

INITIAL FIRE SAFETY INSPECTION REPORT

Chaity Composite Ltd. (Extension 2)

RSC ID: 25497

Chotto Shilmondi, Tripurdi, Sonargaon, Narayanganj
23°38'57.8"N 90°35'08.5"E

Other Factories: Chaity Composite Ltd. ID 9477 & Chaity Composite Ltd.- Annex building ID 24170



Inspected By: Ahammad Kabir

Date: 22 February 2024

Fire Safety Inspection Report

Factory Name: Chaity Composite Ltd. (Extension 2)

Introduction:

Chaity Composite Ltd. (Extension 2) complex was surveyed for fire safety on 22 February 2024 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.

General Factory Information

Factory Building name(s):

1. Building-01 (Extension of Main Production Building), Proposed 5 storied RCC building, Construction Nov 21 to Jun 23, Occupied Jun 23.
2. Building-02, Compressor Building, 2 storied RCC building with UG water reservoir, Construction Jan 22 to Jul 22, Occupied Jul 22.
3. Building-03, Fire Control Room, Single storied RCC building, Construction Mar 14 to Apr 14, Occupied Apr 14.
4. Building-04, Guard Room-(Gate-02), Single storied RCC building, Construction Mar 14 to Apr 14, Occupied Apr 14.
5. Building-05, Knitting Sample Room, Single storied masonry building, Construction Mar 14 to Apr 14, Occupied Apr 14.
6. Building-06, RMS Building-01, Single storied RCC building, Construction Mar 14 to Apr 14, Occupied Apr 14.
7. Building-07, RMS Building-02, Single storied RCC building, Construction Apr 23 (Underconstruction), Not occupied yet.
8. Building-08, Training Center, Two storied RCC building with steel roof shed, Construction Mar 14 to Apr 14, Occupied Apr 14.
9. Building-09, Guard Room (Gate-01), Single storied RCC building, Construction Mar 14 to Apr 14, Occupied Apr 14.

Factory Address: Chotto Shilmondi, Tripurdi, Sonargaon, Narayanganj

Points of contact:

1. Name: Md. Niamul Hasan

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2. Name: Engr. Nabil Mahmud

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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 approval.

Table-1:

Sl No.	Category	Findings	Required Action	Remediation Time Frame
1	Fire Rated Construction	The exit discharge path (Passageway) of the building 01 is not separated by fire-rated construction from the dyeing shed.	Provide minimum 2 hr. fire rated exit discharge path which will lead directly outside.	Within 3 months
				

2	Fire Rated Construction	Unsealed penetrations and openings are located in the fire rated floor/ceiling assemblies. Location: Building 01	Provide a minimum 2-hr fire rated shaft to separate the utility risers 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.	Within 3 months
				
3	Fire Rated Construction	The compressor rooms are not fire separated with fire rated construction barrier or assemblies. Location: Compressor building.	Separate the compressor rooms by a minimum 1-hr fire-rated construction with 0.75-hr fire rated opening protective assemblies like fire rated door. Provide proper ventilation and consult a qualified engineer for overall solution. When located to the exterior of a building by at least 3m (10 ft.) distance from surroundings then fire rated construction barrier is not mandatory.	Within 3 months



4	Fire Rated Construction	Chemical store room is not properly separated due to unprotected opening & penetrations. Location: Near Building 08	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. ** 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	Within 3 months
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5	Fire Rated Construction	The Interim constructed building has been found steel-composite type and the steel columns and girders have been found in exposed condition without any fire protection. Location: Building - 08	The Interim constructed building shall be type-1 or type-2. Chemical store also shall be type-1 construction. Provide required fire rating on the structural elements by following Table-3.2.4, 3.1.9 & Table 4.4.1 of the RSC Technical Guidelines (StandardV1.0) or Table 3.3.1 of BNBC-2006. Consult a qualified fire protection engineer to design the rated construction barriers in between two floors and in structural members.	Within 6 months
6	Means of egress	Building did not have stair designation signs and occupant load signs at required locations on all floor. Location: Building 1.	Provide stair designation signs and occupant load signs at required locations.	Within 1 month

7	Means of egress	Handrails are not provided on both sides of exit stair. Location: Building 08	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.)	Within 3 months
				
