

FIRE SAFETY INSPECTION REPORT

R. B. INDUSTRIES LTD.

ACCORD ID: 12271

**RUBY GATE, NASIRABAD, INDUSTRIAL AREA, EAST
NASIRABAD, BYEZID BOSTAMI ROAD, CHITTAGONG.**

OTHER FACTORIES: NONE



ACCORD
on Fire and Building Safety in Bangladesh

October 24, 2015

SUMMARY



R. B. Industries Ltd. was surveyed for fire safety on 10/24/2015 by Jensen Hughes. This summary identifies the major deficiencies that were identified during the inspection.

The purpose of this survey was to identify significant fire safety issues and to provide recommendations for remediation based on applicable standards specified by the Accord. 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.

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 Accord for approval.

Table 1. Findings And Recommendations

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Proper certification was not available for fire rated doors installed in the factory on ground, 1st, 2nd and 3rd floors.	Submit proper certifications for installed fire doors to the ACCORD for approval. If not available, or certification is not approved, install new, properly certified fire rated doors in accordance with ACCORD direction.	Immediately
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F-2	Fire Rated Construction	The fire pump room is not provided with adequate fire separation in the separate building east side on ground floor.	Provide fire pump room with 2 hr rated fire separation when not sprinklered and 1 hr rated fire separation when provided with automatic sprinklers, in accordance with NFPA 20.	Within 3 months



F-3	Fire Rated Construction	The industrial dryers are not separated by fire-rated construction on ground floor building-02.	Separate the industrial dryer area by a minimum 2-hr fire-rated construction. Seal and protect all openings to maintain the required fire separations. Provide proper ventilation and consult with a qualified engineer.	Within 3 months
F-4	Fire Rated Construction	The boiler and compressor rooms shall be separated by fire-rated construction on ground floor.	<p>Separate the boiler and compressor room by a minimum 1-hr fire-rated construction for non-high rise. Seal and protect all openings to maintain the required fire separations. Provide proper ventilation and consult a qualified engineer.</p> <p>When located to the exterior of a building, separate the boiler and compressor by a minimum distance of 3m (10 ft).</p>	Within 3 months

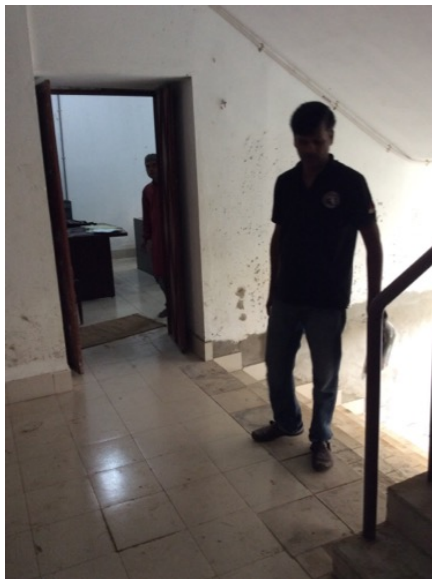

F-5	Fire Rated Construction	Rooms used for combustible storage are not separated by a minimum 1-hr fire-rated construction on ground floor.	<p>Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction.</p> <p>Where separate storage rooms are not feasible, provide defined storage areas and limit the storage arrangement as follows:</p> <ul style="list-style-type: none">- Maximum height of 2.45m (8 ft) and maximum area of 23m² (250 ft²) <p>OR</p> <ul style="list-style-type: none">- If sprinkler protected: maximum height of 3.66m (12 ft) and maximum area of 93m² (1000 ft²) <p>AND</p> <p>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft).</p>	Within 3 months
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F-6	Fire Rated Construction	Exit stairs are not separated from work areas and other spaces on each floor by fire-rated construction due to unprotected openings in the north, northeast, northwest 01 and northwest 02 on 4th, 5th and 6th floors.	Separate the exit stairs from from work areas and other building spaces on all floor levels by minimum 2-hr fire-rated construction. Provide minimum 1.5-hr fire rated doors and seal all unprotected openings and penetrations to maintain the fire separation.	Within 3 months
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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. If applicable: 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 ACCORD standard 6.8.3.1.



