Name of the Factory	: That's It Sweater Ltd
Address of the Factory	: 119, 145 East Narashinghpur, Ashulia, Savar.
Present Status of the Factory	: Under Operation
Structural assessment conducted by	: Alliance
Date of Structural Inspection	: 25-Mar-14
Fire & Electrical assessment conducted by	: Alliance
Date of Fire & Electrical Inspection	: 25-Mar-14
BGMEA Membership No	:5812

BASIC INFORMATION:

There is one building in the factory premises. The following general information was noted:

i.	Building Usage Type	: Garments Factory.
ii.	Structural System	: Steel Shed structure .
iii.	Floor System	: Roof trusses covered with tin sheathing
iv.	Floor Area	: 61,324 sft
v.	No. of Stories	: Single storied
vi.	Construction Year	: 2001~2010
vii.	Foundation Type	: Isolated footing .
viii.	Design Drawings	: Not Available.
ix.	Soil investigation Report	: Not Available
x.	Construction Materials	: RCC brick chips.
xi.	Generator	: Unknown

RECOMMENDATIONS FOR CORRECTIVE ACTION:

The recommendations of corrective action for Structural, Fire and Electrical Safety comprises of Short Term, Mid Term and Long Term basis are as follows:

The recommendations for Structural Safety corrective actions are:

Immediate : NA

Short Term: (3 Weeks) :

i. Designate a representative as the Factory Load Manager. The Factory Owner shall ensure that at least one individual, the Factory Load Manager who is located onsite full time at the factory, is trained in calculating operational load characteristics of the specific factory. The Factory Load Manager shall serve as an ongoing resource to RMG vendors and be responsible to ensure that the factory operational loads do not at any time exceed the factory floor load limits as described on the Floor Load Plans.

Mid Term (6 Weeks) :

i. Engage a qualified structural engineer to confirm structural performance of the structure..

ii. Engage a qualified structural engineer to develop the required documents to confirm the structural integrity of the buildings. Documents must comply with the Alliance Standard Part 8 Sections 8.19 and 8.20
.
iii. Have a qualified structural engineer develop Floor Loading Plans per the requirements of Part 8 Section 8.20.5.3.
iv. Adequately anchor and brace all non-structural elements to resist earthquake forces to comply with the BNBC and Alliance Standard.
v. Engage a qualified structural engineer to confirm and document that provisions have been made to accommodate concentrated loads. If provisions have not been made, have a qualified structural engineer develop a remediation plan.
vi. Under guidance from a qualified structural engineer arrange geotechnical investigation at close vicinity of the structure and make the report available for review.
vii. Provide signage or the appropriate markings at all areas used for storage to indicate the acceptable loading limits detailed in the Load Plan.

Long Term (6 Months) :

i. Provide occupancy certificate for review.
ii. Provide a protective coating at the structural elements constructed with MCAC exposed to rainfall or other sources of water. Have protective coating approved by the Alliance or a qualified structural engineer.

The recommendations for Electrical Safety corrective actions are*:*

Immediate (3 to 6 Days)	Suggested plan for specific issues have been incorporated in the Thermographic Survey Report. Remove all combustible materials and other unnecessary materials from substation room.
Short Term (3 Weeks)	All boxes and enclosures (including transfer switches, generators, and power panels) for emergency circuits shall be permanently marked so they will be readily identified as a component of an emergency circuit or system. The required marking can be by color code, the words "emergency system," or any other method that identifies the box or enclosure as a component of the emergency system.
Mid Term (6 Weeks)	Have a qualified electrical engineer develop an as-built single line diagram and electrical layout drawings detailing key components and capacity of the electrical system. Provide a minimum of 1 m clearance on required sides of electrical panels to ensure ease of maintenance work. Provide individual neutral connection for each circuit. Also, provide identification/ tagging for each circuit using approved means. Use cables of appropriate size with proper cable lugs to terminate cables. Put lug on cable using appropriate lug puncher. Remove unnecessary cable sockets from busbar. Provide a capacity information label which contains the current carrying capacity and size of main cable, rated capacity of circuit breaker, the busbar (with dimension) and the number of circuit

	breakers. Replace/repair faulty lamps and meters where necessary and provide connection to indicator lamps through protective device (fuse box).
Long Term (6 Months)	Have a qualified electrical engineer design a lightning protection system according to the BNBC requirements. Have a licensed electrician install the designed system. Complete thermographic scans at least on a three year cycle. Thermographic scans should be completed in accordance with the Standard for Infrared Inspection of Electrical Systems & Rotating Equipment and NFPA70B or a comparable standard.

The recommendations for Fire Safety corrective actions are:

Immediate (3 to 6 Days)	N/A
Short Term (3 Weeks)	Keep the doors unlocked in the direction of egress under all conditions. All hasps, locks, slide bolts and other locking devices shall be removed as required.
Mid Term (6 Weeks)	Install an automatic fire detection and alarm system throughout the factory. Until that time a central station monitoring service or direct connection to the Fire Service and Civil Defence can be set up; a person shall to be assigned to contact the fire department in the event of fire alarm activation. An annunciator shall be located in a constantly attended location to alert this person. Trouble or alarm notifications shall be indicated on the fire alarm control panel. Post emergency egress maps at the entrances to each exit or main point of egress. Develop and execute an emergency evacuation plan which includes all necessary components required by the Alliance Standards. Provide sufficient communication and training to all employees. Develop a testing and maintenance program that ensures the operation of all means of egress lights are verified at least once per year. If battery-operated lights are used, these lights shall be tested on a monthly basis. Functional testing of battery powered lights shall be provided for a minimum 90 min once per year. Develop a testing and maintenance program that ensures the emergency power for exit signs is tested at least once per year. If battery operated signs are used, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year. Post the occupant load for every assembly and production floor in a conspicuous space near the main exit or exit access doorway for the space. Collect all applicable permits and licenses and keep them up to date

	including boiler license. Apply to appropriate authority in an expeditious manner for issuance of a Certificate of Occupancy for each building and ancillary structure according to each building use. Complete fire department pre-planning activities with the local Fire Service and Civil Defence.
Long Term (6 Months)	Install initiating devices and notification appliances as required by the Alliance Standard and NFPA 72. This includes electrical supervision of all valves controlling fire protection systems (sprinklers, fire pumps, water supplies, etc.). Connect devices to an automatic fire alarm and detection system for the facility. All fire alarm installations shall be submitted for review by the Alliance prior to commencement of installation. Provide required fire resistance rated opening protection (Door, Window, Hatch Cover etc.) at openings and penetrations through fire rated assemblies or close the unprotected openings with fire-resistance rated barrier as per requirements. Consult a qualified fire protection engineer to design the required rated opening protection. All steel sliding door, steel rolling shutter and collapsible gates in the means of egress shall be replaced with required fire rated side-hinged swinging self-closing type doors that swing in the direction of egress per Alliance Standard Section 6.8. Doors shall be free from general locking arrangements. Provide training for the required number of people (25% of total workers) certified in firefighting, first aid, and rescue training by the appropriate authority. Establish an inspection, testing and maintenance program for all fire extinguishers. Program must comply with the requirements of NFPA 10. Provide illumination and contrast per Alliance standards. Exit signs may be illuminated either by lamps external to the sign or by lamps contained within the sign. 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 0.2cd/m2 may also be used. Establish written corporate and plant policies on housekeeping to ensure scheduled cleaning for floor, wall, ceiling, supply and return air ventilation systems. Promptly reschedule skipped cleanings. Provide a documented line of authority for authorizing a cleaning delay and rescheduling.