

INITIAL FIRE SAFETY INSPECTION REPORT

P.A Knit Composite (Extension)

RSC ID: 24202

Hobirbari, Jamirdia, Valuka, Mymensingh

Geographical Coordinates of factory building: 24.29018, 90.39146

Other Factories: P.A Knit Composite (In the premises)



Inspected By: Ahammad Kabir, Dilip Kumar Mondal and Md. Anisuzzaman

Date: 12 and 25 October-2021

Findings & Recommendations :

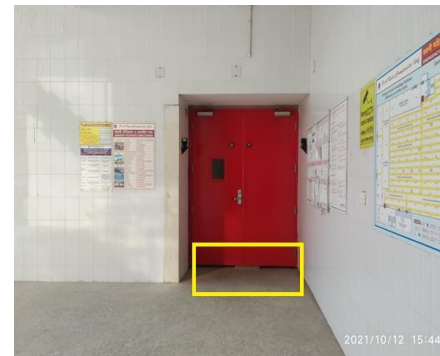
Table 1-6 summarizes the fire safety non-compliant issues identified during the inspection. Recommendations have been provided to address each issue with specific remediation timeline.


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 No.	Building	Total Finding	Finding Range	Remarks
Table 1	Building07-Garment -2	23	F-1 to F-23	
Table 2	Building-5-Printing	12	F-24 to F-35	
Table 3	Building-8-Knitting building	14	F-36 to F-49	
Table 4	Building-09-Sample building	19	F-50 to F-68	
Table 5	Building 10-Dining & store building	15	F-69 to F-83	
Table 6	Building 01 to Building 04 ,Building 06 and building 11 to building 21	14	F-84 to F-97	

Table-1: Finding & recommendation for Garments building-2

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	<p>Fire doors has been installed in the openings of required fire rated assemblies (Exit stairs, Storage rooms, and other occupancy separations), However, fire door were found with following issues-</p> <ol style="list-style-type: none"> 1. Doors were kept open by means of door wedges. 2. Doors were not provided with adequate/required hardware. 3. Doors were found with excessive clearance. 4. Doors were not provided with required positive latching. 5. Fire doors smoke seal were found with damaged that could impact the fire protection. <p>Location: Exit stairs, Storage rooms of Garments building -2</p>	<p>Install the fire door as per NFPA 80.</p> <p>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.</p> <p>The clearance under the bottom of a fire door shall be a maximum of 19mm. From edges and top shall be limited to a maximum 4.8 mm. All measurement shall be taken from the "pull side" of the door.</p> <p>Any modification of fire doors beyond the job site preparation shall be approved by the door manufacturer.</p>	Within 3 months







F-2	Fire Rated Construction	Elevator shafts are directly open into the inside of S-W side Stair. Located: Garments building -2	For new construction, elevators shall not open into an exit enclosure as per ACCORD-6.14.3. So, separate the stair enclosure from elevator shaft throughout the building.	Within 3 month
				
F-3	Fire Rated Construction	Rooms used for storage of combustible materials are not separated from the surrounding occupancy/areas . Location: Several floor of garments building -2	Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum 1 hour construction.	Within 3 months



F-4	Fire Rated Construction	<p>Unsealed penetrations and openings are located in exit stair enclosures and separation walls. Location: Garments building -2</p>	<p>Seal all penetrations and openings in exit stair enclosure and separation walls to maintain the required fire separation.</p>	<p>Within 2 months</p>
-----	-------------------------	---	--	------------------------



F-5	Fire rated construction	<p>Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: Several floor of Garments building -2</p>	<p>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.</p>	Within 3 months
<div style="display: flex; justify-content: space-around;">   </div>				


F-6	Fire rated construction	Storage were observed underneath the cutting tables. Location: 1st floor, 2nd floor of garments building 2	Storage underneath the cutting tables shall be kept clear of combustibles at all time, except as provided for miscellaneous storage in accordance with Accord building standard section 3.4.2.1.6 or where automatic sprinkler protection is installed. Where an automatic sprinkler system is installed sprinklers are required to be installed beneath cutting tables greater than 4 ft in width that are used for storage of combustibles.	Within 2 months
<div style="display: flex; justify-content: space-around;">   </div>				
F-7	Means of Egress	The egress path along the means of egress has been interrupted by obstruction/storage and aisles are not marked at several floor of Garments building-2	Means of egress shall be maintained continuously free and clear of all obstructions/storage. Or Aisles shall be provided with a minimum unobstructed clear- with of 0.9m (36 in).	Within 1 month



