INITIAL FIRE SAFETY INSPECTION REPORT

SAIHAM KNIT COMPOSITE LTD. (Extension 2)

RSC ID: 24576

Factory Address: Saiham Nagar, Noyapara, Madhabpur, Hobigonj.

Other Factories: SAIHAM KNIT COMPOSITE LTD. (RSC ID- 9520) & SAIHAM KNIT COMPOSITE LTD. (Extension area) (RSC ID-24022)

RSC | RMG SUSTAINABILITY COUNCIL

Inspected By: Ahammad Kabir, Hasanat Alamgir Abeer & Mahbub Alam Sami

Date: 16 January 2025

Findings & Recommendations :

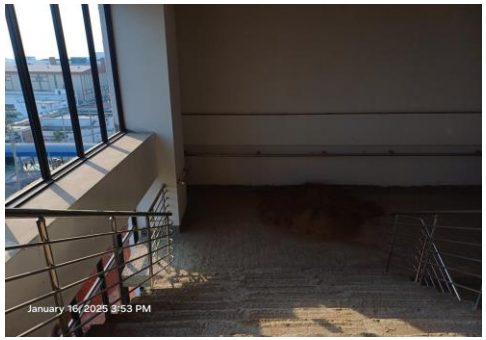
Table 1 summarizes the major fire safety issues identified during the inspection. Recommendations have been provided to address each issue.
An implementation schedule shall be developed by the factory to remediate each of the findings. The specific timing of improvements, including any requested extensions due to design / installation constraints, shall be submitted to the RSC for review.

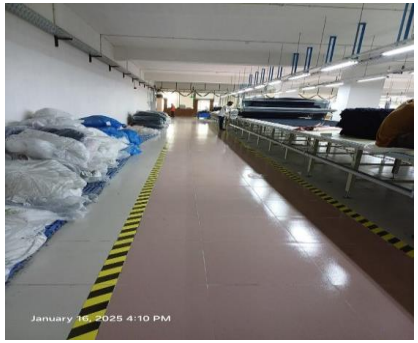
Table-1:

Sl No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Means of Egress	The factory has installed fire rated doors for exit stair separation on all floors for all stairs. The datasheets & certificates of installed fire-rated doors will be verified during the next inspection. **Location: All Buildings.**	The factory shall provide datasheets and certificates of installed fire rated doors and their accessories to verify during the next inspection. If fire rated doors are required to be held open for functional reasons, provide automatic closing devices tied to the fire alarm system.	Within 3 Months

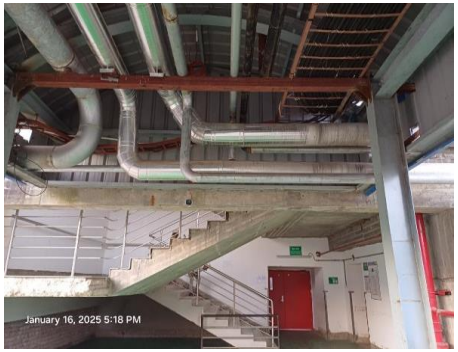
F-2	Means of Egress	Exit stairs are not separated from work areas & other spaces on each floor by fire-rated construction due to unprotected openings and penetrations. **Location: Dyeing Building, New Printing, New Knitting, Locker Building**	The exit stair enclosure shall be provided with a minimum 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. 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. 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 Technical Guidelines (Standard) V1- 6.8.3.1.	Within 3 months

F-3	Means of Egress	Unsealed penetrations and openings are located in the exit stair enclosures. **Location: Dyeing Building (All floors)**	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separations.	Within 3 months

F-4	Means of Egress	Intermidiate handrail has not been provided where stair width were more than 87 inch. **Location: Dyeing Building.**	Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in.).	Within 3 months
				

F-5	Means of Egress	Travel distance has been found more than 200 feet. **Location: 3rd Floor_Dyeing Building.**	Travel distance limitations for G2 (RMG factories) shall be increased to 60 m (200 ft) where a complete automatic fire detection system, portable fire extinguishers, and standpipe system are provided in accordance with the RSC Technical Guidelines (Standard). The egress route shall be redirected avoiding high hazard area ensuring minimum required number of exits with acceptable common path of travel and travel distance issue.	Within 3 months
			

