

FIRE SAFETY INSPECTION REPORT

KADENA SPORTSWEAR

ACCORD ID: 12141

**STANDARD FACTORY BUILDING NO. 5 & PLOT NO.
113-121**

OTHER FACTORIES: NONE



ACCORD
on Fire and Building Safety in Bangladesh

March 14, 2015

SUMMARY

Kadena sportswear was surveyed for fire safety on 3/14/2015 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.

Tables 1 - 2 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 - Plot no. 113-121

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Diesel fuel storage was located inside the generator room.	Remove all diesel fuel storage from the generator room and relocate to the exterior such that the diesel fuel storage is at least 10 ft. from required egress paths. If located along egress paths or in a utility building, provide the diesel fuel storage with 2-hr fire rated construction. There shall be no diesel fuel storage in a factory production building.	Immediately



F-2	Fire Rated Construction	The compressor is not separated by fire-rated construction outside the building.	Separate the compressor by a minimum 1-hr fire-rated construction for non-high rise. Seal and 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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F-3	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire-rated construction on all floors.	Provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) and maximum area of 23m² (250 ft²) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (305ft²) Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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F-4	Fire Rated Construction	Rooms used for combustible storage are not separated by fire-rated construction on the ground floor.	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 23m² (250 ft²) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (305ft²) Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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F-5	Fire Rated Construction	The exit discharge path serving the west exit is 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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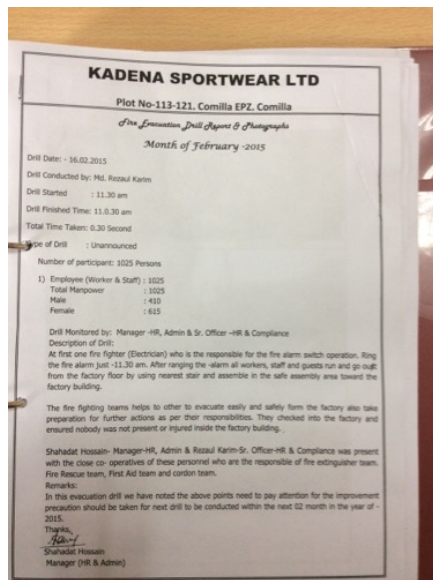


F-6	Fire Rated Construction	The exterior exit stair is not properly separated from the building.	Exterior exit stairs shall be separated from the building with a rating requirement of 1 hr. fire rating for 3 or fewer stories. The rating of the exterior wall shall extend 3.05 m (10ft) beyond the ends of the stair structure.	Within 6 months
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F-7	Egress	Building did not have stair designation signs at floor entrance. Building did not have occupant load signs at building exits.	Provide stair designation signs, occupant load signs and emergency evacuation plans at required locations.	Immediately
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F-8	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
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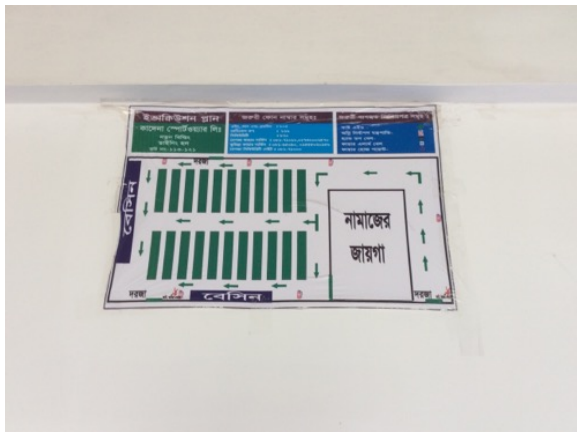


F-9 Egress

Exit capacity (146) is not adequate for the occupant load (350) on the rooftop during lunch time.

Reduce occupant load immediately to not more than available exit capacity (146) during lunch time. Provide additional exits in the future to increase exit capacity.

