

# **FIRE SAFETY INSPECTION REPORT**

**KDS GARMENT INDUSTRIES LTD**  
**255,NASIRABAD I/A ,BAIZID BOSTAMI ROAD,**  
**CHITTAGONG-4211,BANGLADESH;**

**OTHER FACTORIES: NONE**



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

May 21, 2014

## **SUMMARY**

**KDS Garment Industries Ltd was surveyed for fire safety on 5/21/2014 by Hughes Associates, Inc. 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.**

**Tables 1 - 3 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 - Building 1**

| No.                                                                                | Category                | Finding                                                                                                                                                                              | Recommendation                                                                                                                                                              | Remediation Timeframe |
|------------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| F-1                                                                                | Fire Rated Construction | Flammable liquid storage area is not separated by fire-rated construction (openings, non-rated doors, penetrations) on the ground floor in close proximity to exit discharge routes. | Separate the flammable liquid storage room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations.         | Within 3 months       |
|  |                         |                                                                                                                                                                                      |                                                                                                                                                                             |                       |
| F-2                                                                                | Fire Rated Construction | The boiler, generator and transformer room is not separated by fire-rated construction (openings, non-rated doors, penetrations) on the ground floor of building 1.                  | Separate the boiler, generator and transformer room by a minimum 2-hr fire-rated construction. Seal and/or protected all openings to maintain the required fire separations | Within 3 months       |



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| F-3 | Fire Rated Construction | The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction. | <p>Provide minimum 1.5-hr fire rated doors and 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.</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> | Within 3 months |
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| F-4 | Fire Rated Construction | Areas used for combustible storage are not separated by fire-rated construction on the ground floor of building 1. | Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. | Within 3 months |
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| F-5 | Fire Rated Construction | Unsealed penetrations and openings are located in the fire-rated floor/ceiling assemblies. Internal stairwell no longer in use is open to all floors, used as and old storage bay. | Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level.<br><br>Seal all penetrations and openings in floor/ceiling assemblies to maintain the fire separation. | Within 3 months |
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| F-6 | Egress | Egress doors and gates with locking features are provided at building exits, exit stairs, along egress routes, exit discharge. All gates and doors were open and unlocked during the inspection. | Remove locking features from all egress doors / gates.<br><br>If locks are required for security reasons, utilize special door locking features complying with NFPA 101. | Immediate |
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| F-7 | Egress | Storage was located in the exit stair such as trash cans and loose combustible materials. | Remove all storage from exit stairs and egress paths. | Immediate |
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| F-8 | Egress | Collapsible gates and sliding doors are provided at building exits, exit stairs, along egress routes and main exit discharge. | Replace all gates / sliding doors along the means of egress with side-hinged, swinging egress doors.<br><br>If locks are required for security reasons, utilize special door locking features complying with NFPA 101. | Within 1 month |
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| F-9 | Egress | Exit stair door serving 50 or more occupants does not swing in the direction of egress travel on the sixth floor West stair. | Modify the egress door to swing in the direction of egress travel. | Within 3 months |
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| F-10 | Egress | Handrails are not provided in the west exit stair. | Provide handrails on at least one side of exit stair. | Within 3 months |
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| F-11 | Fire Protection | Inspection, testing, and maintenance of 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 |
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| F-12 | Egress Lighting | Manual on-off switch is provided for emergency lighting units. | Remove manual on/off switches from emergency lighting units to prevent them from being switched off. | Within 1 month |
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| F-13 | Egress Lighting | Inspection, testing, and maintenance records for the emergency lighting system were not in accordance with the ACCORD requirements. | Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site. | Within 3 months |
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**Table 2. Findings And Recommendations - Building 2**

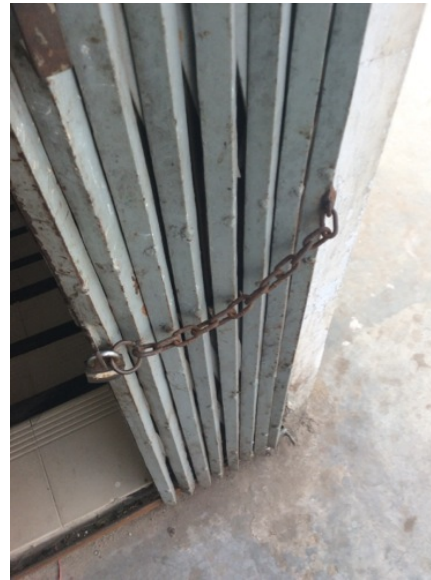
| No. | Category                | Finding                                                                                                   | Recommendation                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Remediation Timeframe |
|-----|-------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| F-1 | Fire Rated Construction | The exit stairs are not separated from work areas, other spaces on each floor by fire-rated construction. | <p>Provide minimum 1.5-hr fire rated doors and 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.</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> | Within 3 months       |



