

# FIRE SAFETY INSPECTION REPORT

## Dewan Fashion Wears Ltd. (Relocated)

Factory ID: 24710

Mamun Nagar, Sarabo, Kashimpur, Gazipur Sadar, Gazipur

23.9847130, 90.2724886

Other Factories in the Premises: None



Inspected by: Md. Rakibul Alam, Nainin Nowrose & Md. Jahidul Kabir

Date: 9 July 2023



## Fire Safety Inspection Summary Report

### Dewan Fashion Wears Ltd. (Relocated)

#### Summary

**Dewan Fashion Wears Ltd. (Relocated)** complex was surveyed for fire safety on 9 July 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.

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. Findings And Recommendations**

| No.                                                                                                                                                                                                                                       | Category        | Finding                                                                                                                                                                  | Recommendation                                                                                                                                               | Remediation<br>Timeframe                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| F-1                                                                                                                                                                                                                                       | Fire Protection | The fire alarm and detection system installation requires detailed review to confirm compliance with NFPA 72 and RSC Technical Guidelines (Standard).<br>(All buildings) | Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and then approval/acceptance test. | Drawing<br>Within 2 months<br>Install<br>Within 2 months |
| <div style="display: flex; justify-content: space-around;">   </div> |                 |                                                                                                                                                                          |                                                                                                                                                              |                                                          |
| F-2                                                                                                                                                                                                                                       | Fire Protection | The fire pump set installation requires detailed review to confirm compliance with NFPA 20 and RSC Technical Guidelines (Standard).                                      | Submit as-built drawings, testing records, equipment certification and other relevant documentation to the RSC for review and then approval/acceptance test. | Drawing<br>Within 2 months<br>Install<br>Within 2 months |





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| F-3 | Fire Protection | The firefighting system (standpipe system) installation requires detailed review to conform compliance NFPA 14. (Main Building) | Submit as built drawing, testing records, equipment certification and all relevant documents to the RSC for review, approval and acceptance test. | Drawing Within 2 months<br>Install Within 2 months |
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| F-4 | Egress | Elevator shaft opening is not fire separated from the factory floors.<br>(Main Building) | Separate the elevator shaft by 1.5-hr fire rated opening protection from factory floors.<br><br>There is a variety of opening protective types i.e., fire rated lift landing doors, fire doors, fire rated curtain combination for both heat & smoke control with integration with fire alarm control panel. | Within 3 months |
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| F-5 | Fire Rated Construction | Exterior exit stairs are not properly separated from the building.<br>(Main Building) | Exterior exit stairs shall be separated from the building with a rating requirement of 1-hr. fire rating for 3 or few store building. The rating of the exterior wall shall extend 3.05 m (10 ft) beyond the ends of the stair structures. | Within 3 months |
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| F-6 | Fire Rated Construction | Areas used for combustible storage open to the factory are not properly defined and/or not within limits. (Main Building –2 <sup>nd</sup> and 5 <sup>th</sup> floor) | <p>Provide defined storage areas and limit the storage arrangement as follows:</p> <p>Maximum height of 2.45m (8 ft) and maximum area of 23 m<sup>2</sup> (250 ft<sup>2</sup>).</p> <p>If sprinkler protected: maximum height of 3.66m (12 ft) and maximum area of 93m<sup>2</sup> (1000 ft<sup>2</sup>).</p> <p>Separate the areas of unenclosed combustible storage by a minimum clear distance of 3 m (10 ft).</p> <p>Areas shall limit within 10% of entire floor area.</p> | Within 2 months |
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| F-7 | Fire Rated Construction | Unsealed utility pipes, electric riser penetration located in the fire-rated floor/ceiling assemblies | Penetrations of fire resistive rated assemblies shall be protected with listed through penetration fire stop system tested in Accordance with ASTM E814 in Accordance with RSC standard 4.7. | Within 3 months |
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| F-8 | Fire Rated Construction | Rooms/areas on 1st and 3rd floor used for combustible storage are not separated by a minimum 1-hr fire-rated construction where storage area exceeding 10% of the floor area. | Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. | Within 3 months |
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| F-9 | Fire Rated Construction | Exit doors are provided with 2 hr fire rated doors however fire door accessories are not working as required and few are not completed yet.<br>(All buildings) | <p>Separate the exit stairs 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 (10" wall).</p> <p>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.</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> <p>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 6.8.3.1.</p> | Within 1 month |
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| F-10 | Fire Rated Construction | Proper certification was not available for fire rated doors installed in the factory.                    | Submit proper certifications for installed fire doors during inspection for approval. If not available, or certification is not approved, install new, properly certified fire rated doors in accordance with RSC direction. | Within 3 months |
| F-11 | Egress Lighting         | Directional sign was not provided at the path of egress / in a readily visible location.                 | Provide lighted directional signs along all paths of travel where a change of direction is not obvious.                                                                                                                      | Within 1 month  |
| F-12 | Egress                  | Fire evacuation maps is not posted at the entrance of the exits at several floors. Also few not updated. | Fire evacuation maps shall be posted at the entrance to each exits and exit stairs and maps shall be updated regularly when required.                                                                                        | Within 1 month  |



