

# **FIRE SAFETY INSPECTION REPORT**

**RADISSON GARMENTS LIMITED**

**ACCORD ID: 12126**

**B -84, BSCIC, TONGI, GAZIPUR, BANGLADESH.**

**OTHER FACTORIES: NONE**



**ACCORD**  
on Fire and Building Safety in Bangladesh

April 20, 2015

## **SUMMARY**

**Radisson Garments Limited was surveyed for fire safety on 4/20/2015 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	Liquefied or compressed gas cylinders were located within the factory on the egress court.	The storage or use of liquefied or compressed flammable gas cylinders shall be prohibited within the factory building.	Immediately



F-2	Fire Rated Construction	Unsealed electrical shafts are located in the fire-rated floor/ceiling assemblies on fourth and fifth floors.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level and seal all penetrations in floor/ceiling assemblies to maintain the fire separation.	Within 3 months
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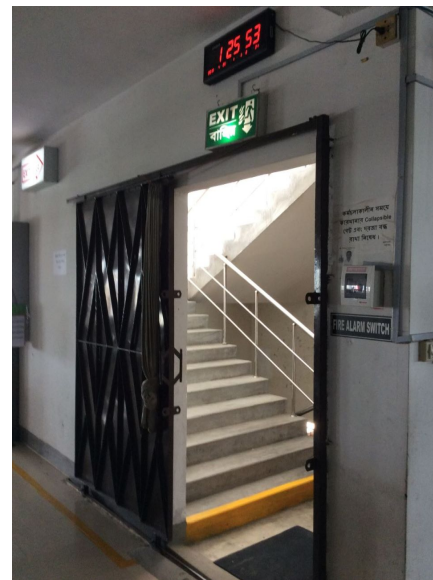
F-3	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor by fire-rated construction.
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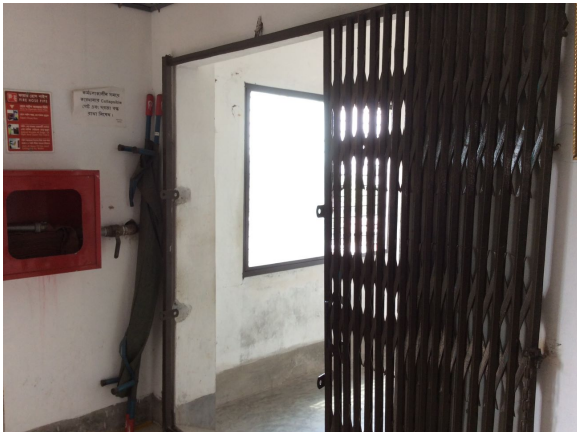
Provide minimum 1.5-hr fire rated doors for buildings that are 4 or more stories. Seal all unprotected openings to separate the exit stairs from work areas and other building spaces on all floor levels. Ensure that the fire doors are self-closing and positive latching and that they are provided with fire exit (panic) hardware where serving production floors.

Within 3 months

If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.

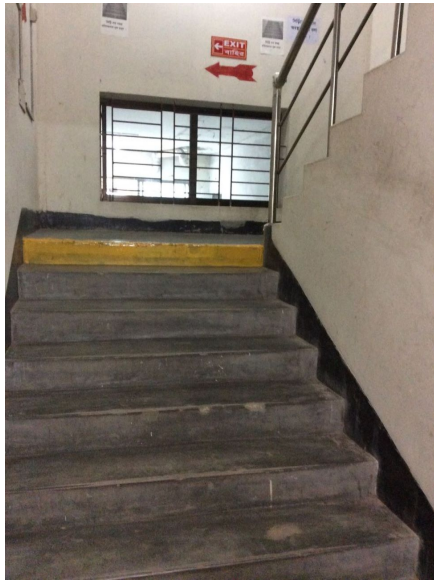
Once fire doors are installed, every door in a stair enclosure serving more than 5 stories shall be provided with re-entry unless it meets ACCORD standard 6.8.3.1.