F-7	Fire Rated Construction	Storage room discharges directly into exit stair enclosure on all floors.	Openings from exit enclosure to storage room spaces shall be provided with a vestibule with fire rated construction and openings. AND 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-8	Egress	Building did not have stair designation signs, occupant load signs and emergency evacuation plans at required locations on all floors.	Provide stair designation signs, occupant load signs and emergency evacuation plans at required locations.	Immediately	
F-9	Egress	Fire drills are not performed as required by ACCORD standard.	Fire drills shall be conducted on a quarterly basis in accordance with ACCORD standard 13.2.	Immediately	

F-10	Egress	Egress doors with locking features are provided at exit stairs on all floors. All doors were open and unlocked during inspection.	Remove locking features from all egress doors and gates. If locks are required for security reasons, utilize special door locking features complying with ACCORD standard 6.8.2.	Immediately
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F-11	Egress	The day-care room does not meet ACCORD standard 3.4.2.1.1 on ground floor building 02.	Day-care shall be located on the ground floor with a maximum travel distance of 9 m (30 ft) or located one story above level of exit discharge with direct access to an exit enclosure. If the above is not possible provide a minimum 2-hr fire-rated exit corridor between the day-care room and exit stair with ACCORD approval.	Within 3 months
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F-12 Egress

Handrails are not provided on both sides of the exit stairs on 5th and 6th floors.

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



F-13	Fire Protection	Fire alarm system installation requires detailed review to confirm compliance with NFPA 72 and ACCORD standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval.	Within 1 month
F-14	Fire Protection	Fire pump installation requires detailed review to confirm compliance with NFPA 20 and ACCORD standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval.	Within 1 month
F-15	Fire Protection	Standpipe system installation requires detailed review to confirm compliance with NFPA 14 and ACCORD standards.	Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval.	Within 1 month
F-16	Fire Protection	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 months
F-17	Fire Protection	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 and ACCORD standards.	Within 3 months

F-18	Fire Protection	Fire department connection is not provided.	Provide fire department connection in accordance with ACCORD standard 5.5.4.	Within 3 months
F-19	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 3 months
F-20	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 and ACCORD standards.	Within 3 months
F-21	Fire Protection	Inspection, testing and maintenance of the standpipe system is not in accordance with NFPA 14.	Inspect, test and maintain the standpipe system and keep written records on-site, in accordance with NFPA 14 and ACCORD standards.	Within 3 months
F-22	Fire Protection	Standpipe system is required for the building, which has an occupiable floor 10 m (33 ft) or more above grade.	Install a new class III standpipe system in accordance with ACCORD standard 5.4 and NFPA 14. A class I system shall be permitted in buildings protected throughout by an approved automatic sprinkler system.	Within 6 months
F-23	Fire Protection	Install addressable Fire alarm system	Provide listed automatic fire alarm system in accordance with NFPA 72 and ACCORD standards.	Within 6 months

F-24	Fire Protection	Install fire pump which is needed for the standpipe system fire demand.	Provide a fire pump in accordance with NFPA 20 and ACCORD standards, or provide an alternative water supply source capable of meeting the required fire protection demand, subject to ACCORD approval.	Within 6 months
F-25	Fire Protection	Visible and audible notification was not provided for the building in accordance with NFPA 72.	Provide visible and audible notification for the building in accordance with NFPA 72.	Within 9 months
F-26	Egress Lighting	Exit signage was not provided at a building exit, along a path of egress and in a readily visible location. Installation work is on going.	Provide exit signs above all building exits to the exterior, all doors to the exit stairs and along all paths of travel where a change of direction is not obvious.	Within 1 month





F-27	Egress Lighting	Emergency lighting did not function in test mode burned out and broken on all floors. Installation work is on going.	Regularly test the emergency lighting system on each floor and replace/repair lights as needed.	Within 1 month
F-28	Egress Lighting	Manual on-off switch is provided for emergency lighting units on all floors within the exit stair enclosures.	Remove manual on/off switches from emergency lighting units to prevent them from being switched off.	Within 1 month



F-29	Egress Lighting	Inspection, testing and maintenance for the emergency lighting system was not in accordance with ACCORD standards.	Inspect, test and maintain the emergency lighting system in the accordance with ACCORD standards. Keep written records on-site.	Within 3 months
F-30	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 3 months

