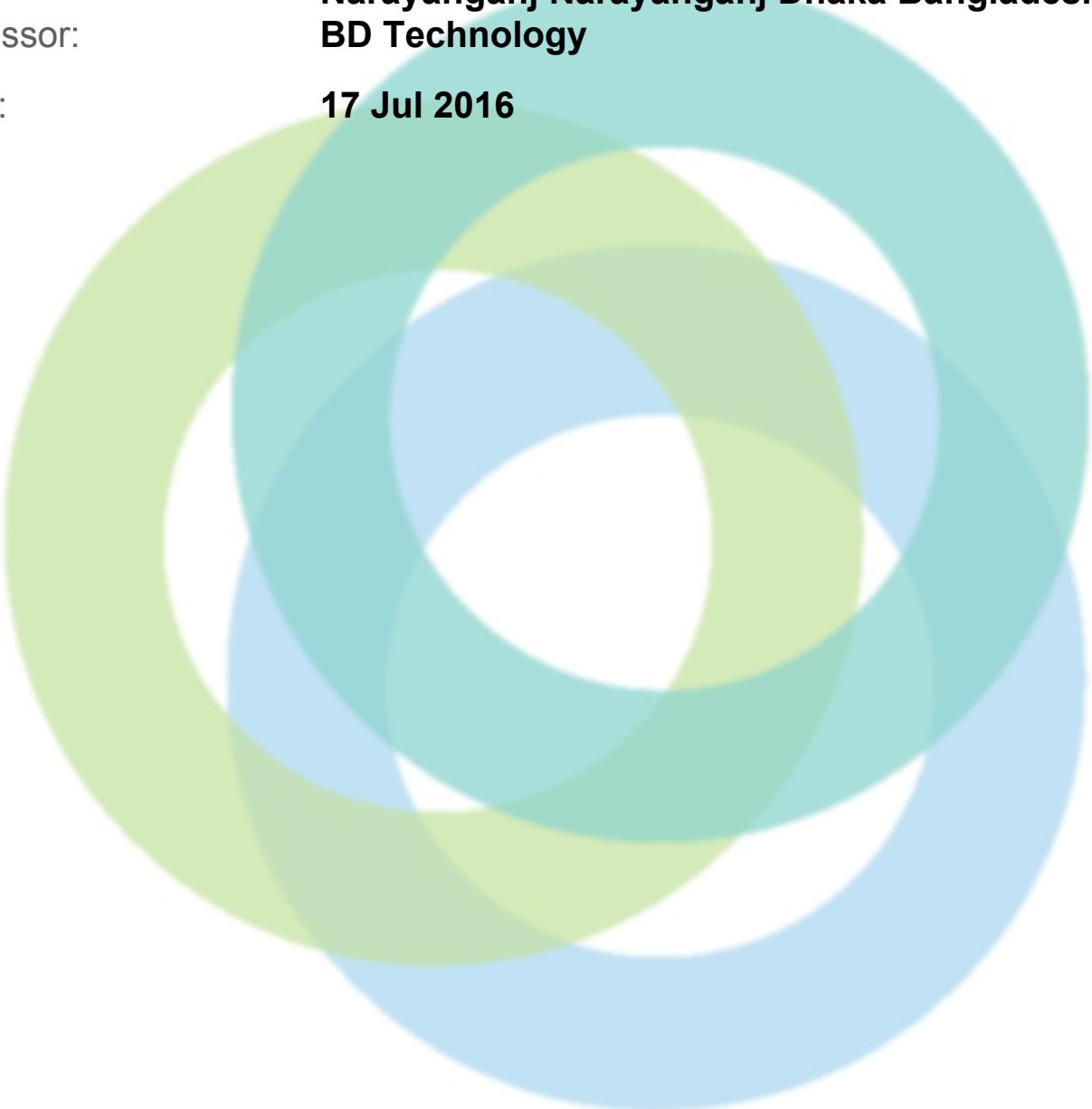


INITIAL STRUCTURAL INTEGRITY ASSESSMENT REPORT (SIAR)

Factory Name: **Ananta Apparels Ltd. (New Location)**
Address: **Plot No -246-249, Adamjee EPZ, Siddhirganj,
Narayanganj Narayanganj Dhaka Bangladesh**
Assessor: **BD Technology**
Date: **17 Jul 2016**





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:	Ananta Apparels Ltd. (New Location)
Address:	Plot No -246-249, Adamjee EPZ, Siddhirganj, Narayanganj Narayanganj Dhaka Bangladesh
Country:	Bangladesh
Province:	Dhaka
City:	Narayanganj
Zip Code:	
Audit Duration:	1 Days
Re-Audit:	Re-Audit After 0 Months
Draft Report Date :	July 20, 2016
Final Report Date :	August 2, 2016
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex :	There are 3 Buildings.Main factory building, Guard room and another one is pump room
Number of Building Levels (Stories) :	The Main Factory Building is 6 story RCC building with one (1) mezzanine floor.
Approximate Building Area (SF) :	Approximate Building Area = 4,31,417sqft. (Ground floor:70,643.59sqft, mezzanine floor:27,991.06sqft, 1st floor:72,028.30sqft, 2nd floor:72,958.61sqft, 3rd floor:72,958.61sqft, 4th floor: 72,958.61sqft, 5th floor:36,825sqft)
Date of Building Construction :	28 March, 2014 to present
Date of Last Building Renovation/Addition :	N/A
Is the Building mixed use?:	No
Ancillary Structures in Complex :	Ancillary-1: Guard Room, Ancillary-2: Pump room.
Number of Ancillary Levels (Stories) :	1- storey both the Guard room and Pump room