Immediately



F-10	Egress	Egress gates with locking features are provided at building exits and exit stairs. All gates 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-11	Egress	Storage was located in the egress path on ground floor. Exterior discharge path of the west exit was found obstructed.	Keep egress paths and stairs clear of storage and obstructions.	Immediately
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F-12	Egress	Collapsible gates are provided at exit stairs. Sliding doors are provided at building exits and along egress routes.	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
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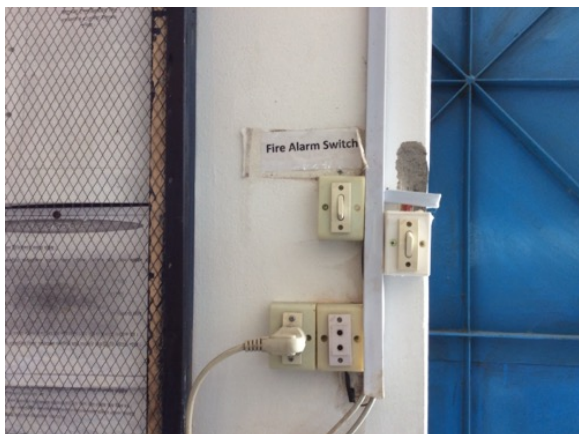
F-13	Egress	The occupiable roof was not provided with an adequate guard rail.	All occupiable roofs shall be provided with parapets or guards with a minimum height of 1067 mm (42 in.)	Within 3 months
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F-14	Egress	A single means of egress is provided from roof top where the occupant load and travel distance is exceeded.	Provide additional means of egress that are adequately remote and in accordance with the Accord Standard.	Within 3 months
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F-15	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-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	Activation of the fire alarm system by a manual fire alarm station provides automatic occupant notification only on the floor of alarm and not throughout the building.	Configure the fire alarm system to initiate automatic occupant notification on all floor levels to facilitate whole-building evacuation upon any manual fire alarm station activation.	Within 1 months
F-18	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-19	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-20	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-21	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-22	Egress Lighting	Exit signage not illuminated (burned out) at all the building exits.	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 ² may also be used.	Within 1 month
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F-23	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-24	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes on the factory floors and exit stairs.	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

Table 2. Findings And Recommendations - SBF-5

No.	Category	Finding	Recommendation	Remediation Timeframe
F-1	Fire Rated Construction	Unsealed electrical shafts are located in the fire-rated floor and ceiling assemblies.	Provide a minimum 2-hr fire-rated shaft to separate the utility risers from each floor level and seal all penetrations in floor and ceiling assemblies to maintain the fire separation.	Within 3 months



F-2	Fire Rated Construction	The exit stairs are not separated from work areas and other spaces on each floor by fire-rated construction.	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. If fire doors are required to be held open for functional reasons, provide automatic-closing devices tied to the fire alarm system.	Within 3 months
				
F-3	Fire Rated Construction	Unsealed penetrations and openings are located in east exit stair enclosure.	Seal all penetrations and openings in exit stair enclosure walls to maintain the fire separation.	Within 3 months



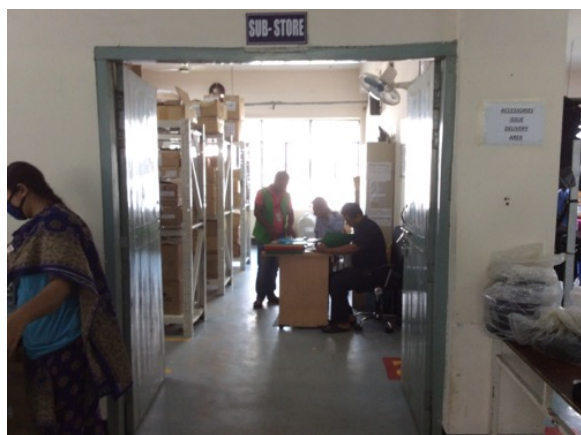
F-4	Fire Rated Construction	Storage room discharges directly into east exit stair enclosure.	Openings from exit enclosure to storage spaces shall be provided with a vestibule with fire rated construction and openings. Provide a 1.5 hr. fire rated door on the exit stair side and a 1-hr. fire rated door on the storage room side. Ensure that the fire rating of the vestibule construction matches that of the exit stair enclosure.	Within 3 months
F-5	Fire Rated Construction	The compressor room is not separated by fire-rated construction due to penetrations in the exterior of the building.	Separate the 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. 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