F-4	Fire Rated Construction	Unsealed penetrations and openings are located in south east exit stair enclosures.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.	Within 3 months
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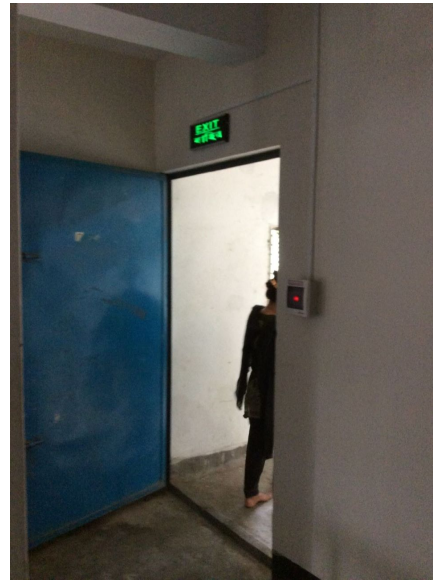


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F-5	Fire Rated Construction	The north exit stair enclosure is not separated from work areas on first and second floors by fire-rated construction.	The exit stair enclosure shall be provided with a minimum 2-hr fire resistance rating for buildings 4 or more stories.	Within 3 months
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F-6	Fire Rated Construction	Storage rooms discharge directly into all exit stair enclosures. Transformer room discharges directly into south east exit stair enclosure.	<p>Openings from exit enclosure to storage and transformer rooms shall be provided with a vestibule with fire rated construction and openings.</p> <p>Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storage and transformer 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-7	Fire Rated Construction	The boiler room is not separated by fire-rated construction due to openings and non-rated doors on the third floor. Compressor room is not separated by fire-rated construction due to openings, non-rated doors and penetrations on ground floor.	Separate the boiler and compressor room by a minimum 1-hr fire-rated construction for non-high rise. Seal and/or protect all openings to maintain the required fire separations. When located to the exterior of a building, 3m (10 ft.) separation is required. Provide proper ventilation and consult a qualified engineer.	Within 3 months
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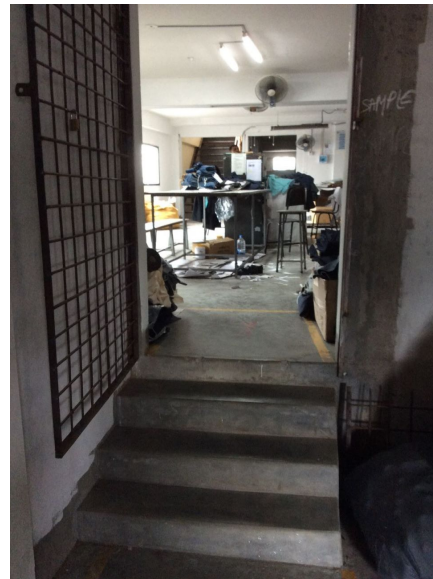


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F-8	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire-rated construction on second and fifth floors.	Provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) and maximum area of 23m <sup>2</sup> (250 ft <sup>2</sup> ) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m <sup>2</sup> (305ft <sup>2</sup> )  Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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F-9	Fire Rated Construction	Rooms used for combustible storage are not separated by fire-rated construction on ground and first floors.	Provide dedicated storage rooms separated by minimum 1-hr fire-rated 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.) and maximum area of 23m <sup>2</sup> (250 ft <sup>2</sup> ) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m <sup>2</sup> (305ft <sup>2</sup> )  Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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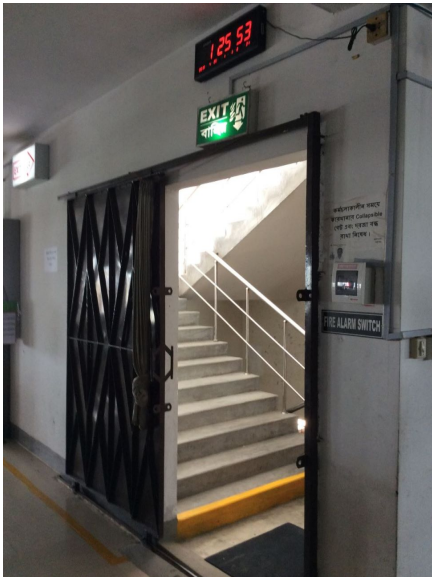




