

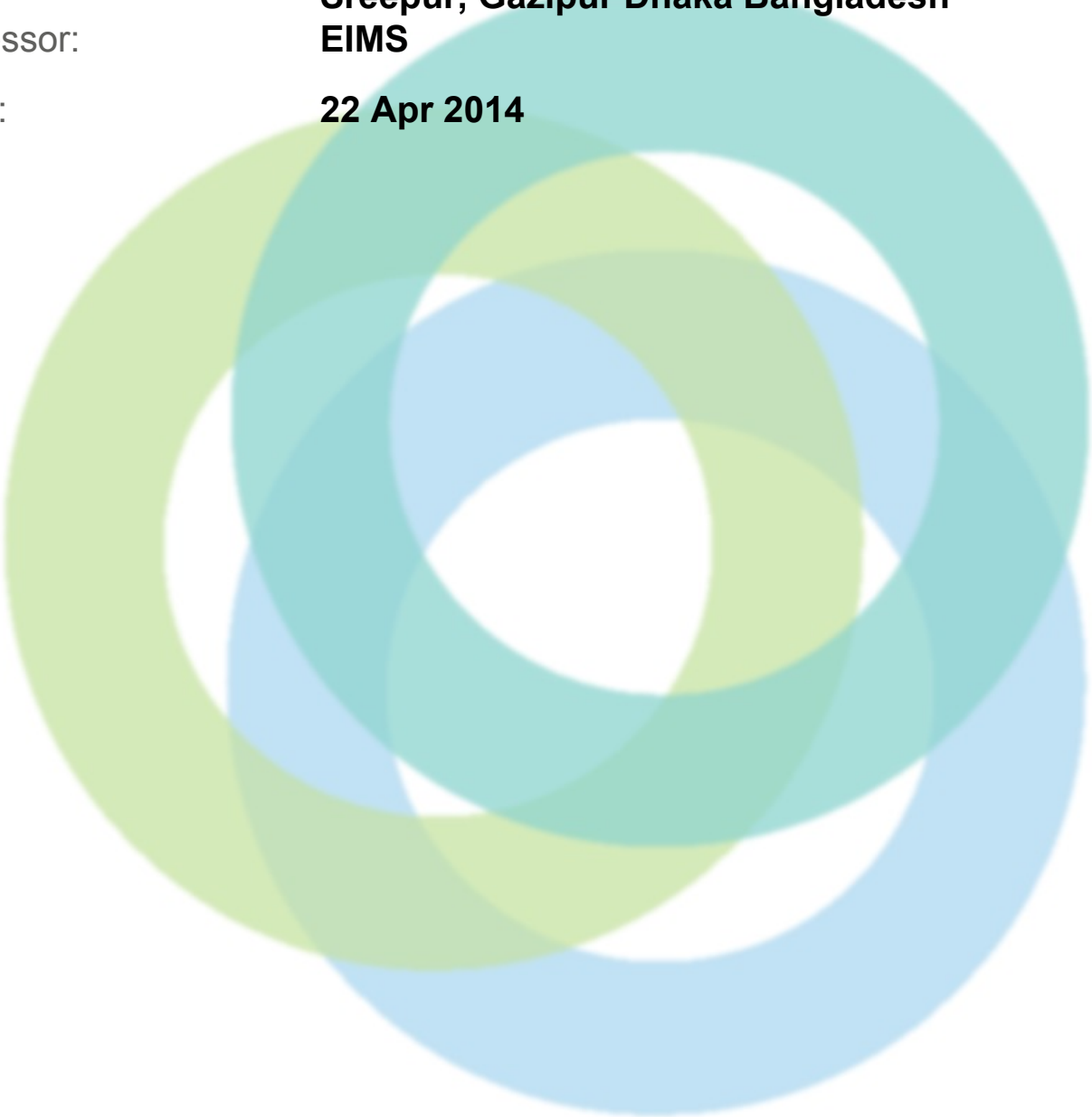
INITIAL STRUCTURAL INTEGRITY ASSESSMENT REPORT (SIAR)

Factory Name: **Your Fashion Sweater Ltd.**

Address: **Gilarchala, Gorgaria Master bari Sreepur, Gazipur
Sreepur, Gazipur Dhaka Bangladesh**

Assessor: **EIMS**

Date: **22 Apr 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:	Your Fashion Sweater Ltd.
Address:	Gilarchala, Gorgaria Master bari Sreepur, Gazipur Sreepur, Gazipur Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Sreepur, Gazipur
Zip Code:	1740
Audit Duration:	10 Hours
Re-Audit:	Re-Audit After 0 Months
Draft Report Date :	19 May 2014
Final Report Date :	23 May 2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex :	Two (02), One main building and one ancillary building
Number of Building Levels (Stories) :	Five storied with one basement in old part of the main building and five storied in new part of the main building
Approximate Building Area (SF) :	Old part: 74,400 sft, New part: 33,600 sft Total floor area: 108,000 sft
Date of Building Construction :	Old part: 2005-2011, New part: 2013
Date of Last Building Renovation/Addition :	The new part of the building was added in 2013
Is the Building mixed use?:	No
Ancillary Structures in Complex :	One (01)
Number of Ancillary Levels (Stories) :	One storied
Approximate Ancillary	2,065 sft