F-8	Means of Egress	Fire evacuation maps is not posted at the entrance of all exit stair all floors. Location: Garments building-2	Updated the fire evacuation maps shall be posted at the entrance to each exit stair all floors.	Within 1 month
F-9	Means of Egress	Building did not have stair designation signs & exit designation signs at required locations at each floor all level.	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-10	Means of Egress	Building did not have occupant load signs at required locations at each floor all level.	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-11	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: all floor of garments building-2	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 months
F-12	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: all floor of garments building-2	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-13	Egress lighting	Emergency lights not illuminated during testing (burned out, broken, etc.). Location : Several location several floor of garments building-2	Regularly inspect all emergency lighting system as per Accord standard and replace/install lights as needed to illuminate signs.	Within 1 month




F-14	Egress Lightning	Exit sign not provided at required exit. Location: Garments building-2	Lighted exit signs shall be placed at entrance to an exit. Additional exit signs 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-15	Egress lighting(ITM)	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 3months

F-16	Fire Alarm & Detection System (FADS)	<p>An addressable fire alarm & detection system installation was ongoing during inspection day. The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72.</p> <p>Location: Garments building-2</p>	<p>Design & Installation of Fire Alarm & Detection system shall be in accordance with ACCORD standard and NFPA 72. Submit design, documents and calculations to RSC for review prior installation/modification.</p> <p>After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation.</p> <p>Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.</p>	Design within 2 months, Install within 6 months.
------	--------------------------------------	--	---	--



F-17	Fire Detection System (ITM of FADS)	<p>Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per Accord standard</p>	<p>Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 or as per Accord standard.</p>	Within 1 month after installation.
------	-------------------------------------	---	--	------------------------------------

F-18	Fire Protection System(Standpipe)	<p>Standpipe system installation requires detailed review to confirm compliance with ACCORD standard and NFPA-14.</p> <p>Location: Garments building-2</p>	<p>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. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire protection System(Standpipe) installation.</p>	<p>Design within 2 months, Install within 6months.</p>
				
F-19	Fire Protection System(ITM of Standpipe)	<p>Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 14,25 or as per Accord standard</p>	<p>Inspect, test and maintain the Standpipe system, and keep written records on-site, in accordance with NFPA 14, 25 or as per Accord standard</p>	<p>Within 1 Month after installation.</p>

F-20	Fire Protection	The fire pump set installation requires detailed review to confirm compliance with NFPA 20.	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 6months
<div style="display: flex; justify-content: space-around;">   </div>				
F-21	Fire Protection System(ITM of Fire Pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 20,25 or as per Accord standard	Inspect, test and maintain the fire pump, and keep written records on-site, in accordance with NFPA 20, 25 or as per Accord standard	Within 1 month after installation.
F-22	Fire Protection System(ITM of Extinguisher)	Portable fire extinguishers are not install at 4th & 5th floor as per standard of garments building -2	Portable fire extinguishers shall be installed throughout building in accordance with BNBC Part 4 Section 4.10 and NFPA 10 and maximum travel distance to the nearest until shall not exceed 30m.	Within 3 months

F-23	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 1 month
------	---	--	---	----------------


Table-2: Finding & recommendation for Printing building

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-24	Fire-Rated Construction	Most of the exit stairs and storage rooms are separated by double and single leaf fire rated doors but smoke seal damaged for several doors. For that doors are not closing properly.	Install/repair smoke seal and ensures that all the doors are closing properly. Submit proper certifications for installed fire doors to the RSC for approval.	Within 3 months



F-25	Fire-Rated Construction	<p>Areas used (in-process storage) for combustible materials are open to the surrounding occupancy. Location: 3rd floor.</p>	<p>Provide defined storage areas and limit the storage arrangement as follows:-</p> <ol style="list-style-type: none"> 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. <p>or</p> <ol style="list-style-type: none"> 3. Enclose the storage area from the surrounding occupancy with a minimum 1 fire rated hour construction. 	Within 3 months
------	-------------------------	---	--	-----------------