Approximate Ancillary Structures Area (SF) :	Guard Room: 331.40 sqft and Pump Room: 149.13sqft. Total Ancillary area: 480.53
Number of Occupants :	697 (2nd floor: 697. Only the 2nd floor is under operation other floors are under architectural construction. Proposed occupant load: ground floor:250, mezzanine floor:80, 1st floor:250,2nd floor:1500,3rd floor:1500,4th floor:1500,5th floor:500)
Exterior Facade Description :	The perimeter façade of the factory buildings typically consists of 10" thick non-bearing masonry infill walls. In general, the masonry walls are abutted tightly against the structural concrete frame members. A plaster finish is provided in the exterior surface of the masonry walls. Aluminium framed glass windows are available in the periphery masonry walls. In front side maximum portion are made by glass partition.
Structural System Description :	The Main Factory Building is a cast in place reinforced concrete structure. The typical structural floor framing system consists of monolithic RC flat slab (8" thick) with drop panels at columns. The building lateral force resisting system for wind and seismic loads appears to be a periphery beam and shear wall system. In the building an expansion joint is also provided. Foundation system consists of Pile Foundation (As per the available documents).
Issues were not found during the structural integrity assessment that required the Emergency Escalation Protocol (and referral to NTC Review Panel)?:	Yes



ASSESSMENT FINDINGS

Structural System Design

Question:	Are credible structural design documents available for review and kept on site?
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Structural documents for the main factory building are available for review and kept on site but the documents are not credible as per BNBC part 6 Section 1.9 and the requirements of Part 8 Section 8.19/8.20 of the Alliance Standard. Design report also prepared but it was not available in the factory. Thus design report was not verified by the assessment team.
Source of Findings:	Document Review: Document reviewed during Site visit July 17, 2016.
Suggested Plan of Action:	Have a qualified structural engineer prepare credible as-built documents based on the requirements of Part 8 Section 8.19 of the Alliance Standard.
Suggested Deadline Date:	30 Sep 2016
Standard:	Alliance Standard Part 8 Section 8.19 Required Structural Documentation for New and Existing Factories
Question:	Are Certificates of Occupancy available for review?
Priority Level:	Low
Non-Compliance Level:	2
Description:	No certificates of occupancy are available for review.
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.
Suggested Plan of Action:	Provide Certificates of Occupancy for review.
Suggested Deadline Date:	30 Sep 2016
Standard:	Alliance Standard Part 8 Section 8.3 Preliminary Structural Assessment

Structural System Construction



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:	2
Description:	During visual assessment water ponding and debris on the flat roof of the Main Building was observed. Some exterior wall is also without plaster and paint.
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.
Suggested Plan of Action:	Under guidance from a qualified structural engineer, address all areas of needed maintenance by correcting the identified issues. The roof slope and drainage system should be corrected as required to produce proper and timely drainage of the roof surface
Suggested Deadline Date:	30 Sep 2016
Standard:	Alliance Standard Part 8 Section 8.26 Durability and Maintenance
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:	A/C Outdoor unit and Storage racks at 2nd floor of the main factory building were observed without seismic bracing.
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.
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:	30 Sep 2016
Standard:	Alliance Standards Part 8 Section 8.18 Seismic Bracing of Key Non-Structural Elements and 2006 BNBC Part 6
Question:	Are expansion joints provided at appropriate intervals on the exterior façade?
Priority Level:	Low
Non-Compliance Level:	2
Description:	Expansion joints are not provided at appropriate intervals on the exterior façade.
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.
Suggested Plan of Action:	Have a qualified structure engineer identify the locations where a expansion joint is needed and then have a remediation plan developed.





Suggested Deadline Date:	30 Sep 2016
Standard:	Alliance Standard Part 8 Section 8.2 Structural Integrity of Existing Factory Buildings

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 is not 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.
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.
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:	30 Sep 2016
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 been prepared for each floor documenting the actual maximum operational loading that is intended and/or allowable on each floor.
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.
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:	30 Sep 2016
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:	Floor Load Plans are not posted as required.	
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.	
Suggested Plan of Action:	Have a qualified structural engineer prepare load plans including the information required in Section 8.20 of the Alliance Standard. Floor load plans should be visibly posted on all levels of all buildings.	
Suggested Deadline Date:	30 Sep 2016	
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:	Areas used for storage of work materials and work products are not clearly marked to indicate a acceptable loading limits.	
Source of Findings:	Visual Assessment: Visual Assessment on Site visit July 17, 2016.	
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:	30 Sep 2016	
Standard:	Alliance Standard Part 8 Section 8.11 Floor Load Markings	