Lighting & exit signage units to prevent them from being switched off.	Within 1 month
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F-19	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.	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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F-20	Egress	Building did not have stair designation sign, occupant load sign & floor level signs at required locations.	Provide occupant load sign, stair & floor designation signs at required locations in both. Bengali and English.	Within 1 month
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F-21	Egress	The exit discharge path serving the [N-W exit] is less than 10 ft wide and is not separated from the building interior.	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft, to provide a minimum 1-hr fire separation. Alternatively, provide a second remote discharge path to the public way (only include this if feasible).	Within 3 months
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F-22	Fire Protection	Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records on-site, in accordance with NFPA 10.	Within 1 month
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