F-26	Fire Rated Construction	[Hazardous materials / flammable liquid storage] area is separated by fire-rated construction (openings, non-rated doors, penetrations) but door is non rated. Location: Chemical storage on 3rd,4th and 5th floors.	Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level. Seal all penetrations and openings in floors/ceiling assemblies to maintain the fire separation.	Within 3 months
 <p>The first photograph on the left shows a large, grey, diamond-patterned fire-rated door that is slightly ajar, revealing a brightly lit interior space with blue chairs. The second photograph on the right shows a utility room with several blue and white buckets and containers stacked on a metal shelving unit, with a window in the background. Both photos have an orange timestamp '10.25.2021' in the bottom right corner.</p>				
F-27	Egress	Building did not have stair designation signs or occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month



F-28	No smoking sign	The required no smoking signs are not present in the factory.	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 month
F-29	Fire Detection and Alarm System	Automatic fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards. Location: Printing building.	Submit the as-built design of fire alarm system to RSC in accordance with NFPA 72. Installation shall be as per the reviewed design with a listed Addressable Fire Alarm System.	Within 3 months



F-30	Fire Detection & Alarm ITM	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72	Within 1 month (after installation)
F-31	Fire Protection	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 and ACCORD standards. Printing building.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Within 3 months



F-32	Fire-protection	<p>Inspection, testing and maintenance of portable fire extinguishers is not in accordance with NFPA 10.</p>	<p>Inspect, test and maintain the portable fire extinguishers and keep written records on- site, in accordance with NFPA 10 and ACCORD standards.</p>	<p>Within 2 months</p>
F-33	Egress Lighting	<p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: All floor.</p>	<p>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.</p>	<p>Within 3 months</p>



F-34	Egress Lighting	<p>Illuminated directional signs are not provided where direction of the path of travel to an exit has changed.</p> <p>Location: All floor.</p>	<p>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.</p>	Within 1 month
------	-----------------	--	---	----------------



F-35	Emergency Lighting ITM	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 2 months
------	---------------------------	--	--	-----------------

Table-3: Finding & recommendation for 06 Storied Knitting Building

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-36	Fire-Rated Construction	The exit stair-2 is not separated from work areas & other spaces on each floor by fire rated construction and fire door . Also doors are not closing properly.	<p>Stair shall be enclosed with a minimum 2-hr fire-rated construction. Seal all unprotected openings and provide minimum 1.5 -hr. fire rated doors to separate the exit stairs from work areas and other building spaces on all floor levels. Ensure that the fire doors are self-closing, positive latching and that they are provided with fire exit (panic) hardware where serving production floors.</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>	Within 3 months




F-37	Fire-Rated Construction	<p>Areas used (in-process storage) for combustible materials are open to the surrounding occupancy. Location: 2nd floor.</p>	<p>Provide defined storage areas and limit the storage arrangement as follows:-</p> <ol style="list-style-type: none"> 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. <p style="text-align: center;">or</p> <ol style="list-style-type: none"> 3. Enclose the storage area from the surrounding occupancy with a minimum 1 fire rated hour 	Within 3 months
------	-------------------------	---	--	-----------------



F-38	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies. Location: Electrical riser.	Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level. Seal all penetrations and openings in floors/ceiling assemblies to maintain the fire separation.	Within 3 months
------	-------------------------	---	--	-----------------



F-39	Fire Rated Construction	Exterior exit stairs are not properly separated from the building and stair exit discharge. Location: Stair-2.	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-40	Egress	Building did not have stair designation signs or occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month





F-41	No smoking sign	The required no smoking signs are not present in the factory.	Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.	Within 1 month
F-42	Fire Detection and Alarm System	Automatic fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards. Location: Knitting building.	Submit the as-built design of fire alarm system to RSC in accordance with NFPA 72. Installation shall be as per the reviewed design with a listed Addressable Fire Alarm System.	Within 3 months



F-43	Fire Detection & Alarm ITM	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72	Within 1 month (after installation)
F-44	Fire Protection	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 and ACCORD standards. Knitting building.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Within 3 months



F-45	Fire-protection	Inspection, testing and maintenance of the standpipe system is not 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-46	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 and ACCORD standards.	Within 2 months

F-47	Egress Lighting	<p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.</p> <p>Location: All floor.</p>	<p>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.</p>	Within 3 months
				
F-48	Egress Lighting	<p>Illuminated directional signs are not provided where direction of the path of travel to an exit has changed.</p> <p>Location: All floor.</p>	<p>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.</p>	Within 1 month




F-49	Emergency Lighting ITM	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 2 months
------	---------------------------	--	--	-----------------

Table-4: Finding & recommendation for Six Storied sample building.