F-10	Fire Rated Construction	The exit discharge path serving the north exits are less than 3 m (10 ft.) wide and is not separated from the building interior.	Seal all penetrations and openings to the interior of the building along the discharge path, up to a height of 10 ft., to provide a minimum 1-hr fire separation.	Within 6 months
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F-11	Egress	Building did not have stair designation signs at exit stairs. Building did not have occupant load signs on factory floors.	Provide stair designation signs and occupant load signs at required locations.	Immediately
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F-12	Egress	Egress doors with locking features are provided at exit stairs and along egress routes. Egress gates with locking features are provided at exit stairs. All doors were not open and unlocked during the inspection.	Remove locking features from all egress doors and gates.  If locks are required for security reasons, utilize special door locking features complying with NFPA 101 and ACCORD standard 6.8.2.	Immediately
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F-13	Egress	Storage was located in the egress paths on ground and third floors. Obstructions were located in the egress paths on all the floors and egress court.	Keep egress paths and stairs clear of storage.	Immediately
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F-14	Egress	Storage was located in the south west, south east and south exit stairs.	Remove all storage from exit stairs and egress paths.	Immediately
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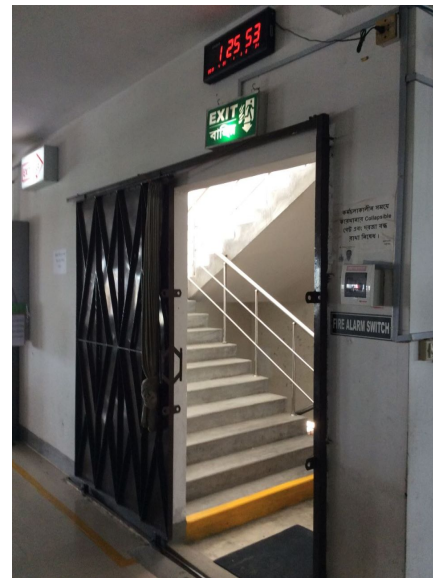


F-15 Egress

Collapsible gates are provided at exit stairs. Sliding doors are provided at exit stairs, along egress routes and exit discharges.

Replace all gates and sliding doors along the means of egress with side-hinged, swinging egress doors in accordance with ACCORD standard 6.8.1.

Within 1 month





F-16 Egress

The width of egress aisles is less than 36-in. on all floors.

Provide minimum aisle widths of 36-in.

Within 3 months





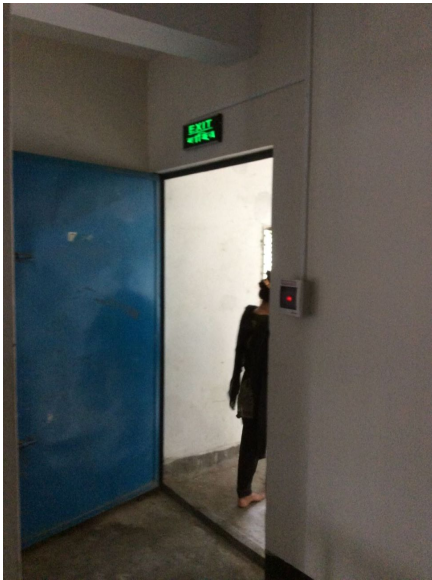
F-17 Egress

Exit stair doors does not swing in the direction of egress travel on first and second floors.

Modify the egress door to swing in the direction of egress travel.

Within 3 months



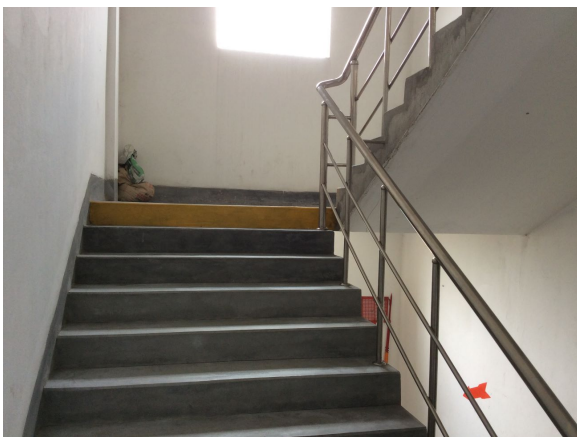


F-18 Egress

Handrails are not provided on both sides of all the exit stairs.

Provide handrails on both sides of the exit stairs. 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-19 Egress

A single means of egress is provided from Prayer space on the first floor where the occupant load (95) is exceeded.