F-6	Means of Egress	Storage room discharges directly into the exit stair enclosure. **Location: GF_New 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 as per 6.14.3-RSC Technical Guidelines Standard V1.0. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.The minimum width of a vestibule shall not be less than 1.1 m nor less than the width of the corridor leading to the vestibule. The minimum length of a vestibule in the direction of escape travel shall be 1.8 m.	Within 3 months
F-7	Means of Egress	A dead-end corridor/aisles has been found exceed 15 m (50 ft) limit. **Location: Mezzanaine Floor_AOP Building.**	Reconfigure the egress arrangement to reduce the maximum dead-end distance to not more than 15 m (50 ft) in accordance with RSC Techical Guidelines (Standard).	Within 3 months

F-8	Means of Egress	The interior exit stair discharges inside the building in the ground floor of the dyeing building. **Location: GF_ Dyeing Building.**	Provide 2-hr fire-rated exit passageway leading directly outside. - Modify stair to discharge directly outside. - Provide 2-hr fire-rated exit passageway leading directly outside (vestibules to separate any storage areas). - Provide sprinkler protection for discharge floor in accordance with NFPA 13.	Within 3 months
				

F-9	Fire Rated Construction	A steel shed has been observed which is non-rated and were found exposed condition without any fire protection. **Location: Yarn Ware House**	The "Ministry of Housing and Public Works" has issued a resolution based on the recommendations from the House Building Research Institute (HBRI) and the Public Works Department (PWD) to assess structural fire protection requirements of steel buildings (unprotected noncombustible construction type) according to BNBC 2020. The construction type shall be confirmed to be in accordance with BNBC 2020 Part-3, Table 3.1.7. Ensure fire resistive rated construction following Table 3.3.1(a) Part 3 Section-3, Table 3.2.2 and Table 3.2.3 Part 3 Section 2 and Table 4.1.1 from BNBC 2020 Part 4 Section 1. Provide design philosophy to determine the construction type as per BNBC 2020. If any construction rating is required, Consult a qualified fire protection engineer to achieve the required fire rating.	Within 6 Months

F-10	Fire Rated Construction	Room used for combustible storage are not separated by fire rated construction from the production aea. **Location: Dyeing Building.**	Separate the storage room by a minimum 1- hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.	Within 3 months

F-11	Fire Rated Construction	Unsealed penetration has been observed in between production floor and MDB room. **Location: Dyeing Building.**	Seal and/or protected all openings to maintain the required fire separations.	Within 3 months
F-12	Fire Rated Construction	Unsealed penetrations and openings has been found due to cable riser and PVC pipe of toilet block area are located in the fire rated floor/ceiling assemblies. **Location: Dyeing Building, New Printing, New Knitting, Locker Building.**	Provide a minimum 2-hr fire-rated shaft to separate the sanitary pipe and cable riser from each floor level. or Seal all penetrations and openings in floors/ceiling assemblies by 3-hr fire rated listed/certified materials. The installation of such fire-rated materials shall be following certified design.Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation as been reviewed from the RSC prior to install the passive fire protection system (If required).	Within 3 months

F-13	Fire Rated Construction	Areas used for combustible storage open to the factory are not maintained or separated by fire rated construction. **Location: Dyeing Building.**	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. Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) , maximum area of 23m2 (250 ft2) and 3m (10ft.) clear distance from adjacent another unenclosed combustible storage. - If the building/floor is sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m2 (1000 ft2). -In process storage shall be limited to 10 percent of the building area of the story in which they occur.	Within 2 months

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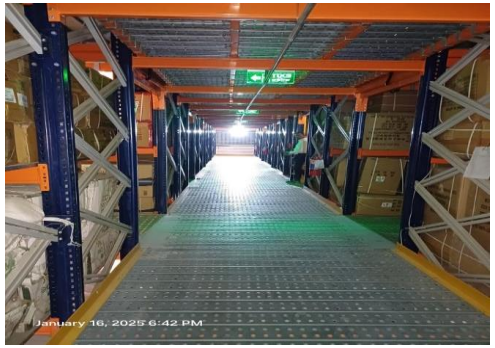
F-14	Fire Rated Construction	Elevator shaft are directly open into production floor and stair enclosure without proper fire separation (Doors are not fire rated). **Location: Dyeing Building, New Printing, New Knitting.**	Ensure minimum 1.5-hr fire rating for the doors of elevator shafts otherwise close the shafts area with 2-hr fire rated construction barrier and 1.5-hr fire rated doors. So, rearrange the facility to provide separate enclosure for lifts. If not possible anyway provide a minimum 2-hr fire- rated elevator shaft with listed fire rated lift landing door to separate from each floor level. Factory shall ensure that, all the design, datasheet, certificate, and proposed drawing of installation has been reviewed from the RSC prior to install the passive fire protection system (If required).	Within 3 months
F-15	Fire Rated Construction	A dining area has been found along with production floor (G2 Occupancy) at 3rd floor of the dyeing building. Assembly occupancy I3 is not permited with the G2 Occupancy as per table 3.2.1 of BNBC-2020. **Location: Dyeing Building_3rd Floor.**	Relocate the dining area to ensure compliance with BNBC 2020.	Within 3 month

