

INITIAL ELECTRICAL ASSESSMENT REPORT (EAR)

Factory Name: **Energypac Fashions Ltd**
Address: **Hotapara, Bokran, Monipur Gazipur Sadar, Gazipur
Gazipur Dhaka Bangladesh**
Assessor: **Uttaron Technologies**
Date: **22 May 2014**



Introduction to the Report

The following report contains a site profile and summary of non-conformities identified during an onsite assessment commissioned by the Alliance for Bangladesh Worker Safety (Alliance) and conducted by a third-party Qualified Assessment Firm (QAF). The assessment was conducted against the Alliance for Bangladesh Worker Safety Assessment Protocols (APs) and Fire Safety and Structural Integrity Standard, which is harmonized with the factory assessment guidelines developed by Bangladesh University of Engineering and Technology (BUET) for the Bangladesh National Tripartite Plan of Action (NTPA). The goal of the Alliance process is to provide clear and practical technical requirements by which Bangladeshi Ready Made Garment (RMG) Factories producing for Alliance members may be consistently and fairly evaluated for fire, structural, and electrical safety in a non-duplicative manner. Each assessment will prompt action plans that will be used by RMG factories to systematically and sustainably improve safety conditions for garment workers. Beyond tracking and reporting on action steps taken in a transparent manner, the Alliance organization and its members will seek to further support factory improvements through technical assistance, training, implementation support for functional Worker Committees, and in some cases financial assistance and wage support for workers if factories are closed for remediation.

The contents of the report do not constitute a guarantee of compliance with the applicable laws, the Alliance Standard or the absolute or continued safety against fire, electrical and/or structural integrity issues that may lead to injury or loss of life. The report is designed to provide a non-exhaustive summary of risk issues, based on a limited sampling and duration of time onsite by the named QAF. Neither the QAF nor the Alliance can certify or guarantee the quality, outcome, or effectiveness of actions taken in response to the report.

For more information and report feedback please go to: www.bangladeshworkersafety.org.





GENERAL INFORMATION

General Information	
Factory Name:	Energypac Fashions Ltd
Address:	Hotapara, Bokran, Monipur Gazipur Sadar, Gazipur Gazipur Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Gazipur
Zip Code:	
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date :	22 May 2014
Final Report Date :	15 June 2014
Are all action items from previous assessment complete? :	Yes
Buildings in Complex :	One
Is the building(s) owned or rented by the Factory?:	Owned
Number of Building Levels (Stories) :	5 stories
Approximate Building Area (SF) :	65000 SF(Approximate)
Date of Building Construction :	Yr.2007
Date of Last Building Renovation/Addition :	Under Construction
Ancillary Structures in Complex :	One
Approximate Ancillary Structures Area (SF) :	1000 SF
Number of Occupants :	1052

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ALLIANCE
 FOR BANGLADESH WORKER SAFETY

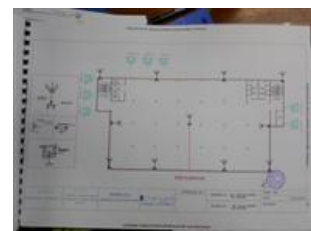
Provide brief description of the electrical system for each building.:	Brief Description: No of Main Building: 1 (Multi stories) No of Ancillary Building: 2 • 1. Generator & Substation room in one Facility. • 2. Childcare. No. of Transformer: 1 Transformer Rating: 500 KVA (Energy Pac Brand). No. of Generator: 5 Generator Brand and Rating: I. DG-400 KVA II. DG-250 KVA III. DG-83 KVA All Generators are Cummins Brand. Connection Type: REB 11kv incoming to indoor Substation (11kv/.44kv) and Self power Source (Generator) are connected to Change over Switch (C.O.S). Emergency Power: I.P.S is used for Emergency Lights and Exit signs.
Physical location of Substation? :	Out side of production building.
What equipment/loads does the UPS serve? :	CCTV,Exit Signage,Emergency Light, Light.



ASSESSMENT FINDINGS

Electrical System Information

Question:	Are as-built electrical drawings indicating information such as panel and circuit locations throughout the building(s) available for review?
Priority Level:	High
Non-Compliance Level:	2
Description:	No updated as-built drawing was found on the site.
Source of Findings:	Document Review: Old as-built drawing seen, which do not have current information on the entire system.
Suggested Plan of Action:	Have a qualified electrical engineer develop as-built electrical drawings providing detailing key components of the electrical system.
Suggested Deadline Date:	15 Aug 2014
Standard:	Alliance Standard Part 10 Section 10.3.7



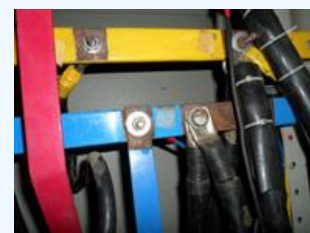
Electrical System Maintenance

Question:	Have workers that operate and maintain the electrical system received electrical safety training? Is training documentation on site?
Priority Level:	High
Non-Compliance Level:	3
Description:	Workers that operate and maintain the electrical system received no electrical safety training and no documents were found at site in this connection.
Source of Findings:	Document Review: No documents provided.
Suggested Plan of Action:	Develop and implement an electrical safety program. Include key topics such as lock out tag out procedures, personal protective equipment requirements, etc.
Suggested Deadline Date:	15 Aug 2014
Standard:	Reference NFPA 70e for example