F-6	Fire Rated Construction	Areas used for combustible storage open to the factory are not separated by fire-rated construction on first and second floors.	Provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8ft.) and maximum area of 23m² (250 ft²) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (305ft²) Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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F-7	Fire Rated Construction	Rooms used for combustible storage are not separated by fire-rated construction on first and ground 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 23m² (250 ft²) - If sprinkler protected: maximum height of 3.66m (12ft.) and maximum area of 93m² (305ft²) Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft.).	Within 3 months
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F-8	Egress	Building did not have stair designation signs at floor entrances and occupant load signs at exits.	Provide stair designation signs, occupant load signs and emergency evacuation plans at required locations.	Immediately
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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	Exit capacity (326) is not adequate for the occupant load (450) on the third floor.	Reduce occupant load immediately to not more than available exit capacity (326). Provide additional exits in the future to increase exit capacity.	Immediately
F-11	Egress	Egress doors with locking features are provided at building exits. Egress gates with locking features are provided at building exits and exit stairs. All gates and doors were 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



F-12	Egress	Storage was located in the egress path on all floors.	Keep egress paths and stairs clear of storage.	Immediately
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F-13	Egress	Storage was located in all the exit stairs.	Remove all storage from exit stairs and egress paths.	Immediately
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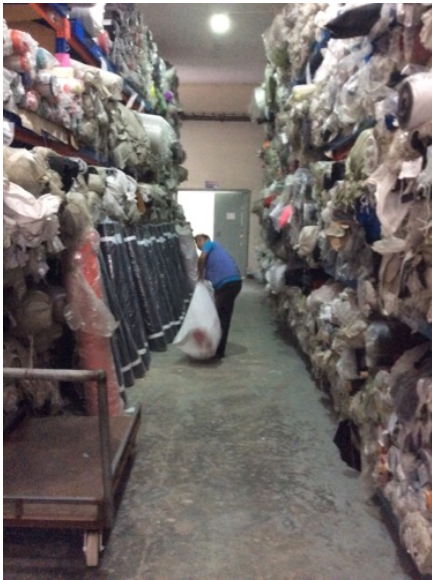
F-14	Egress	Collapsible gates are provided at building exits and exit stairs. Sliding doors are provided at building exits.	Replace all gates and sliding doors along the means of egress with side-hinged, swinging egress doors in accordance with ACCORD standard 6.8.1.	Within 1 month
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F-15	Egress	The width of egress aisles is less than 36-in. on ground, first and third floors.	Provide minimum aisle widths of 36-in.	Within 3 months
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F-16	Egress	Common path of egress travel exceeds limit on the ground floor.	Reconfigure the egress arrangement to reduce the maximum common path of travel to not more than 23 m (75 ft.) or 30 m (100 ft.) when complete sprinkler protection is provided.	Within 3 months
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F-17	Egress	Dead-end aisles exceed 15 m (50 ft.) on the ground floor.	Reconfigure the egress arrangement to reduce the maximum dead-end distance to not more than 15 m (50 ft.).	Within 3 months
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F-18	Egress	Exit stair door does not swing in the direction of egress travel on the second floor. Egress door serving 50 or more occupants does not swing in the direction of egress travel on the first floor.	Modify the egress door to swing in the direction of egress travel.	Within 3 months
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F-19	Egress	Handrails are not provided on both sides of 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
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F-20	Egress	A single means of egress is provided from dining where the occupant load is exceeded.	Provide an additional exit that is remotely located in accordance with Accord Standard.	Within 3 months
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



F-22	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-23	Fire Protection	Activation of the fire alarm system by a manual fire alarm station provides automatic occupant notification only on the floor of alarm and not throughout the building.	Configure the fire alarm system to initiate automatic occupant notification on all floor levels to facilitate whole-building evacuation upon any manual fire alarm station activation.	Within 1 months



F-24	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-25	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-26	Fire Protection	Fire department connection is not provided.	Provide fire department connection in accordance with ACCORD standard 5.5.4.	Within 3 months
F-27	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-28	Fire Protection	Visible notification was not provided for the building in accordance with NFPA 72. Audible notification was not provided for the third floor in accordance with NFPA 72.	Provide visible and audible notification for the building in accordance with NFPA 72.	Within 3 months
F-29	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-30	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-31	Egress Lighting	Exit signage was not provided at exit stair entrances.	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-32	Egress Lighting	Exit signage not illuminated (burned out) at east exit stair entrance on the first floor.	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 ² may also be used.	Within 1 month
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F-33	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
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