

INITIAL STRUCTURAL INTEGRITY ASSESSMENT REPORT (SIAR)

Factory Name: **World Ye Apparels (BD) Ltd**

Address: **Plot No. 61-64 & 70-73 Sector No-02 KEPZ Karnafully
EPZ, North Patenga Chittagong Chittagong
Bangladesh**

Assessor: **EIMS**

Date: **19 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:	World Ye Apparels (BD) Ltd
Address:	Plot No. 61-64 & 70-73 Sector No-02 KEPZ Karnafully EPZ, North Patenga Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	4204
Audit Duration:	2 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date :	14 May 2014
Final Report Date :	23 May 2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex :	Three (3)
Number of Building Levels (Stories) :	Building #1: two storied
Approximate Building Area (SF) :	Building #1: 161,822 sft
Date of Building Construction :	Building #1: 2010, Building #2: 2011, Building #3: 2011.
Date of Last Building Renovation/Addition :	No addition of floor
Is the Building mixed use?:	No
Ancillary Structures in Complex :	Two (2)
Number of Ancillary Levels (Stories) :	Building #2: three storied, Building #3: two storied

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Approximate Ancillary Structures Area (SF) :	Building #2: 37,959 sft, Building #3: 11,031 sft.
Number of Occupants :	1400 : main building (Building #1), 10 : office building (Building #2), 5 : generator & sub-station building (Building #3).
Exterior Facade Description :	Wall sheeting with glass windows
Structural System Description :	Building #1 & Building #2: Steel beam-column frame system, Building #3: Concrete beam-column frame system



ASSESSMENT FINDINGS

Structural System Design

Question:	Is a clear and redundant load path to resist lateral loads provided?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Most of the cable bracing is loose and dislocated from its original position.	
Source of Findings:	Visual Assessment: Photograph of dislocated cable bracing	
Suggested Plan of Action:	Have a qualified structural engineer complete further analysis of the structure and develop a remediation plan if required.	
Suggested Deadline Date:	28 Jun 2014	
Standard:	Alliance Standards Part 8 Section 8.17 Design for Lateral Loads and 8.3.3. 2006 BNBC Part 6 Section 1.5	
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:	Supplied drawing did not indicate which code they followed.	
Source of Findings:	Document Review: Structural drawings of three buildings	
Suggested Plan of Action:	Engage a qualified structural engineer to develop the required documents 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:	28 Jun 2014	
Standard:	Reference Alliance Standards Part 8 Section 8.2 Structural Integrity of Existing Factory Buildings	
Question:	If built after 2006, can documented compliance with the seismic and wind requirements of the 2006 BNBC be provided?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Supplied drawing did not indicate seismic and wind requirements of the 2006	



	BNBC.	
Source of Findings:	Document Review: Structural drawing of three buildings	
Suggested Plan of Action:	Have a qualified structural engineer document compliance with the seismic and wind requirements stated in the 2006 BNBC.	
Suggested Deadline Date:	28 Jun 2014	
Standard:	Alliance Standards Part 8 Section 8.17 Design for Lateral Loads and 2006 BNBC Part 6 Section 1.5	
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:	Wind load and storm surge loading are not mentioned in the drawings.	
Source of Findings:	Document Review: Structural drawing of three buildings	
Suggested Plan of Action:	Engage a qualified structural engineer to confirm satisfactory structural performance of the buildings under wind loading.	
Suggested Deadline Date:	28 Jun 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 19, 2014	
Suggested Plan of Action:	Provide Certificates of Occupancy for review.	
Suggested Deadline Date:	28 Jun 2014	
Standard:	Alliance Standard Part 8 Section 8.3 Preliminary Structural Assessment	
Structural System Construction		



Question:	Are structural steel members free of corrosion, physical damage or other types of deterioration?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Corrosion was found in main column due to direct water contact in office building.
Source of Findings:	Visual Assessment: Photograph of water contacting column
Suggested Plan of Action:	Complete further testing on areas of deterioration and have a qualified structural engineer develop a remediation plan.
Suggested Deadline Date:	28 Jun 2014
Standard:	Alliance Standard Part 8 Section 8.26
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:	Big steam pipe run connected to the column by inadequate connection. It should be connected properly.
Source of Findings:	Visual Assessment: Photograph of steam pipe
Suggested Plan of Action:	Develop engineered plans to brace all non-structural elements to resist earthquake forces to comply with the BNBC and Alliance Standard. Install anchor and braces as shown on approved plans.
Suggested Deadline Date:	28 Jun 2014
Standard:	Alliance Standards Part 8 Section 8.18 Seismic Bracing of Key Non-Structural Elements and 2006 BNBC Part 6
Question:	Have all areas of needed maintenance, including areas with efflorescence, dampness, standing water on rooftops, and corrosion been addressed.
Priority Level:	Medium
Non-Compliance Level:	1
Description:	Corrosion was found in main column due to direct water contact in office building, which is due to maintenance problem.
Source of Findings:	Visual Assessment: Photograph of corrosion in coulumn
Suggested Plan of Action:	Under guidance from a qualified structural engineer, address all areas of needed maintenance by correcting the identified issues.





Suggested Deadline Date:	28 Jun 2014	
Standard:	Alliance Standard Part 8 Section 8.26 Durability and Maintenance	
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 19, 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:	28 Jun 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 plan is not available.	
Source of Findings:	Visual Assessment: Site visit on April 19, 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:	28 Jun 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.	



Source of Findings:	Visual Assessment: Site visit on April 19, 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:	28 Jun 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:	No marking for storage limit was found during inspection.	
Source of Findings:	Visual Assessment: Photograph of storage area	
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:	28 Jun 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 19, 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.	
Suggested Deadline Date:	28 Jun 2014	
Standard:	Alliance Standards Part 8 Section 8.9 Factory Load Manager	

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