Electrical System Conditions



Question:	Is electrical wiring/cables sized according to capacity of circuit breakers (No higher rated circuit breakers with lower rated wiring)?
Priority Level:	High
Non-Compliance Level:	3
Description:	Cables are installed with higher rated circuit breakers. Location: All LT/MDBS
Source of Findings:	Photograph: Higher rated circuit breakers with lower rated wiring.
Suggested Plan of Action:	Consult with a qualified Electrical Engineer and ensure electrical cables are sized according to capacity of circuit breakers.
Suggested Deadline Date:	01 Sep 2014
Standard:	Alliance Standard Part 10 Section 10.3.1 Electrical Connections.
Question:	No multi looping of wiring/cables observed at circuit breakers within switchboards and/or distribution boards.
Priority Level:	High
Non-Compliance Level:	3
Description:	Multiple and looping are found at circuit breakers in the distribution boxes at every floor. Location: LT-01, MDB-01/GF, MDB-02/1st FL, COS-01
Source of Findings:	Photograph: Multiple and looping cables.
Suggested Plan of Action:	Need to separate the multiple cables either using proper size of circuit breakers or connecting separately on bus bars as per requirements.
Suggested Deadline Date:	15 Aug 2014
Standard:	Alliance Standard Part 10 Section 10.3 Electrical Wiring and Cabling
Question:	Power and telecommunication or antenna cables are led in separately.
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Power and telecommunication or antenna cables are not led in separately.
Source of Findings:	Visual Assessment: Power and telecommunication or antenna cables are not led in separately.
Suggested Plan of Action:	Lead telecommunication or antenna cables separately to the main point of service. Power and telecommunications cables must have separate entrance.
Suggested Deadline Date:	15 Aug 2014





Standard:	Alliance Standards Part 10 Section 10.3.10 Service Entry	
Question:	Do switchboards and/or distribution boards have capacity information labels?	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Switchboards and distribution boards do not have capacity information labels. Location: All MDB,DB,SDBs	
Source of Findings:	Photograph: Switchboards and/or distribution boards have no capacity information labels.	
Suggested Plan of Action:	Provide capacity information labels (Maximum current rating, no of circuit breakers etc.) for Switchboards and distribution boards.	
Suggested Deadline Date:	29 Jul 2014	
Standard:	Alliance Standard Part 10 Section 10.7 Main Switch, Switchboards And Metal Clad Switchgear and 10.13.7 Inspection of the Installation	
Question:	Each circuit is provided with a dedicated neutral.	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Circuits are not provided with a dedicated neutral for each load. Location: SDB/3rd FL	
Source of Findings:	Photograph: Circuit is not provided with a dedicated neutral for each load.	
Suggested Plan of Action:	Provide dedicated neutral for each circuit.	
Suggested Deadline Date:	15 Aug 2014	
Standard:	Alliance Standards Part 10 Section 10.3 Electrical Wiring and Cabling	
Question:	Are electrical wiring/cables properly identified?	
Priority Level:	Medium	
Non-Compliance Level:	3	
Description:	Electrical wiring/cables are not properly identified. Location: All MDB, DB, SDBs	
Source of Findings:	Photograph: Electrical wiring/cables are not properly identified.	
Suggested Plan of Action:	Need to maintain color code for all cables. For phase conductors use Red , Yellow, Blue, For Neutral conductors use black and For Grounding cable use green dotted yellow.	



Suggested Deadline Date:	15 Aug 2014	
Standard:	Bangladesh Electricity Rules 1937 Rule 51 and 56	
Question:	Mechanical guards are provided for electrical equipment and wiring where necessary.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Rotating parts of electrical equipment and wirings should have mechanical guard. Location: Ground floor	
Source of Findings:	Photograph: Mechanical guard not provided for cables.	
Suggested Plan of Action:	Mechanical guards should be provided for electrical equipment and wiring where necessary.	
Suggested Deadline Date:	15 Jul 2014	
Standard:	Alliance Standard Part 10 Section 10.3 Electrical Wiring and Cabling, 10.6.5 Cables, and 10.7 Main Switch, Switchboards And Metal Clad Switchgear	

Emergency Power System

Question:	Is the generator frame earthing (grounding) provided at two separate points?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Generator frame earthing (grounding) is not provided at two separate points. Location: Generator room	
Source of Findings:	Photograph: Generator earthing not provided two points	
Suggested Plan of Action:	Provide generator frame earthing (grounding) at two separate points.	
Suggested Deadline Date:	29 Jul 2014	
Standard:	Alliance Standard 10.8.2.2	
Question:	Is the generator room appropriately sized in order to properly access the generator to perform routine maintenance activities?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Generator room is not sized to perform the routine maintenance works.	



	Location: Generator room	
Source of Findings:	Photograph: Generator room	
Suggested Plan of Action:	Need to install the generator in an appropriately sized room.	
Suggested Deadline Date:	15 Sep 2014	
Standard:	Alliance Standard Part 10 Section 10.8.4 Generator Room	
Question:	Are inspection, maintenance, and testing procedures of the UPS being completed and documented?	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	No record of inspection, maintenance, and testing procedures of the UPS were found. Location: Maintenance section	
Source of Findings:	Visual Assessment: No record found on inspection, maintenance, and testing procedures of the UPS	
Suggested Plan of Action:	Establish an inspection testing, and maintenance program for the Uninterruptible Power Supply (UPS) and associated components.	
Suggested Deadline Date:	15 Aug 2014	
Standard:	Alliance Standard Part 13 Section 13.11 NFPA 111 Chapter 8 NFPA 70B Chapter 28	