

# **FIRE SAFETY INSPECTION REPORT**

**APS KNIT COMPOSITE LTD.**

**ACCORD ID: 12359**

**KARAMTALA, PUBAIL ROAD, GAZIPUR SADAR,  
GAZIPUR, BANGLADESH.**

**OTHER FACTORIES: APS APPARELS DYEING UNIT  
LTD.**



**ACC**  **RD**  
on Fire and Building Safety in Bangladesh

November 3, 2015

## **SUMMARY**

**APS Knit Composite Ltd. was surveyed for fire safety on 11/3/2015 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 | 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, separate 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 | Proper certification was not available for fire rated doors installed in the factory. | 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-3 | Fire Rated Construction | Exit access corridors are not provided with 1 hr fire resistance rating or approved NFPA 13 sprinkler system. | Provide exit access corridors with 1 hr fire resistance rating or approved NFPA 13 sprinkler system. | Within 3 months |
|-----|-------------------------|---|--|-----------------|



---

|     |                         |   |   |                 |
|-----|-------------------------|---|---|-----------------|
| F-4 | Fire Rated Construction | The fire pump room is not provided with adequate fire separation. | Provide fire pump room with 2 hr rated fire separation when not sprinklered and 1 hr rated fire separation when provided with automatic sprinklers, in accordance with NFPA 20. | Within 3 months |
|-----|-------------------------|---|---|-----------------|



|     |                         |   |  |                 |
|-----|-------------------------|---|--|-----------------|
| F-5 | Fire Rated Construction | The boiler room is not separated by fire-rated construction due to non-rated doors. | Separate the boiler room by a minimum 2-hr fire rated construction for high rise. Seal and/or protect all openings to maintain the required fire separations. 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 properly defined and/or not within limits. | Provide defined storage areas and limit the storage arrangement as follows:<br>- Maximum height of 2.45m (8 ft) and maximum area of 23m <sup>2</sup> (250 ft <sup>2</sup> )<br>- If sprinkler protected: maximum height of 3.66m (12 ft) and maximum area of 93m <sup>2</sup> (1000 ft <sup>2</sup> )<br><br>Separate areas of unenclosed combustible storage by a minimum clear distance of 3m (10 ft). | Within 3 months |
|-----|-------------------------|---|--|-----------------|



---

|     |                         |   |  |                 |
|-----|-------------------------|---|--|-----------------|
| F-7 | Fire Rated Construction | Rooms used for combustible storage are not separated by a minimum 1-hr fire-rated construction. | Provide dedicated storage rooms separated by minimum 1-hr fire-rated construction. | Within 3 months |
|-----|-------------------------|---|--|-----------------|



|     |                         |   |  |                 |
|-----|-------------------------|---|--|-----------------|
| F-8 | 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. | 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. | Within 3 months |
|-----|-------------------------|---|--|-----------------|

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.





---

|     |        |   |   |             |
|-----|--------|---|---|-------------|
| F-9 | Egress | Egress gates with locking features are provided at exit discharge | Remove locking features from all egress doors and gates.<br><br>If locks are required for security reasons, utilize special door locking features complying with ACCORD standard 6.8.2. | Immediately |
|-----|--------|---|---|-------------|



---

|      |        |   |   |             |
|------|--------|---|---|-------------|
| F-10 | Egress | Obstructions was located in the exit stair. | Remove all obstructions from exit stairs. | Immediately |
|------|--------|---|---|-------------|



---

|      |        |   |   |                |
|------|--------|---|---|----------------|
| F-11 | Egress | Collapsible gates are provided at exit discharge. | 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 |
|------|--------|---|---|----------------|

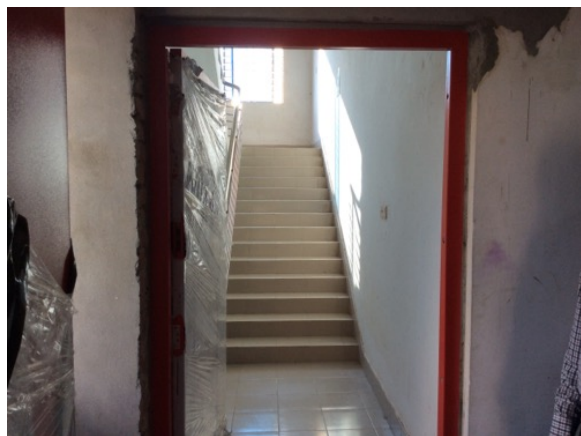


---

|      |        |   |  |                 |
|------|--------|---|--|-----------------|
| F-12 | Egress | Exit stairs serve more than 5 stories and do not have required re-entry provisions. | 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-13 | Egress | Handrails are not provided on both sides of the exit stair. | Provide handrails on both sides of the exit stair and ramp. 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-14 | 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-15 | Fire Protection | Fire pump installation requires detailed review to confirm compliance with NFPA 20 and ACCORD standards. | Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval. | Within 1 month |
|------|-----------------|--|--|----------------|



---

|      |                 |   |  |                |
|------|-----------------|---|--|----------------|
| F-16 | Fire Protection | Standpipe system installation requires detailed review to confirm compliance with NFPA 14 and ACCORD standards. | Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval. | Within 1 month |
|------|-----------------|---|--|----------------|



|      |                 |   |   |                 |
|------|-----------------|---|---|-----------------|
| F-17 | Fire Protection | Automatic sprinkler system installation requires detailed review to confirm compliance with NFPA 13 and ACCORD standards. | Submit as-built drawings, testing records, equipment certification and other relevant documentation to the ACCORD for review and approval.    | Within 1 month  |
| 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 | 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-20 | Fire Protection | Inspection, testing and maintenance of the fire pump system is not in accordance with NFPA 20.                            | Inspect, test and maintain the fire pump system and keep written records on-site, in accordance with NFPA 20 and ACCORD standards.            | Within 3 months |
| F-21 | Fire Protection | Inspection, testing and maintenance of the automatic sprinkler system is not in accordance with NFPA 25.                  | Inspect, test and maintain the automatic sprinkler system and keep written records on-site, in accordance with NFPA 25 and ACCORD standards.  | Within 3 months |
| F-22 | 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-23 | 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-24  | Egress Lighting | Manual on-off switch is provided for emergency lighting units.   | Remove manual on/off switches from emergency lighting and exit signage units to prevent them from being switched off.   | Within 1 month  |
|  |                 |    |   |                 |
| F-25  | 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-26  | Egress Lighting | Based on the number and location of emergency lights observed, adequate illumination levels are not anticipated along egress routes. | 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 |