Reduce occupant load to not more than 30 persons. Or provide additional means of egress.

Within 3 months



F-20	Egress	North exit stair serving second floor discharges inside the building on the first floor. Exit discharge path is open to storage and production areas on the first floor.	Provide 2-hr fire-rated exit passageway leading directly to north east exit stair on the first floor (vestibules to separate any storage areas).	Within 6 months
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F-21	Fire Protection	The fire alarm system is antiquated, not a listed system and does not provide alarm and notification features consistent with acceptable standards.	Replace the fire alarm system with a new, listed addressable fire alarm system in accordance with NFPA 72.	Design within 4 months, install within 9 months
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F-22	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.	Within 3 months
F-23	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.	Within 3 months
F-24	Fire Protection	Fire department connection is not provided.	Provide fire department connection in accordance with ACCORD standard 5.5.4.	Within 3 months
F-25	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.	Within 3 months

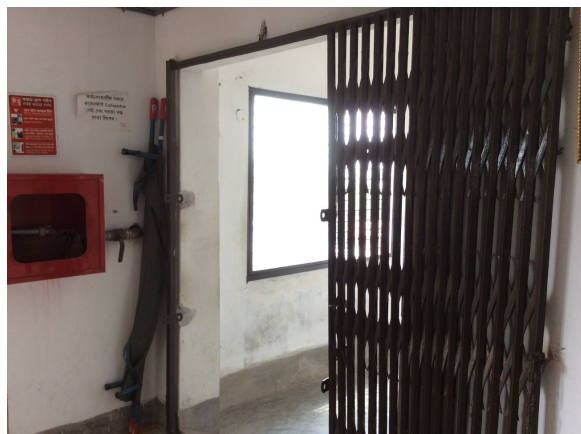
F-26	Fire Protection	Visible notification was not provided for the building in accordance with NFPA 72.	Provide visible notification for the building in accordance with NFPA 72.	Within 3 months
F-27	Fire Protection	The required standpipe system is not installed in accordance with the ACCORD standard.	Install a new standpipe system in accordance with ACCORD standard 5.4 and NFPA 14.  A class III system shall be installed in buildings with the highest occupiable floor 10 m (33 ft.) above grade or more. A class I system shall be permitted in buildings protected throughout by an approved automatic sprinkler system.	Within 6 months

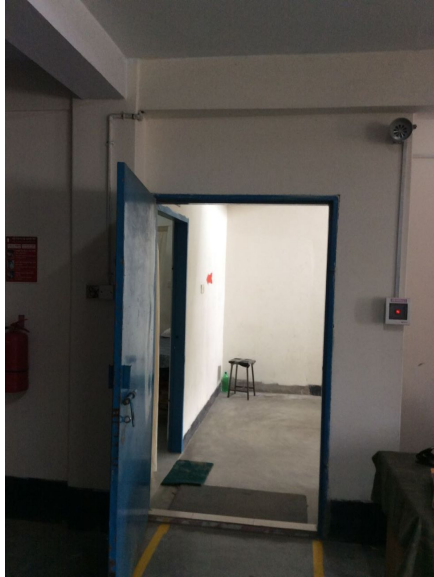


F-28	Fire Protection	The building is equipped with single-station smoke alarms. Smoke alarm activation sounds only a local alarm and does not provide automatic fire alarm notification of occupants.	Remove single-station smoke alarms. Provide automatic smoke detection throughout the building, tied into the fire alarm system, in accordance with NFPA 72.	Within 9 months
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F-29	Egress Lighting	Exit signage was not provided at floor exits.	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
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F-30 Egress Lighting

Exit signage not illuminated on the first floor above north exit.

Regularly inspect all exit signage and replace/install lights as needed to illuminate signs. The source of illumination shall provide not less than 50 lux at the illuminated surface with a contrast of not less than 0.5. Approved self luminous signs which provide evenly illuminated letters having a minimum luminance of 0.2 cd/m<sup>2</sup> may also be used.

Within 1 month



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F-31	Egress Lighting	Inspection, testing and maintenance for the emergency lighting system was not in accordance with The ACCORD standard.	Inspect, test and maintain the emergency lighting system in the accordance with The ACCORD standard. Keep written records on-site.	Within 3 months
F-32	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes on factory 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

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