INITIAL STRUCTURAL INTEGRITY ASSESSMENT REPORT (SIAR)

Factory Name:	**Peninsula Garments Ltd. (Sunman)**
Address:	**Sector #1, Plot #46-48 CEPZ, Chittagong Chittagong Chittagong Bangladesh**
Assessor:	**Bureau Veritas**
Date:	**12 Feb 2015**

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:	Peninsula Garments Ltd. (Sunman)
Address:	Sector #1, Plot #46-48 CEPZ, Chittagong Chittagong Chittagong Bangladesh
Country:	Bangladesh
Province:	Chittagong
City:	Chittagong
Zip Code:	
Audit Duration:	8 Hours
Re-Audit:	Re-Audit After 0 Months
Draft Report Date :	17-Feb-2015
Final Report Date :	27-Feb-2015
Are all Action Items From Previous Assessment Completed?:	N/A
Buildings in Complex :	There are twelve buildings in the factory premises out of which two are main production buildings and remaining ten are ancillary buildings. The buildings are named as: 1) Main production building: This building has two parts: Old part and New Part.Old part is five storied and new part is five storied with occupied roof. 2) Single story washing shed, 3) Single story sub-station-1 building, 4) Single story compressor shed, 5) Single story guard building, 6) Single story gas meter shed, 7) Single story chemical store shed, 8) Single story maintenance office shed, 9) Single story sub-station-2 building, 10) Single story generator shed, 11) Two story water treatment plant-1, 12) Three story water treatment plant-2;
Number of Building Levels (Stories) :	1) Main production building: This building has two parts: Old part and New Part.Old part is five storied (G+4) and new part is five storied with occupied roof (G+4+Occupied Roof). 2) Single story Washing Shed: Stories above grade: 1, Stories below grade: 0, 3) Single story sub-station-1 building: Stories above grade: 1, Stories below grade: 0, 4) Single story compressor shed: Stories above grade: 1, Stories below grade: 0, 5) Single story guard building: Stories above grade: 1, Stories below grade: 0, 6) Single story gas meter shed: Stories above grade: 1, Stories below grade: 0, 7) Single story chemical store shed: Stories above grade: 1, Stories below grade: 0, 8) Single story Maintenance office shed: Stories above grade: 1, Stories below grade: 0, 9) Single story sub-station-2 building: Stories above grade: 1, Stories below grade: 0, 10) Single story generator shed: Stories above grade: 1, Stories below grade: 0, 11) Two story water treatment plant-1: Stories above grade: 2, Stories below grade: 0, 12) Three story water treatment plant-2: Stories above grade: 3, Stories below grade: 0;
Approximate Building Area (SF) :	Total area of all buildings in the factory premises: 208227.00 sft. Building wise breakdown as follows: 1) Five story RCC main production building with extension at roof, Ground floor: 31889 sft 1st floor: 31889 sft 2nd floor: 31889 sft 3nd floor: 31889 sft 4th floor: 31889 sft 5nd floor: 31889 sft 2) Single story Washing Shed: 12383 sft, 3) Single story sub-station-1 building: 368 sft, 4) Single story compressor shed: 380 sft, 5) Single story guard building: 203 sft, 6) Single story gas meter shed: 80 sft, 7) Single story chemical store shed: 1137