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ALLIANCE
FOR BANGLADESH WORKER SAFETY

Structures Area (SF) :	
Number of Occupants :	Total occupants are approximately 1650
Exterior Facade Description :	5 inch unreinforced brick masonry with 30 window and open space in front of building
Structural System Description :	RC flat plate in old part and RC beam-column frame system in new part of the building



ASSESSMENT FINDINGS

Structural System Design

Question:	If the structure has been previously expanded, was the structural impact on the entire structure analytically evaluated and confirmed by a qualified structural engineer.	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	One extra floor was added in 2011 in the old part of the building and the new part of the building was added in 2013, but the structural impact on the entire structure was not analytically evaluated by a qualified structural engineer.	
Source of Findings:	Document Review: ASP 1.0	
Suggested Plan of Action:	Have a qualified structural engineer complete an analytical evaluation of the structural impact of the addition.	
Suggested Deadline Date:	05 Jul 2014	
Standard:	Reference Alliance Standards Part 8 Section 8.1 Applicability of Building Code.	
Question:	Are credible structural design documents available for review and kept on site?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	For new part of the building the structural drawings is credible but there are no detail drawings for old part of the building so credibility check can be possible at this stage of investigation.	
Source of Findings:	Document Review: Structural drawings of old part and new part of the building	
Suggested Plan of Action:	Have a qualified structural engineer prepare credible as-built documents of old building based on the requirements of Part 8 Section 8.19 of the Alliance Standard.	
Suggested Deadline Date:	05 Jul 2014	
Standard:	Alliance Standard Part 8 Section 8.19 Required Structural Documentation for New and Existing Factories	
Question:	Can credible structural documentation indicating general conformance with 2006 BNBC or other comparable applicable international model building code be produced?	



Priority Level:	Medium
Non-Compliance Level:	1
Description:	For new part of the building they use BNBC 2006. But the old part of the building was built before 2006. There was no indication of use of any international building code shown in the drawing.
Source of Findings:	Document Review: Structural design drawings of new part and old part of the building
Suggested Plan of Action:	Engage a qualified structural engineer to develop the required documents for old part of the building to confirm the structural integrity of the buildings. Documents must comply with Alliance Standard Part 8 Section 8.19 and 8.20.
Suggested Deadline Date:	05 Jul 2014
Standard:	Reference Alliance Standards Part 8 Section 8.2 Structural Integrity of Existing Factory Buildings
Question:	Can documentation be provided that the building is compliant with the requirements for wind loading and storm surge loadings as detailed in BNBC Part 6 Section 1.5.3?
Priority Level:	Medium
Non-Compliance Level:	1
Description:	The new part of the building is compliant with the wind loading and storm surge loadings requirements as detailed in BNBC Part 6 Section 1.5.3. For old part wind load and storm surge loading are not mentioned in the drawings.
Source of Findings:	Document Review: Structural design drawings of new part and old part of the building
Suggested Plan of Action:	Engage a qualified structural engineer to confirm satisfactory structural performance of the old part of the building under wind loading.
Suggested Deadline Date:	05 Jul 2014
Standard:	2006 BNBC Part 6 Section 1.5. Compliance may be waived if the Factory Owner provides satisfactory evidence of a cyclone operations plan that includes full evacuation of the factory in advance of any approaching cyclone"
Question:	Are Certificates of Occupancy available for review?
Priority Level:	Low
Non-Compliance Level:	2
Description:	Certificates of occupancy are not available for review.
Source of Findings:	Visual Assessment: Site visit on April 22, 2014





Suggested Plan of Action:	Provide Certificates of Occupancy for review
Suggested Deadline Date:	05 Jul 2014
Standard:	Alliance Standard Part 8 Section 8.3 Preliminary Structural Assessment

Structural System Construction

Question:	Is the structural system free of distress, settlement, shifting, or cracking in columns or walls?
Priority Level:	High
Non-Compliance Level:	2
Description:	We found small crack in a column near expansion joint of the two part of the building.
Source of Findings:	Visual Assessment: Photograph of crack in column
Suggested Plan of Action:	Engage a qualified structural engineer to provide further testing and analysis of distress, settlement, shifting, or cracking in columns or walls and provide a remediation plan to correct noted issues.
Suggested Deadline Date:	05 Jul 2014
Standard:	Alliance Standard Part 8 Section 8.3.3
Question:	Are all non-structural elements suspended from, attached to, or resting atop the structure adequately anchored and braced to resist earthquake forces?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	We did not find any anchored storage racks on the second floor.
Source of Findings:	Visual Assessment: Photograph of non-structural element
Suggested Plan of Action:	Develop engineered plans to brace all non-structural elements (storage rack) to resist earthquake forces to comply with the BNBC and Alliance Standard. Install anchor and braces as shown on approved plans.
Suggested Deadline Date:	05 Jul 2014
Standard:	Alliance Standards Part 8 Section 8.18 Seismic Bracing of Key Non-Structural Elements and 2006 BNBC Part 6





