

FIRE SAFETY INSPECTION REPORT

ORCHID SWEATERS LTD.

ACCORD ID: 12267

**GKL SWEATERS COMPLEX, 12P-13P KALURGHAT
HEAVY INDUSTRIAL AREA, CHITTAGONG**

**OTHER FACTORIES: GLOBAL ACCESSORIES LTD.,
SAVAR SWEATERS LTD., GLOBAL SPECIALISED
GARMENTS LTD.**



ACCORD
on Fire and Building Safety in Bangladesh

October 31, 2015

SUMMARY

Orchid Sweaters Ltd. was surveyed for fire safety on 10/31/2015 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 in the stair-06 & 03 on 1st floor.	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
F-2	Fire Rated Construction	The elevator does not have the proper fire rating for the shaft and elevator door.	Provide the proper 2 hr fire rating for the shaft and 1.5 hr fire rating for the elevator door.	Within 3 months
F-3	Fire Rated Construction	The industrial dryers are not separated by fire-rated construction due to openings, non-rated doors, and penetrations on 1st floor.	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 room is not separated by fire-rated construction due to openings, non-rated doors, and penetrations on ground floor.	Separate the boiler room by a minimum 2-hr fire rated construction for high rise. Seal and protect all openings to maintain the required fire separations. Provide proper ventilation and consult a qualified engineer.	Within 3 months

F-5	Fire Rated Construction	Areas used for combustible storage open to the factory are not properly defined and not within limits on 4th floor.	Provide defined storage areas and limit the storage arrangement as follows: - Maximum height of 2.45m (8 ft) and maximum area of 23m² (250 ft²) OR - If sprinkler protected: maximum height of 3.66m (12 ft) and maximum area of 93m² (1000 ft²) AND Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10 ft).	Within 3 months
F-6	Fire Rated Construction	Rooms used for combustible storage are not separated by a minimum 1-hr fire-rated construction in yarn store on 4th 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 (8 ft) and maximum area of 23m² (250 ft²) OR - If sprinkler protected: maximum height of 3.66m (12 ft) and maximum area of 93m² (1000 ft²) AND Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10ft).	Within 3 months

F-7	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 and penetrations in stair -03, 04 & 05 on 1st floor.	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. 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. 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.	Within 3 months
F-8	Fire Rated Construction	Office rooms discharges directly into exit stair enclosure.	Provide a 1.5 hr fire rated door.	Within 3 months

F-9	Egress	Egress doors and gates with locking features are provided at building exits, exit stairs, along egress routes and exit discharge on 1st floor. All doors and gates 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
F-10	Egress	Storage was located in the egress path on 4th floor.	Keep egress paths and stairs clear of storage.	Immediately
F-11	Egress	Storage was located in the exit stair on 4th floor.	Remove all storage from exit stairs.	Immediately
F-12	Egress	Collapsible gates and sliding doors are provided at building exits, exit stairs, along egress routes, and exit discharge on 4th floor.	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-13	Egress	Exit stairs serve more than 5 stories and do not have required re-entry provisions on all floors.	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.	Within 3 months
F-14	Egress	Egress door does not swing in the direction of egress travel in stair 06 on 4th floor.	Modify the egress door to swing in the direction of egress travel.	Within 3 months

F-15	Egress	Handrails are not provided on both sides of the exit stair 05, 03 & 04 on 4th floor.	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-16	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 automatic fire alarm system in accordance with NFPA 72 and ACCORD standards.	Design within 4 months, install within 9 months
F-17	Fire Protection	The high-rise building has an occupied floor currently less than 23m (75 ft) and is not provided with automatic sprinkler protection. Upon completion of construction the building will be greater than 23m (75 ft) and will require a sprinkler system.	Provide automatic sprinkler protection throughout the building in accordance with NFPA 13 and ACCORD standards.	Design within 6 months, install within 12 months
F-18	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-19	Fire Protection	Fire department connection is not provided.	Provide fire department connection in accordance with ACCORD standard 5.5.4.	Within 3 months

F-20	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-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	Fire pump is not provided and appears to be 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-23	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-24	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-25	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 and ACCORD standards.	Within 9 months
F-26	Egress Lighting	Exit signage was not provided at a building exit and in a readily visible location on 1st floor.	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	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-28	Egress Lighting	Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes on 1st floor.	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