8	Means of egress	The width of the exit stair is less than 1.5 m (60 in.). Location: Building 08 (Training Building)	In new and interim construction and constructed stairs post 24 November 2013, stairs shall have a minimum width of 1.5 m (60 in.) for all industrial occupancies and 2.0 m (79 in.) for all assembly occupancies. For assembly use areas provided for prayer halls, dining halls and like areas that are for integral use by the factory workers, the minimum width for the primary occupancy use of the building shall be permitted to be used.	Within 3 months

				
9	Means of egress	Fire evacuation map is not posted at the entrance of all exit stairs. Location: Building 01.	Fire evacuation maps shall be posted at the entrance of all exit stair.	Within 3 months

10	Means of egress	There is no means of egress at the two storied compressor building.	The number of means of egress from any floor, story or portion thereof shall not be less than 2 except where a single exit is permitted by RSC Technical Guideline (Standard)-6.6.2, a single means of egress is permitted by RSC Technical Guideline (Standard)-6.6.5 or where a greater number is required by RSC Technical Guideline (Standard)-6.6.3. For Basement/Ground floor: Maintain maximum 50 occupants having a travel distance of 23m (75 ft). Or Provide additional exit. For First Floor: Maintain maximum 30 occupants having a travel distance of 23m (75 ft) for occupancy F,G & H only. Or Provide additional exit.	Within 3 months
				

11	Means of Egress	Walking surface were not found level from exit discharge of all stair and are not protected from slip or tripling hazard. Location: Building 1 Stair 06.	Provide an level walking surface in exit discharge in accordance with 6.3.4 of RSC Technical Guidelines (Standard).	Within 3 months
				
12	Egress Lighting	Directional signs are not provided where direction of the path of travel to an exit has changed. Location: 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



13	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. Location: Building 1 & 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
14	Egress Lighting	Inspection, testing, and maintenance for the emergency lighting system was not in accordance with The RSC Technical Guidelines (Standard).	Inspect, test and maintain the emergency lighting system in accordance with The RSC Technical Guidelines (Standard). Keep written records on-site.	Within 3 months

15	Inspection Testing and Maintenance of Portable Fire Extinguisher.	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 onsite, in accordance with NFPA 10.	Within 3 months
16	Fire Alarm & Detection System (FADS)	Fire detection system installation requires detailed review to confirm compliance with NFPA72 and in accordance with The RSC Technical Guidelines (Standard).	Submit design, drawings and other relevant documentation to the RSC for review. Replace the fire detection system with a new, listed addressable fire detection system in accordance with NFPA 72.	Design within 2 months and installation within 3 months



17	Inspection Testing and Maintenance of Fire Alarm and Detection System (ITM)	Inspection, testing and maintenance for the fire detection and alarm system was not in accordance with standard.	Inspect, test and maintain the fire alarm system and keep written records on-site, in accordance with Table-14.3.1 of NFPA 72.	Within 1 month (after installation completed).
18	Fire Protection System (Sprinkler)	The building is in single fire compartment with the sprinkler required building. Sprinkler system installation requires detailed review to confirm compliance with NFPA 13, 14, 20, 22 and RSC Technical Guideline (Standard). Location: Building 1.	Submit the fire pump, standpipe and sprinkler system drawing to RSC for review. Once reviewed, install or modify the standpipe system throughout the building in accordance with RSC Technical Guideline (Standard) and NFPA 13, 14, 20, 22 and 24. After installation the owner shall contact the RSC for witness of conducting the final acceptance testing of the standpipe system.	Design Review within 2 months and installation within 4 months.



19	Inspection, testing, and maintenance of the Fire Pump (ITM).	Inspection, testing, and maintenance for the Fire pump is not in accordance with NFPA 25 or as per RSC Technical guidelines (Standard).	Inspect, test and maintain the fire pump & water system and keep written records on-site, in accordance with NFPA 25 or as per RSC Technical guidelines (Standard).	Within 1 month after installation.
20	Inspection, testing, and maintenance of the Fire Pump (ITM).	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 or as per RSC Technical guidelines (Standard).	Inspect, test and maintain the fire pump & water system & standpipe system and keep written records on-site, in accordance with NFPA 25 or as per RSC Technical guidelines (Standard).	Within 1 month after installation.

21	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
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