	sft, 8) Single story Maintenance office shed: 124 sft, 9) Single story sub-station-2 building: 240 sft, 10) Single story generator shed: 656 sft, 11) Two story water treatment plant 1: 162, 12) Three story water treatment plant 2: 1160,
Date of Building Construction :	Factory personnel informed the date of construction as follows: 1) Main production Building: Old part of the building: Construction finished in 1998, New part of the building: Construction finished in 2004, 2) Washing Shed: Construction finished in 1998; No information on date of construction of rest of the buildings were found from factory personnel.
Date of Last Building Renovation/Addition :	New part of the main production building: Prayer shed and maintenance shed were added in the year of 2006 beyond the original construction. Also, during assessment renovation (construction of a new room on roof top) was going on. Old part of the main production building: Roof top truss shed was added beyond original construction. But the date of addition is unknown.
Is the Building mixed use?:	No
Ancillary Structures in Complex :	1) Single story sub-station-1 building, 2) Single story compressor shed, 3) Single story guard building, 4) Single story gas meter shed, 5) Single story chemical store shed, 6) Single story Maintenance office shed, 7) Single story sub-station-2 building, 8) Single story generator shed, 9) Three story water treatment plant-1, 10) Three story water treatment plant-2;
Number of Ancillary Levels (Stories) :	1) Single story sub-station-1 building: Stories above grade: 1, Stories below grade: 0, 2) Single story compressor shed: Stories above grade: 1, Stories below grade: 0, 3) Single story guard building: Stories above grade: 1, Stories below grade: 0, 4) Single story gas meter shed: Stories above grade: 1, Stories below grade: 0, 5) Single story chemical store shed: Stories above grade: 1, Stories below grade: 0, 6) Single story Maintenance office shed: Stories above grade: 1, Stories below grade: 0, 7) Single story sub-station-2 building: Stories above grade: 1, Stories below grade: 0, 8) Single story generator shed: Stories above grade: 1, Stories below grade: 0, 9) Three story water treatment plant-1: Stories above grade: 3, Stories below grade: 0, 10) Three story water treatment plant-2: Stories above grade: 3, Stories below grade: 0,
Approximate Ancillary Structures Area (SF) :	1) Single story sub-station-1 building: 368 sft, 2) Single story compressor shed: 380 sft, 3) Single story guard building: 203 sft, 4) Single story gas meter shed: 80 sft, 5) Single story chemical store shed: 1137 sft, 6) Single story Maintenance office shed: 124 sft, 7) Single story sub-station-2 building: 240 sft, 8) Single story generator shed: 656 sft, 9) Two story water treatment plant 1: 162 sft, 10) Three story water treatment plant 2: 1160 sft;
Number of Occupants :	Total number of occupants: 3500.
Exterior Facade Description :	The perimeter facade of both part of the main building consists of brick masonry wall. Main door is metallic sliding type and windows are sliding glass in aluminum frame. There is a parapet at periphery of roof level. Visually, dampness has been observed on exterior façade. Also, growth of vegetation is observed on sunshade of old part of the main building. On the other hand, the perimeter facade of washing shed consists of brick masonry wall. Main door is metallic sliding type and windows are sliding glass in aluminum frame. Visually, dampness has been observed on exterior façade.
Structural System Description :	Main production building: Both part of the main building are RCC moment resisting frame structure with monolithic beams and slabs. Roof of old part is occupied by truss shed. Foundation of old part is isolated column footing on sand pile. On the other hand, foundation of new part of the building is pile foundation. Washing shed: This is a single storied braced PEB shed. Foundation type is unknown.
Issues were not found during the structural integrity assessment that required the Emergency Escalation Protocol (and referral to NTC Review	Yes

Panel)?:	

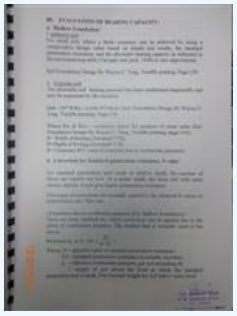
ASSESSMENT FINDINGS

Structural System Design

Question:	Are the available FoS for the columns adequate based on Preliminary calculation?
Priority Level:	High
Non-Compliance Level:	3
Description:	Old part of the main building: FoS has been calculated taking into account the following consideration: Concrete compressive strength: 2045psi (as per standard for MCAC), Rebar strength: 40 ksi (As constructed before 2004), FoS of columns are noted: 1) Central column: 1.37 (not satisfactory), 2) Corner column: 2.80 (satisfactory), 3) Edge column: 1.93 (satisfactory). New part of the main building: FoS has been calculated taking into account the following consideration: Concrete compressive strength: 2370 psi (as per standard for stone chips), Rebar strength: 60 ksi (As constructed at 2004), FoS of columns are noted: 1) Central column: 1.70 (not satisfactory), 2) Corner column: 3.21 (satisfactory), 3) Edge column: 2.40(satisfactory). WTP's are not such kind of structure which require FoS calculation.
Source of Findings:	Uploaded Document: Column FoS calculation spreadsheet, WTP photos.
Suggested Plan of Action:	Under guidance from a qualified structural engineer arrange Detail Engineering Assessment of the structure. This assessment should include destructive core test to validate the in-situ concrete compressive strength of structural elements.
Suggested Deadline Date:	15 Apr 2015
Standard:	Provide results of preliminary calculations in space provided. a) column capacity; FoS > 1.86 - Safe b) column capacity; FoS 1.5 -1.86 - Needs Evaluation c) Column capacity; FoS 1.25-1.5 - Needs Evaluation d) Column capacity; FoS <1.25 - Unsafe In case of a critically low FoS (<1.25), consider Immediate Escalation Protocol

Question:	Are credible structural design documents available for review and kept on site?
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Main Production Building: Old part: This part has an approval as five storied building. On the other hand structural drawing is available for four storied building. No design document is available for the truss shed on roof. In architectural plan only a typical floor plan is given rather than giving individual floor plan. That is why, present floor plan is not matching with the provided architectural floor plan. New part: This part has an approval as five storied building.A set of architectural and structural drawing of new part is available. No structural document is available for the roof top prayer shed, maintenance shed,roof top RCC water tank and emergency steel stair. In architectural plan only a typical floor plan is given rather than giving individual floor plan. That is why, present floor plan is not matching with the provided architectural floor plan. Washing Shed: No design document were available for review during the assessment.
Source of Findings:	Document Review: Provided documents reviewed on-site.
Suggested Plan of Action:	For both part of the main building and washing shed under guidance of 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:	15 Apr 2015
Standard:	Alliance Standard Part 8 Section 8.19 Required Structural Documentation for New and Existing Factories