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-50	Fire Rated Construction	<p>Fire doors has been installed in the openings of required fire rated assemblies (Exit stairs, Storage rooms, and other occupancy separations), However, fire door were found with following issues-</p> <ol style="list-style-type: none"> 1. Doors were kept open by means of door wedges. 2. Doors were not provided with adequate/required hardware. 3. Doors were found with excessive clearance. 4. Doors were not provided with required positive latching. 5. Fire doors smoke seal were found with damaged that could impact the fire protection. <p>Location: Exit stairs & Store of the sample building.</p>	<p>Install the fire door as per NFPA 80.</p> <p>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.</p> <p>The clearance under the bottom of a fire door shall be a maximum of 19mm. From edges and top shall be limited to a maximum 4.8 mm. All measurement shall be taken from the "pull side" of the door.</p> <p>Any modification of fire doors beyond the job site preparation shall be approved by the door manufacturer.</p>	Within 3 months






F-51	Fire Rated Construction	Elevator shafts are directly open into the inside of S-W side Stair. Located: Sample building	For new construction, elevators shall not open into an exit enclosure as per ACCORD-6.14.3. So, separate the stair enclosure from elevator shaft throughout the building.	Within 3 month
				
F-52	Fire rated construction.	Unsealed penetrations and openings are located in exit stair enclosures. Location: Both exit stair of sample building.	Seal all penetrations and openings in the wall of exit enclosure walls (full thickness of the wall) by fire rated materials to maintain the fire resistance rating.	Within 3 months




F-53	Fire rated construction.	Storage room discharges directly into exit stair enclosure. Location: 3rd floor of sample 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-54	Fire Rated Construction	<p>Chemical storage area is not separated by fire-rated construction.</p> <p>Location: Ground floor of Sample building</p>	<p>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. The clearance under the bottom of a fire door shall be a maximum of 19mm.</p> <p>** 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.</p>	Within 3 month
<div style="display: flex; justify-content: space-around;">   </div>				
F-55	Means of Egress	<p>Fire evacuation maps is not posted at the entrance of all exit stair all floors.</p> <p>Location: Sample building</p>	<p>Updated Fire evacuation maps shall be posted at the entrance to each exit stair all floors.</p>	Within 1 month

F-56	Means of Egress	Building did not have stair designation signs & exit designation signs at required locations at each level all floor.	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-57	Means of Egress	Width of exit stairs are less than 1.5 m (60 in.). Location: Both exit stair of sample 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-58	Means of Egress	Building did not have occupant load signs at required locations at each level all floor	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-59	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: all floor of sample 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-60	Egress Lightning	Exit sign not provided at required exit. Location: sample building	Lighted exit signs shall be placed at entrance to an exit. Additional exit signs 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-61	Egress lighting(ITM)	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 3months

F-62	Fire Alarm & Detection System (FADS)	<p>An addressable fire alarm & detection system installation was ongoing during inspection day. The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72.</p> <p>Location: sample building</p>	<p>Design & Installation of Fire Alarm & Detection system shall be in accordance with ACCORD standard and NFPA 72. Submit design, documents and calculations to RSC for review prior installation/modification.</p> <p>After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire detection & alarm system installation.</p> <p>Also inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72.</p>	Design within 2 months, Install within 4 months.
F-63	Fire Detection System (ITM of FADS)	<p>Inspection, testing, and maintenance for the fire alarm system is not in accordance with NFPA 72 or as per Accord standard</p>	<p>Inspect, test and maintain the fire alarm system, and keep written records on-site, in accordance with NFPA 72 or as per Accord standard.</p>	Within 1 Month after installation.
F-64	Fire Protection System(Standpipe)	<p>Standpipe system installation requires detailed review to confirm compliance with ACCORD standard and NFPA-14.</p> <p>Location: Sample building</p>	<p>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.</p> <p>After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the fire protection System(Standpipe) installation.</p>	Design within 2 months, Install within 6 months.