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| F-2 | Fire Rated Construction | Areas used for combustible storage are not separated by fire-rated construction on the ground, sixth, seventh and eighth floors. | Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. | Within 3 months |
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| F-3 | Egress | Egress doors and gates with locking features are provided at building exits, exit stairs, along egress routes and main exit discharge. All gates and doors were open and unlocked during the inspection. | <p>Remove locking features from all egress doors and gates.</p> <p>If locks are required for security reasons, utilize special door locking features complying with NFPA 101.</p> | Immediate |
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| F-4 | Egress | Storage was located in the exit stair such as trash cans. | Remove all storage from exit stairs and egress paths. | Immediate |
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| F-5 | Egress | Collapsible gates and sliding doors are provided at building exits, exit stairs, along egress routes and main exit discharge. | <p>Replace all gates and sliding doors along the means of egress with side-hinged, swinging egress doors.</p> <p>If locks are required for security reasons, utilize special door locking features complying with NFPA 101.</p> | Within 1 month |
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| F-6 | Egress | Exit stair door does not swing in the direction of egress travel on the sixth floor. | Modify the egress door to swing in the direction of egress travel. | Within 3 months |
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| F-7 | Egress | Handrails are not provided in the West exit stair. | Provide handrails on at least one side of exit stair. | Within 3 months |
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| F-8  | Fire Protection | The fire alarm system is antiquated, not a listed system, and does not provide alarm and notification features consistent with acceptable standards.                                                                                             | Alter the fire alarm system to meet the requirements with NFPA 72.                                              | Design within 4 months, install within 9 months  |
| F-9  | Fire Protection | The high-rise building has an occupied floor greater than 23m (75 ft) and is not provided with automatic sprinkler protection. The large occupant loads, heavy fuel loading, and anticipated extended egress times warrant sprinkler protection. | Provide automatic sprinkler protection throughout the building in accordance with NFPA 13.                      | Design within 6 months, install within 12 months |
| F-10 | Fire Protection | Inspection, testing, and maintenance of 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                                  |

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| F-11 | Egress Lighting | Manual on-off switch is provided for emergency lighting units throughout the factory. | Remove manual on/off switches from emergency lighting units to prevent them from being switched off. | Within 1 month |
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| F-12 | Egress Lighting | Inspection, testing, and maintenance records for the emergency lighting system were not in accordance with the ACCORD requirements. | Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site. | Within 3 months |
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**Table 3. Findings And Recommendations - Building 3**

| No. | Category                | Finding                                                                                                         | Recommendation                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Remediation Timeframe |
|-----|-------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| F-1 | Fire Rated Construction | The exit stairs are not separated from work areas on each floor by fire-rated construction on the ground floor. | <p>Provide minimum 1.5-hr fire rated doors and 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.</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> | Within 3 months       |



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| F-2 | Fire Rated Construction | Areas used for combustible storage are not separated by fire-rated construction. Ground floor yarn storage not adequately separated. | Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. | Within 3 months |
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| F-3 | Egress | Egress doors and gates with locking features are provided at building exits, exit stairs, along egress routes, exit discharge. All gates/doors were open and unlocked during the inspection. | Remove locking features from all egress doors / gates.<br><br>If locks are required for security reasons, utilize special door locking features complying with NFPA 101. | Immediate |
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| F-4 | Egress | Storage was located in the exit stairs such as trash cans. | Remove all storage from exit stairs and egress paths. | Immediate |
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| F-5 | Egress | Collapsible gates and sliding doors are provided at building exits, exit stairs, along egress routes, main exit discharge. | Replace all gates and sliding doors along the means of egress with side-hinged, swinging egress doors.<br><br>If locks are required for security reasons, utilize special door locking features complying with NFPA 101. | Within 1 month |
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|-----|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| F-6 | Fire Protection | The fire alarm system is antiquated, not a listed system, and does not provide alarm and notification features consistent with acceptable standards. | Alter the fire alarm system in accordance with NFPA 72.                                                         | Design within 4 months, install within 9 months |
| F-7 | Fire Protection | Inspection, testing, and maintenance of 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-8 | Egress Lighting | Manual on-off switch is provided for emergency lighting units.                                                                                       | Remove manual on/off switches from emergency lighting units to prevent them from being switched off.            | Within 1 month                                  |



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| F-9 | Egress Lighting | Inspection, testing, and maintenance records for the emergency lighting system were not available. | Inspect, test and maintain the emergency lighting system in accordance with The ACCORD standard. Keep written records on-site. | Within 3 months |
|-----|-----------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------|