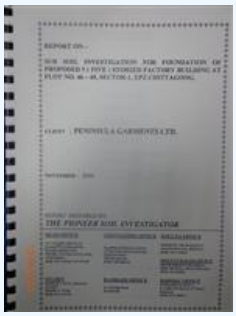




Question:	If the structure has been previously expanded, was the structural impact on the entire structure analytically evaluated and confirmed by a qualified structural engineer.
Priority Level:	Medium
Non-Compliance Level:	3
Description:	Main Production Building: Old Part: Presently the building is five storied (G+4) but structural document is available for four storied building. No structural document is available for the top most story which is a truss shed. New Part: There are three undocumented roof top constructions on new part of the main building: 1) Prayer shed, 2) RCC water tank and 3) Maintenance shed. Also, an undocumented emergency steel stair is attached to north east corner of this part. For these undocumented constructions load impacts on existing structure were not evaluated and confirmed by a qualified structural engineer.
Source of Findings:	Document Review: Documents unavailable for these expansions., Visual Assessment: Visually confirmed.
Suggested Plan of Action:	Have a qualified structural engineer complete an analytical evaluation of the structural impact of these additions and prepare required documents for them.
Suggested Deadline Date:	15 Apr 2015



Standard:	Reference Alliance Standards Part 8 Section 8.1 Applicability of Building Code.	
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:	2	
Description:	Main Production Building: Old part & New Part:The available design documents do not indicate general conformance with 2006 BNBC or other comparable applicable international model building code. Washing Shed:No design documents are available for this building.	
Source of Findings:	Document Review: Available documents reviewed on-site.	
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:	15 Apr 2015	
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:	2	
Description:	Main Production Building: Old part & New Part:There is no information available on the design document to understand the consideration of wind loading and seismic loading in the design of the building. Washing Shed: No design documents are available for this washing shed.	
Source of Findings:	Document Review: Documents reviewed on-site.	
Suggested Plan of Action:	Engage a qualified structural engineer to prepare required documents to confirm satisfactory structural performance of the buildings under wind loading.	
Suggested Deadline Date:	15 Apr 2015	
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:	Have provisions been made in floors or decks for a concentrated load (such as heavy equipment, water tanks, stored materials, etc) applied at a location wherever this load acting upon an otherwise unloaded floor would produce stresses greater than those caused by a uniform load?	
Priority Level:	Medium	
Non-Compliance Level:	2	
Description:	Main Production Building: New part: There are two plastic water tanks situated on roof level having a total capacity of (2000+3000)= 5000 liter. These water tanks are undocumented.	
Source of Findings:	Document Review: Documents unavailable for the water tanks., Visual Assessment: Visually confirmed.	
Suggested Plan of Action:	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.	
Suggested Deadline Date:	15 Apr 2015	
Standard:	Alliance Standard Part 8 Section 8.13 and 8.14	
Question:	Are Certificates of Occupancy available for review?	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	The facility has not obtained the Occupancy Certificate yet.	
Source of Findings:	Document Review: Occupancy Certificate is unavailable.	
Suggested Plan of Action:	Apply for issuance of Occupancy Certificate to concerned authority.	
Suggested Deadline Date:	15 Apr 2015	
Standard:	Alliance Standard Part 8 Section 8.3 Preliminary Structural Assessment	
Question:	Is a Geotechnical Report available for review and kept on site?	
Priority Level:	Low	
Non-Compliance Level:	1	
Description:	New part of the main building: There is a set of geotechnical report available for review with proper identity of the engineer of record. Name of the firm: "The pioneer Soil Investigator". No soil test test report is available for the old part of the main building and washing shed.	
Source of Findings:	Document Review: Geo-technical report reviewed on-site.	

Suggested Plan of Action:	Under guidance from a qualified structural engineer arrange geotechnical investigation at close vicinity of the structure and make the report available for review.
Suggested Deadline Date:	15 Apr 2015
Standard:	Alliance Standard Part 8 Section 8.2 Structural Integrity of Existing Factory Buildings

Structural System Construction

Question:	Is the structural system free of distress, separations, or cracking that indicates lack of performance or overstress of the lateral load-carrying system?
Priority Level:	High
Non-Compliance Level:	1
Description:	There are cracks in the beam and slab of fourth floor roof of new part. There are also some cracks on beam of substation building-1. These cracks appear to be shrinkage crack, periodic inspection is required to confirm whether cracks are progressive or not.
Source of Findings:	Visual Assessment: Visually confirmed.
Suggested Plan of Action:	Engage a qualified structural engineer to provide additional investigation into the areas of cracking and provide a remediation plan if required.
Suggested Deadline Date:	15 Apr 2015
Standard:	Alliance Standard Part 8 Section 8.3.3