F-16	Fire Rated Construction	Unprotected opening has been found within 10 ft of the exit discharge path. **Location: Dyeing Building, New Knitting.**	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.	Within 3 months

F-17	Fire Rated Construction	5 layers of catwalk have been constructed on high rack storage and the area of the intermediate deck creates a full floor where the size of the deck is more than 33% of the total floor area and requires fire rated separation. **Location: Yarn Storage Shed.**	Remove the catwalk of the intermediate deck. Or , Provide the required fire rated separation between the floors according to table 3.3.1 (a),Table-3.2.2, Table-3.2.3 & table 3.1.7 BNBC 2020. Consult a qualified fire protection engineer to design the rated construction barriers in between two floors and in structural members. Factory shall submit all required product datasheet, installation design along with design philosophy to RSC for review prior to installation on site.	Within 6 months
				

F-18	Fire Rated Construction	Chemical storage has not been separated with required fire rated construction. **Location: Hydrozen Paroxide Building.**	Ensure the chemical store fire separated by minimum 4-hr fire rated construction barrier with only occupancies with G and H following table 3.2.1 of BNBC-2020. No opening is permitted in the 4-hr rated wall towards any other occupancy. Follow section 2.14 and 2.1.14 of BNBC-2020 as a guideline chemical store while rearranging.	Within 3 months
F-19	Fire Rated Construction	The yarn storage shed main structural elements are constructed by non-rated steel and was found exposed condition without any fire protection. Where fire Resistance Ratings of exterior walls are not maintained considering the fire separation distance as well. **Location: Yarn Store Shed.**	The "Ministry of Housing and Public Works" has issued a resolution based on the recommendations from the House Building Research Institute (HBRI) and the Public Works Department (PWD) to assess structural fire protection requirements of steel buildings (unprotected noncombustible construction type) according to BNBC 2020. The construction type shall be confirmed to be in accordance with BNBC 2020 Part-3, Table 3.1.7. Ensure fire resistive rated construction following Table 3.3.1(a) Part 3 Section-3, Table 3.2.2 and Table 3.2.3 Part 3 Section 2 and Table 4.1.1 from BNBC 2020 Part 4 Section 1. Provide design philosophy to determine the construction type as per BNBC 2020. If any construction rating is required, Consult a qualified fire protection engineer to achieve the required fire rating.	Within 6 months

F-20	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. **Location: Dyeing 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-21	Fire Protection System(ITM of Extinguishers)	Inspection, testing and maintenance for the emergency lighting system was not in accordance with The RSC standard.	Inspect, test and maintain the emergency lighting system in accordance with The RSC Technical Guidelines (Standard). Keep written records on-site.	Within 1 month
F-22	Fire Alarm & Detection System (FADS)	The factory has installed Fire alarm and detection system which requires detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (Standard).	Submit the proposed design of Addressable fire alarm system to RSC in accordance with NFPA 72. Installation shall be done as per the reviewed design with a listed Addressable Fire Alarm System.	Design within 2 months and installation within 3 months

F-23	Fire Detection System (ITM of FADS)	Inspection, testing, and maintenance for the fire detection system is not found in accordance with NFPA 72.	Inspect, test and maintain the fire detection system, and keep written records on-site, in accordance with NFPA 72.	Within 1 month after installation.
F-24	Fire Suppression System (SUPS)	The factory building has an occupied floor greater than 10 meter (33 feet) and installed a standpipe protection system which requires detailed review to confirm compliance with NFPA 14 & 20 and RSC Technical Guidelines (Standard).	Submit the proposed design of Standpipe Protection System to RSC in accordance with NFPA 14 & 20. Installation shall be as per the reviewed design with a listed Standpipe & Fire Pump System.	Design within 2 months, Installation within 3 months
F-25	Fire Protection System(ITM of Standpipe)	Inspection, testing and maintenance of the standpipe system is not found in accordance with NFPA 25.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 25.	Within 1 Month after installation.
F-26	Inspection, testing, and maintenance of the Fire Pump (ITM).	Inspection, testing, and maintenance for the fire pump is not found 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.
F-27	Fire Protection System(ITM of Extinguishers)	Inspection, testing and maintenance of portable fire extinguishers is not found in accordance with NFPA 10.	Inspect, test and maintain the portable fire extinguishers and keep written records onsite, in accordance with NFPA 10.	Within 1 month.