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| F-13 | Fire Rated Construction | Storage/ storage rooms discharges directly into the exit stair enclosures. (Ground floor, 1st floor). | Openings from exit enclosure to storage room, generator, basements, transformer boiler and similar normally unoccupied spaces shall be provided with a vestibule with fire rated construction and openings as per RSC Technical Guidelines (Standard) 6.14.3. | Within 3 months |
|      |                         |                                                                                                       | Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storeroom/storage side.<br>Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.                                    |                 |



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| F-14 | Egress | Adequate and unobstructed aisles were not provided. Aisles were blocked by building columns. | Provide minimum and clear aisle widths of 36-in where applicable and required. Rearrange the floor layout if required. | Within 3 months |
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| F-15 | Egress Lighting | Manual on-off switch is provided for emergency lighting / exit signage units. | Remove manual on/off switches from emergency lighting / exit signage units to prevent them from being switched off. | Within 1 month |
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| F-16 | Egress | Sliding doors are provided at exits on the metal free zones. | Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors in accordance with RSC standard 6.8.1. | Within 1 month |
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| F-17 | Egress | Handrails height was below 30 inches. | 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 |
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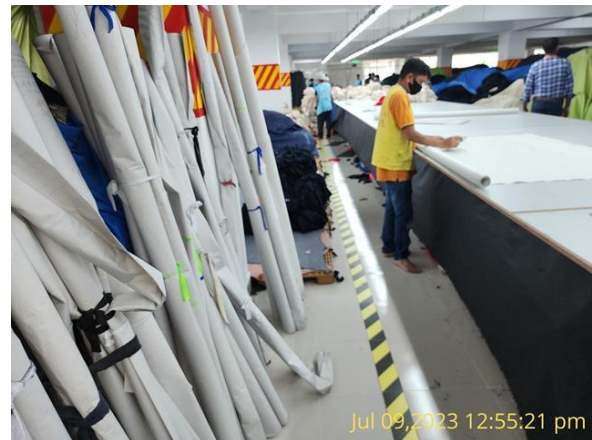


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| F-18 | Egress Lighting | Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes.<br><br>(Top Floor and where required). | Test the emergency lighting system on each floor 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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| F-19 | Egress | Building did not have stair designation sign and occupant load signs at required locations. | Provide occupant load signs and stair designation signs at all required locations. | Within 1 month |
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| F-20 | Egress | Storage was located in the exit stairs and aisles. | Remove all storage from exit stairs and aisles.<br>Keep egress paths and stairs clear of storage. | Immediately |
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F-21 Fire Rated Construction

Dining and storage are not separated by fire rated construction. (6<sup>th</sup> floor)

Dining shall be separated from by minimum 3-hr rated construction. Provide at least two means of exits leading directly to the stairs in two independent and different direction.

Within 3 months

If factory change the occupancy bellow and above the dining floor then need to meet the requirement of BNBC 2006, part 4 chapter 3 section 3.21.3 and table 3.2.1.





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| F-22 | Egress | Fire drills are not performed as required | Fire drills shall be conducted on a Monthly basis as outlined in BNBC2020 Part 4 Appendix A | Within 1 month |
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