

INITIAL FIRE SAFETY INSPECTION REPORT

DEBONAIR PADDING AND QUILTING SOLUTION LTD

RSC ID: 24641

Chotanpara, Paragaon, 10 no. Hobirbari Union, Valuka, P:O-2240, Mymensingh, Bangladesh.

Other Factories: N/A



Inspected By: Mohammad Anayet Hossain & Shahina Imam

Date: 06 December 2023

Fire Safety Inspection Report

DEBONAIR PADDING AND QUILTING SOLUTION LTD

Introduction:

DEBONAIR PADDING AND QUILTING SOLUTION LTD was surveyed for fire safety on **06/12/2023** 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. Padding Raw Ware House (Single storied steel shed)
2. Padding Production Shed (G+M), Steel.
3. Finished Storage Building (G+2) RCC
4. Homeware Shed (Single Story G+M) Steel
5. Pillow Filling Shed (Single Story) Steel
6. Needle Punch Shed (Single Story) Steel
7. Quilting Shed (Steel)
8. Glue Lamination Shed (Steel)
9. Utility Shed (Steel)
10. Admin Building RCC
11. 6 storied Homeware Storage (RCC) (G+5)
12. Canteen Building (G+1) RCC
13. Resin Shed (Steel)
14. Wastage Shed (Steel)
15. Security Building and Main gate (Single Story) RCC

16. Rms Building (RCC)
17. Padding Toilet (RCC)
18. Quilting Toilet
19. Substation control Panel room (RCC)
20. Fire Pump Room (RCC) B+G
21. ETP (RCC)
22. ETP Lab Room RCC
23. Resin Mixing Shed -1 (Steel)
24. Resin Mixing Shed -2
25. Boiler room (Steel)
26. New RMS Room Single Story RCC
27. Backpack Toilet: Single Story RCC.

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Findings & Recommendations :

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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:

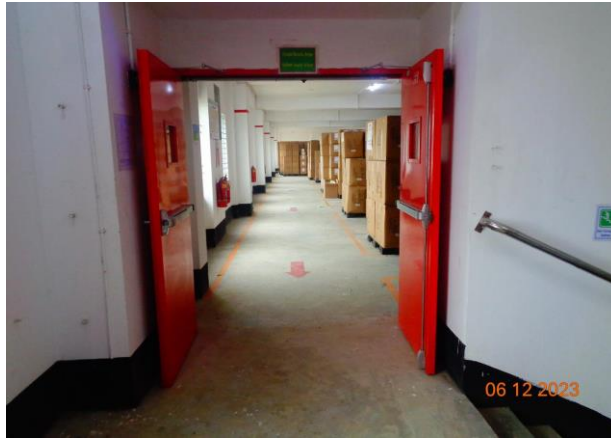
SI No.	Category	Findings	Required Action	Remediation Time Frame
F-1	Fire Rated Construction	<p>Areas used for in-process storage of combustible materials are open to the surrounding occupancy. Location: Padding Production Shed, Homeware Shed, Glue Lamination Shed</p>	<p>Provide defined storage areas 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 hour construction. 	Within 3 Months