Question:	If yes, have the structural members constructed with MCAC been investigated by an appropriate program of in-situ testing and representative destructive testing or core samples?
Priority Level:	Medium
Non-Compliance Level:	1
Description:	In-situ testing (UPV) was performed during inspection. But no core test result was available.
Source of Findings:	Uploaded Document: Concrete compressive strength calculation from UPV result, Visual Assessment: Photograph of UPV testing at column
Suggested Plan of Action:	Have a qualified structural engineer assess the durability aspects as suggested in Alliance Standard Part 7 Section 7.2 and take appropriate remedial measures. This assessment should include destructive core testing to verify the concrete compressive strength of columns.
Suggested Deadline Date:	05 Jul 2014
Standard:	Reference Alliance Standards Part 7 Building Materials Section 7.2 Masonry-chip aggregate concrete (MCAC)
Question:	If yes, have the structural members constructed with MCAC been investigated by an appropriate program of in-situ testing and representative destructive testing or core samples?
Priority Level:	Medium
Non-Compliance Level:	1
Description:	In-situ testing (UPV) was performed during inspection. But no core test result was available.
Source of Findings:	Visual Assessment: Photograph of UPV testing at column
Suggested Plan of Action:	Have a qualified structural engineer assess the durability aspects as suggested in Alliance Standard Part 7 Section 7.2 and take appropriate remedial measures. This assessment should include destructive core testing to verify the concrete compressive strength of columns.
Suggested Deadline Date:	05 Jul 2014
Standard:	Reference Alliance Standards Part 7 Building Materials Section 7.2 Masonry-chip aggregate concrete (MCAC)



Structural Safety Programs

Question:	Is a program in place to ensure that the live loads for which a floor or roof is or has been designed will not be exceeded?
Priority Level:	Medium



Non-Compliance Level:	2	
Description:	There was no program in place to ensure the live loads for which a floor or roof has been designed. So it is required and it should be marked in all floors including roof.	
Source of Findings:	Visual Assessment: Site visit on April 22, 2014	
Suggested Plan of Action:	Develop a program to ensure that all live loads for which a floor or roof has been designed for will not be exceeded. The designated Load Manager shall oversee this program and ensure it is enforced.	
Suggested Deadline Date:	05 Jul 2014	
Standard:	Alliance Standard Part 13 Section 13.7 and Part 8 Section 8.9.	
Question:	Have Load Plans been prepared for each floor documenting the actual maximum operational loading that is intended and/or allowable on each floor.	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	Load plans have not prepared for all floors of the building.	
Source of Findings:	Visual Assessment: Site visit on April 22, 2014	
Suggested Plan of Action:	Have a qualified structural engineer develop Floor Loading Plans per the requirements of Part 8 Section 8.20.5.3.	
Suggested Deadline Date:	05 Jul 2014	
Standard:	Alliance Standard Part 8 Section 8.10 Floor Loading Plans (Load Plans)	
Question:	Are Floor Load Plans posted as required?	
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	No floor load plan was posted on the floors of the building.	
Source of Findings:	Visual Assessment: Site visit on April 22, 2014	
Suggested Plan of Action:	Have a qualified structural engineer prepare load plans including the information required in Section 8.20 of the Alliance Standard.	
Suggested Deadline Date:	05 Jul 2014	
Standard:	Alliance Standard Part 8 Section 8.20.5.3	
Question:	Are areas used for storage of work materials and work products, clearly marked to indicate the acceptable loading limits as described in the Load Plan	



	for that floor?
Priority Level:	Low
Non-Compliance Level:	2
Description:	Storage areas are required to be marked to indicate acceptable loading limits per the load plans.
Source of Findings:	Visual Assessment: Site visit on April 22, 2014
Suggested Plan of Action:	Provide signage or the appropriate markings at all areas used for storage to indicate the acceptable loading limits detailed in the Load Plan.
Suggested Deadline Date:	05 Jul 2014
Standard:	Alliance Standard Part 8 Section 8.11 Floor Load Markings
Question:	Is a designated representative (Factory Load Manager), who is onsite full time, trained regarding the structural floor capacity, and serves as an ongoing vendor resource and monitor of operational factory floor loadings?
Priority Level:	Low
Non-Compliance Level:	2
Description:	No factory load manager was onsite full time. So, a factory load manager is required to check whether the loads exceed or not as per floor load plan.
Source of Findings:	Visual Assessment: Site visit on April 22, 2014
Suggested Plan of Action:	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 loading limits as described on the Floor Loading Plans.
Suggested Deadline Date:	05 Jul 2014
Standard:	Alliance Standards Part 8 Section 8.9 Factory Load Manager