F-65	Fire Protection System(ITM of Standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 14,25 or as per Accord standard	Inspect, test and maintain the Standpipe system, and keep written records on-site, in accordance with NFPA 14, 25 or as per Accord standard	Within 1 Month after installation.
F-66	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.
F-67	Fire Protection System(Extinguisher)	Portable fire extinguishers are not install as per standard at several floors of sample building	Portable fire extinguishers shall be installed throughout building in accordance with BNBC Part 4 Section 4.10 and NFPA 10 and maximum travel distance to the nearest until shall not exceed 30m.	Within 3 months
F-68	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 1 month


Table-5: Finding & recommendation for 6 Storied Dining & Store Building

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-69	Fire-Rated Construction	Most of the exit stairs and storage rooms are separated by double and single leaf fire rated doors but smoke seal damaged one door. For that doors are not closing properly and magnetic holder connection is underway for floor 3rd to 5th.	Install/repair smoke seal and ensures that all the doors are closing properly. Submit proper certifications for installed fire doors to the RSC for approval.	Within 3 months



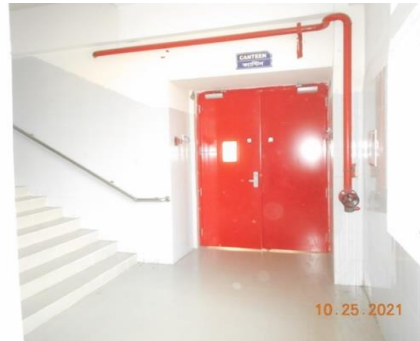
F-70	Fire-Rated Construction	<p>Areas used (in-process storage) for combustible materials are open to the surrounding occupancy. Location: Ground floor.</p>	<p>Provide defined storage areas and limit the storage arrangement as follows:-</p> <ol style="list-style-type: none"> 1. General Condition: Maximum height of 2.4m and maximum area of 23m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. 2. If sprinkler protected: maximum height of 3.66m and maximum area of 93m². Separate areas of unenclosed combustible storage by a minimum clear distance of 3m. or 3. Enclose the storage area from the surrounding occupancy with a minimum 1 fire rated hour construction. 	Within 3 months
------	-------------------------	--	--	-----------------



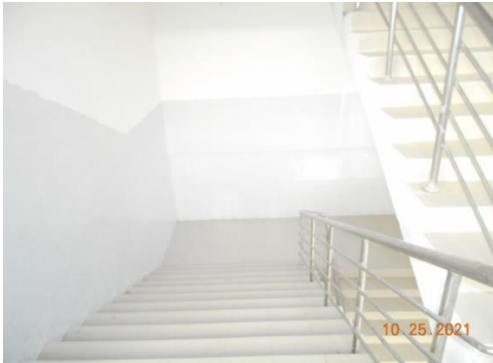
F-71	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies.	Provide a minimum 2-hr fire rated shaft to separate the utility risers from each floor level. Seal all penetrations and openings in floors/ceiling assemblies to maintain the fire separation.	Within 3 months
				
F-72	Mean of Egress	Storage was located in exit stair. Location: Below staircase-2 on ground floor.	Remove all storage from exit stair enclosures.	Within 1 month




F-73	Egress	Building did not have stair designation signs or occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 month
------	--------	---	--	----------------



F-74	No Handrails	<p>Handrails are not provided on both sides of each exit stairs on all floors for stair-2. Having handrails on one side of said staircase, may pose as a falling hazard during evacuation. Stair width exceeds 87 in for stair-1. Or, Handrails are not provided at exit stairs.</p>	<p>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. Intermediate handrails shall be provided when the stair width exceeds 2.2 m (87 in).</p>	Within 3 months
------	--------------	--	---	-----------------





F-75	No smoking sign	<p>The required no smoking signs are not present in the factory.</p>	<p>Smoking is prohibited in any garment factory building or separate storage building. Signs shall be posted in Bengali and English at all building entrances. If the factory creates a designated smoking area outside the building, information of these areas will be posted on the signs.</p>	Within 1 month
------	-----------------	--	---	----------------

F-76	Fire Detection and Alarm System	Automatic fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards. Location: Dining & storage building.	Submit the as-built design of fire alarm system to RSC in accordance with NFPA 72. Installation shall be as per the reviewed design with a listed Addressable Fire Alarm System.	Within 3 months
				
F-77	Fire Detection & Alarm ITM	Inspection, testing and maintenance for the fire alarm system is not in accordance with NFPA 72.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with NFPA 72	Within 1 month (after installation)
F-78	Fire Protection	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 and ACCORD standards. Knitting building.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Within 3 months



