

# INITIAL STRUCTURAL INTEGRITY ASSESSMENT REPORT (SIAR)

Factory Name: **Concorde Garments Ltd**  
Address: **Plot M-3, Road 5, Section -7, Mirpur, Dhaka Dhaka  
Dhaka Bangladesh**  
Assessor: **Sumerra**  
Date: **29 Mar 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](http://www.bangladeshworkersafety.org).





## GENERAL INFORMATION

General Information	
Factory Name:	Concorde Garments Ltd
Address:	Plot M-3, Road 5, Section -7, Mirpur, Dhaka Dhaka Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Dhaka
Zip Code:	
Audit Duration:	2 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date :	April 17, 2014
Final Report Date :	May 13, 2014
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex :	Building 1 Building 2
Number of Building Levels (Stories) :	Building 1 - 6 Storied Building 2 - 3 Storied
Approximate Building Area (SF) :	Building 1 - 49,800 sft Building 2 - 34,500 sft
Date of Building Construction :	Building 1 (Part A)- Construction started in 1983 & completed in 1984 Building 1 (Part B) - 2011 Building 2 - 2011
Date of Last Building Renovation/Addition :	2011 (Part B of building 1)
Is the Building mixed use?:	No
Ancillary Structures in Complex :	NA
Number of Ancillary Levels (Stories) :	NA
Approximate Ancillary	NA

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**ALLIANCE**  
FOR BANGLADESH WORKER SAFETY

Structures Area (SF) :	
Number of Occupants :	Approx. 1700
Exterior Facade Description :	Both Buildings: Brick Facade with typical window installations. Good condition.
Structural System Description :	Building 1: Part A (older) - Reinforced concrete frame Monolithic RC slab with beams. Part B (addition) - Concrete slab on metal deck atop structural steel beams and prefabricated steel frame structure Building 2: Concrete slab on metal deck atop structural steel beams. Steel prefab frame.



## ASSESSMENT FINDINGS

### Structural System Design

Question:	Where density of operations, storage of materials, or equipment weights require live load capacity in excess of 2.0 kN/m <sup>2</sup> (42 psf), do the design documents confirm that the required load capacity exists? Or has the load capacity been analytically confirmed and certified by an Alliance-qualified structural engineer?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Live loads have not been determined for storage areas of Building 1 (1st Floor Accessory Storage and Finished Goods Storage)
Source of Findings:	Photograph: Photo of storage areas
Suggested Plan of Action:	Have a qualified structural engineer confirm that capacity to support the load is available. Load Plans complying with Alliance Standard Part 8 Section 8.20.4.3 should also be developed.
Suggested Deadline Date:	25 Jun 2014
Standard:	Alliance Standards Part 8 Section 8.15 Minimum Floor Design Loads
Question:	Are Certificates of Occupancy available for review?
Priority Level:	Low
Non-Compliance Level:	
Description:	
Source of Findings:	
Suggested Plan of Action:	Provide Certificates of Occupancy for review.
Suggested Deadline Date:	
Standard:	Alliance Standard Part 8 Section 8.3 Preliminary Structural Assessment



### Structural System Construction



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:	Storage racks on 1st Floor of Building 1 are not adequately anchored as per Alliance Standards Part 8 Section 8.18 Seismic Bracing of Key Non-Structural Elements and 2006 BNBC Part 6
Source of Findings:	Photograph: Photo of storage rack
Suggested Plan of Action:	Adequately anchor and brace all non-structural elements to resist earthquake forces to comply with the BNBC and Alliance Standard.
Suggested Deadline Date:	25 Jun 2014
Standard:	Alliance Standards Part 8 Section 8.18 Seismic Bracing of Key Non-Structural Elements and 2006 BNBC Part 6



Question:	Was masonry-chip aggregate concrete (MCAC) used in the construction of the building?
Priority Level:	
Non-Compliance Level:	
Description:	
Source of Findings:	
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.
Suggested Deadline Date:	
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:	3
Description:	No program is in place to ensure loads will not be exceeded as per BNBC Part 6 Chapter 1 Section 1.4.6 and Alliance Standard Part 13 Section 13.7 and Part 8 Section 8.9.



Source of Findings:	Worker Interviews: Management confirms that no program is currently in place.
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:	25 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:	3
Description:	No load plans have been prepared as per Alliance Standards Part 8 Structural Design Section 8.10 Floor Loading Plans (Load Plans)
Source of Findings:	Document Review: No load plans available for review.
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:	25 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:	3
Description:	No load plans posted as required per Alliance Standard Part 8 Section 8.20.5.3
Source of Findings:	Visual Assessment: No load plans observed.
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:	25 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:	3
Description:	Areas are not marked with acceptable loading limits as per Alliance Standards Part 8 Structural Design Section 8.11 Floor Load Markings
Source of Findings:	Visual Assessment: No load markings observed
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:	25 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:	3
Description:	No load manager has been assigned as per Alliance Standards Part 8 Section 8.9 Factory Load Manager
Source of Findings:	Worker Interviews: Management confirms no Load Manager has been assigned.
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:	11 Jun 2014
Standard:	Alliance Standards Part 8 Section 8.9 Factory Load Manager