

INITIAL FIRE SAFETY INSPECTION REPORT

AR-TEX COMPOSITE LTD.

RSC ID: 24289

Bholail, Kashipur, Fatullah, Narayanagnaj

Other Factories: None



Inspected By: Pantha Pallob Das & Md. Anisuzzaman

Date: 21 December 2021

Fire Safety Inspection Report

AR-TEX COMPOSITE LTD.

Introduction:

AR-TEX COMPOSITE LTD.. Complex was surveyed for fire safety on **21/12/2021** 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.

Limitations

The information in this fire safety inspection report was obtained during a visit to the facility and during interviews with local factory management. It has not been possible to provide independent verification for all the information and data collected, and, therefore, The RSC cannot accept general responsibility for omissions or errors arising from inaccuracies in this report from the information obtained.

The findings and recommendations in this report are not intended to imply, guarantee, ensure or warrant compliance with any government regulations. Additionally, the results do not imply in any way that compliance with the findings or recommendations as stated in this report will eliminate all hazards, risks or exposures or that hazards, risks or exposures not referred to in this report do not exist. Compliance with the findings and recommendations stated in this report does not relieve the factory owner from obligation to comply with specific project requirements, industry standards, or the provisions of any local government regulations.

Findings & Recommendations :

Table 1-2 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 Building 01

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor as the installed fire rated doors was not functional properly and there were unprotected openings in the roof of ceiling of stair which is connected with production floor.	The exit stair enclosure shall be provided with a minimum 1-hr fire resistance rating with 1- hr. fire rated door and seal all penetrations and openings by 1 hr. fire rated materials. 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.	Within 3 months



F-2	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Electrical riser & construction joint.	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 3-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's datasheet. 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-3	Fire Rated Construction	Rooms used for storage of combustible materials are not separated from the surrounding occupancy/areas. Location: ground floor of building 01	Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum 1 hour fire rated construction.	Within 3 months
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F-4	Fire Rated Construction	The main structural element of the building 01 is constructed by steel which is non-rated and were found in exposed condition without any fire protection.	The building shall be type-I or II construction. So, provide require rating in the structural elements of the building. Consult with a qualified fire protection engineer. Follow BNBC 2006-Table 3.2.4, 3.1.9 and 3.3.1 as reference.	Within 6 months
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F-5	Means of Egress	Wooden type doors have provided along means of egress at first floor of building 01	Replace the exit door made by combustible materials and use exit door made by non-combustible materials where fire rating is not mandatory.	Within 1 month
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F-6	Means of Egress	Common path of egress travel was more than 23 m in the ground floor of building 01	Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 23m.	Within 3 months
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F-7	Egress Lighting	Exit sign with directional arrow are not provided on the ground floor & first floor of building 01.	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
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F-8	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards.	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 2 months and modification within 4 months (If require).
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F-9	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per Accord standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 or as per Accord standard.	Within 1 Month after installation.
F-10	Fire Protection System(ITM of Extinguisher)	Inspection, testing, and maintenance of the extinguisher system is not in accordance with NFPA 10 or as per Accord standard	Inspect, test and maintain the extinguisher system, and keep written records on-site, in accordance with NFPA 10 or as per Accord standard.	Within 3 months

Table-2: Findings & Recommendations for Building 02

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-11	Fire Rated Construction	Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Location: Electrical riser	Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation at least by 3-hr. The used sealer shall be 3rd party certified and installation shall be as per manufacturer's datasheet.	Within 3 months
				

F-12	Mean of egress	Handrails are not provided both side on the exit stair. Location: Building 02	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	Within 2 months
				

F-13	Means of Egress	Building did not have stair designation signs & exit designation signs at required locations.	Provide stair designation sign & exit designation sign at each floor entrance from the stair to the floor in English and Bengali. Signs shall indicate the name of the stair and the floor level. Signs shall be posted adjacent to the door.	Within 1 month
F-14	Means of Egress	Building did not have occupant load signs at required locations.	Post the occupant load for every assembly and production floor in a facility in a conspicuous space near the main exit or exit access doorway for the space.	Within 1 month
F-15	Egress Lighting	Exit sign with directional arrow are not provided on the ground floor & first floor of building 02	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	Fire Alarm & Detection System (FADS)	Addressable fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards.	Submit design, documents and calculations to RSC for review prior and based on the review modify the system if there is any. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation. Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.	Design Review within 2 months and modification within 4 months (If require).
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F-17	Fire alarm & Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per Accord standard.	Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 or as per Accord standard.	Within 1 Month after installation.
F-18	Fire Protection System(ITM of Extinguisher)	Inspection, testing, and maintenance of the extinguisher system is not in accordance with NFPA 10 or as per Accord standard	Inspect, test and maintain the extinguisher system, and keep written records on-site, in accordance with NFPA 10 or as per Accord standard.	Within 3 months
F-19	Fire Protection System (Standpipe System).	Standpipe system and fire pump installation requires detailed review to confirm compliance with NFPA 14, 20, 22, 24 and ACCORD standard.	Submit the standpipe system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with Accord standard and NFPA 14 and 20. The factory management shall contact RSC to conduct the final acceptance testing after the installation, testing & commissioning.	Design Review within 2 months and modification within 4 months (If require).



F-20	Fire Protection System(ITM of Fire Pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25 or as per Accord standard	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 25 or as per Accord standard	Within 1 Month after installation.
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F-21	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per Accord standard	Inspect, test and maintain the Standpipe system, and keep written records on-site, in accordance with NFPA 25 or as per Accord standard	Within 1 Month after installation.
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