F-79	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 1 month (after installation)
F-80	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 and ACCORD standards.	Within 2 months

F-81	Egress Lighting	<p>Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.</p> <p>Location: All floor.</p>	<p>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.</p>	Within 3 months
<div style="display: flex; justify-content: space-around;">   </div>				
F-82	Egress Lighting	<p>Illuminated directional signs are not provided where direction of the path of travel to an exit has changed.</p> <p>Location: All floor.</p>	<p>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.</p>	Within 1 month



F-83	Emergency Lighting ITM	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 2 months
------	------------------------	--	--	-----------------

Table-6: Building No-B 01 to B04 ,B6 and B11 to B21

SI No.	Category	Findings	Required Action	Remediation Time Frame
F-84	Fire rated construction	Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: Dyeing shed-2	Provide defined storage areas and limit the storage arrangement as follows: Maximum height of 2.45 m and maximum area of 23 m ² 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 ft ² (93 m ²) 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 ft ² (372 m ²) 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-85	Fire Rated Construction	Rooms used for storage of combustible materials are not separated from the surrounding occupancy/areas due to unseal penetration. Location: Dyeing shed-2	Rooms used for storage of combustible materials shall be separated from the surrounding occupancy with a minimum 1 hour construction.	Within 3 months
------	-------------------------	--	---	-----------------



F-86	Fire Rated Construction	<p>The main structural elements of the buildings are constructed by steel which is non-rated and were found in exposed condition without any fire protection. (New Structure).</p> <p>Location: Dyeing shed-2, Godown shed & Dyeing finishing shed-1</p>	<p>The buildings are new steel structure which shall be type-I or II construction. So, provide require rating in the structural elements of the buildings. Consult with a qualified fire protection engineer. Follow BNBC 2006-Table 3.2.4, 3.1.9 and 3.3.1 as reference.</p> <p>Note: J occupancy (Chemical Store) shall be type-I construction.</p>	Within 6 months
------	-------------------------	--	--	-----------------



F-87	Fire rated construction	<p>Generator ,Boiler & compressor are not properly separated from each other by fire rated construction.</p> <p>Location :Utility shed</p>	<p>Generator Boiler & Compressor room shall be separated from each other by a minimum 2-hr fire-rated construction (wall, floor, slab, etc.). Seal all penetrations and openings (door, window, etc.) by minimum 1.5-hr fire-rated materials to maintain the fire separation as required. All exhaust systems shall discharge to the exterior of the building in a safe location.</p>	Within 3 months
------	-------------------------	--	---	-----------------



F-88	Fire Rated Construction	<p>Chemical storage area is not properly separated by fire-rated construction.</p> <p>Location: Dyeing shed-2</p>	<p>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.</p> <p>** As per BNBC, chemical storage room will be Type-1 construction. Follow section-2.13 and Table 3.2.1 of BNBC-2006 for the guideline.</p>	Within 3 month
------	-------------------------	---	--	----------------



F-89	Fire Rated Construction	The fire pump room was not properly separated from other occupancy by fire rated construction. Location: Pump shed.	Provide fire pump room with 2 hr. rated fire separation by fire rated construction. Seal all unprotected opening & penetrations.. Or, Physically separate the pump room from the protected building by a minimum of 50 ft. (15.3 m) in accordance with NFPA 20.	Within 3 months
------	-------------------------	---	---	-----------------



F-90	Means of Egress	Fire evacuation maps is not posted at the entrance of all exit stair all floors. Location: Go down shed & other all factory building.	Updated Fire evacuation maps shall be posted at the entrance to each exit stair all floors.	Within 1 month
F-91	Means of Egress	Building did not have occupant load signs at required locations at each shed/Building	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-92	Egress lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: Dyeing shed & Godown shed.	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-93	Egress lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes located at each all buildings.	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-94	Egress lighting(ITM)	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 3 months
F-95	Fire Alarm & Detection System (FADS)	Automatic fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standard Location: Building No-B 01 to B04 ,B6 and B11 to B21	Design & Installation of Fire Alarm system shall be in accordance with ACCORD standard and NFPA 72. Submit design, documents and calculations to RSC for review prior installation/modification. 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 within 2 months, Install within 6months.
F-96	Fire 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 1month after installation.

F-97	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
------	---	--	---	-----------------