F-2	Fire Rated Construction	<p>The exit stairs are not separated from [work areas, other spaces] on each floor by fire-rated construction.</p> <p>Location: 6 storied Homeware Storage, Finished Storage Building</p>	<p>Provide minimum 2-hr fire rated construction for buildings 4 storied or more and 1-hr for up to 3 storied. Seal all unprotected openings to separate the exit stairs from work areas and other spaces on all floor levels by 90 minutes for 2 hr construction and 60 minutes for 1-hr construction. Ensure that the fire rated doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors and provide vestibules to avoid direct discharge from storage to exit stair enclosure. If fire rated 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) 6.8.3.1If 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
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F-3	Fire Rated Construction	<p>Storage rooms discharges directly into the exit stair discharge. Location: 6 storied Homeware Storage and Finished Storage Building</p>	<p>Openings from exit enclosure to storage room, generator and hazard 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 Store, generator, substation room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.</p>	Within 3 Months
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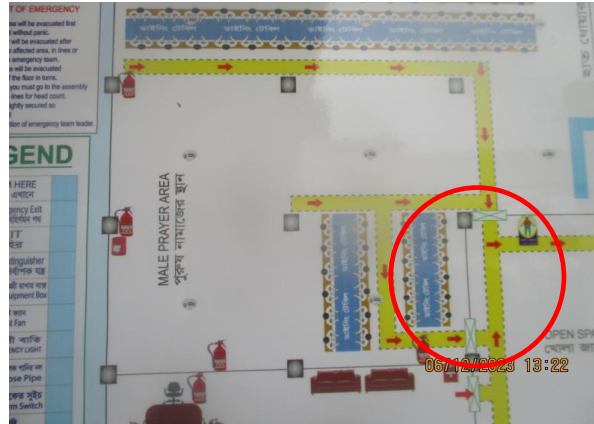
F-4	Fire Rated Construction	<p>Hazardous materials / flammable liquid storage area is not separated by fire-rated construction. Location: Resin Shed (Steel).</p>	<p>Hazardous materials / flammable liquid storage shall be in compliance and separated in accordance with BNBC 2006 Part 3 Section 2.13. Seal and/or protected all openings to maintain the required fire separations.</p>	<p>Within 3 Months</p>
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F-5	Fire Rated Construction	Steel sheds are interim constructed where structural members are constructed by steel and have been found in exposed condition without any fire protection.	<p>Interim construction shall be type-1 or type-2 construction in accordance with the RSC Technical Guidelines (Standard) 3.5.2.1 and BNBC Part-2, Table-3.2.4. Construction of new non-high-rise buildings shall be Type 1 or Type-2 construction [RSC Technical Guidelines (Standard) 3.5.2.2]. Provide required fire rating on the structural elements by following Section 4.4 and Table 4.4.1 of the RSC Technical Guidelines (Standard) or Table 3.3.1 and Table 4.1.1 from BNBC Part 4.</p> <p>Consult a qualified fire protection engineer to design the rated construction barriers in between two floors and in structural members.</p>	Within 6 Months
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F-6	Means of Egress	<p>The exits are not remotely located from each other such that a single fire event could compromise both exits.</p> <p>Location: 1st Floor of Canteen Building.</p>	<p>Modify exit arrangement or Provide additional exit(s)</p>	<p>Within 3 months</p>
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F-7	Means of Egress	Building did not have stair designation signs, floor designation at required locations.	Provide stair 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-8	Means of Egress	Building did not have Evacuation map and occupant load signs at the required locations.	Provide stair designation signs and occupant load signs at the required locations.	Within 1 Month

F-9	Means of Egress	<p>Parapets or guards are not provided in occupied roof. OR Parapets or guards are provided in occupied roof which is less than 1067mm (42 inch.). Location: Canteen Building</p>	<p>Provide parapets or guards with a minimum height of 1067mm (42 inch.).</p>	<p>Within 1 Month</p>
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F-10	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes on all floors.	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 1 Month
F-11	ITM of Emergency light and Exit Sign	Inspection, testing, and maintenance for the exit sign and emergency lighting system was not in accordance with The RSC Technical standard.	Inspect, test and maintain the exit sign and emergency lighting system in the accordance with The RSC Technical standard. Keep written records on-site.	Within 1 Month after installation
F-12	Egress Lighting	Illuminated directional signs are not provided where direction of the path of travel to an exit has changed.	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-13	Fire Alarm and Detection System (FADS)	Fire alarm & detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (Standards).	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval; modification (if required) shall have to done as per the reviewed design and standard.	Design Review within 2 months and installation within 4 months.
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F-14	Inspection, Testing and Maintenance of FADS.	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)
F-15	Fire Protection System(Standpipe)	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 and RSC standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.	Design Review within 2 months and installation within 4 months.



F-16	Fire Protection System(Automatic Sprinkler System)	<p>Fire Protection system installation requires detailed review to confirm compliance with NFPA 13, 20, 22,24 and RSC standards.</p> <p>Location: 6 storied Homeware Storage</p>	<p>Design & Installation Fire Protection system shall be in accordance with RSC standard. Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and approval.</p>	<p>Design Review within 2 months and installation within 4 months.</p>
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F-17	Fire Protection System(ITM of standpipe)	Inspection, testing, and maintenance for the Standpipe system is not in accordance with NFPA 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the standpipe system in accordance with NFPA 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month after installation.
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F-18	Fire Protection System(ITM of fire pump)	Inspection, testing, and maintenance for the fire pump is not in accordance with NFPA 25 and RSC Technical Guideline (Standard).	Inspect, test and maintain the fire pump in accordance with NFPA 25 and RSC Technical Guideline (Standard) and keep written records on-site.	Within 1 Month (after installation)
F-19	Fire Protection System(ITM of Sprinkler)	Inspection, testing, and maintenance for the automatic fire sprinkler system is not in accordance with NFPA 13 and 25 or as per RSC Technical Guideline (Standard).	Inspect, test and maintain the fire pump and standpipe system, and keep written records on-site, in accordance with NFPA 13 and 25 or as per RSC Technical Guideline (Standard).	Within 1 Month after installation.
F-20	ITM of Fire Extinguishers	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 and The RSC Technical Guidelines (Standard).	Within 3 Months