Question:	Is the structural system free of distress, settlement, shifting, or cracking in columns or walls?
Priority Level:	High
Non-Compliance Level:	1
Description:	New part of main production building: 1st floor: Masonry crack has been observed on wall of south east corner beside lift core, 2nd floor: Masonry crack has been observed on wall (East side) of toilet zone and wall of north side stair. 4th floor: Masonry crack has been observed on wall of west and north-east side. Roof: Masonry crack has been observed on wall of stair case of north side.
Source of Findings:	Visual Assessment: Visually confirmed.
Suggested Plan of Action:	Have a qualified structural engineer provide further testing and analysis of cracking in walls and provide a remediation plan to correct noted issues.
Suggested Deadline	15 Apr 2015


Date:		
Standard:	Alliance Standard Part 8 Section 8.3.3	
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:	3	
Description:	Main Production Building: Old part: Old part of the structure is constructed with MCAC. New part: Beams and slabs are constructed with MCAC, columns are constructed with stone chips. The structural members constructed with MCAC have not been investigated by an appropriate program of in-situ testing and representative destructive testing or core samples. FoS calculation of both part of the building shows ovserstressed considering minimum concrete compressive strength.	
Source of Findings:	Document Review: Documents reviewed on-site.	
Suggested Plan of Action:	Under guidance from a qualified structural engineer arrange Detail Engineering Assessment of the structure. This assessment should include destructive core test to validate the in-situ concrete compressive strength of structural elements.	
Suggested Deadline Date:	15 Apr 2015	
Standard:	Reference Alliance Standards Part 7 Building Materials Section 7.2 Masonry-chip aggregate concrete (MCAC)	
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:	Main production building: Old Part: Ground Floor: Dampness has been observed on masonry wall of west corner beside stair. 1st floor: Dampness has been observed on masonry wall of child care room and cad room. New Part: 1st floor: Dampness has been observed on masonry wall of stair of north side. 3rd floor: Dampness has been observed on east side wall of toilet zone and wall of north side stair. Also, ceiling and beam of North West corner (beside toilet) are found to be damp. 4th floor: Dampness has been observed on wall of west and north-east side. Also, ceiling and beam of North West corner (beside toilet) are found to be damp. Roof: Dampness has been observed on wall of stair case (north side). Corrosion has been observed on exposed rebar of roof. Washing shed: Dampness has been found on the north	

	side wall. Guard shed: Dampness has been found on the ceiling. Chemical shed: Corrosion has been observed on tin shed. The mentioned areas need maintenance.
Source of Findings:	Visual Assessment: Visually Confirmed.
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:	15 Apr 2015
Standard:	Alliance Standard Part 8 Section 8.26 Durability and Maintenance

Question:	Are any structural elements constructed with MCAC exposed to rainfall or other sources of water sealed with a protective coating to prevent water intrusion?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	The roof of the building (new part) is of MCAC aggregate but no protective sealing is available.
Source of Findings:	Visual Assessment: Visually confirmed.
Suggested Plan of Action:	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.
Suggested Deadline Date:	15 Apr 2015
Standard:	Alliance Standards Part 7 Building Materials Section 7.2 Masonry-chip aggregate concrete (MCAC).

Question:	Are structural steel members free of corrosion, physical damage or other types of deterioration?
Priority Level:	Medium
Non-Compliance Level:	2
Description:	Corrosion have been observed on steel column of washing shed. Also, corrosion has been observed on exposed rebars at roof top of new part of the building and steel members of maintenance and prayer shed . Also, tin shed of chemical building found to be corroded.
Source of Findings:	Visual Assessment: Visually confirmed.
Suggested Plan of Action:	Complete further testing on areas of deterioration and have a qualified structural engineer develop a remediation plan.
Suggested Deadline Date:	15 Apr 2015

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:	1)New Part of main production building: Plastic water tanks at roof top, storage racks at 1st floor accessories store and storage racks at ground floor, 2)Old Part of main production building: fabric racks at 4th floor beside cartoon store. 3)Washing shed: boiler at washing shed, 4) Generator, boiler and panel box of substation building. These non-structural elements need bracing and anchorage.	
Source of Findings:	Visual Assessment: Visually confirmed.	
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:	15 Apr 2015	
Standard:	Alliance Standards Part 8 Section 8.18 Seismic Bracing of Key Non-Structural Elements and 2006 BNBC Part 6	
Question:	If the building is currently being renovated or expanded, are the Construction Practices and Safety requirements of Section 9 being followed?	
Priority Level:	Medium	
Non-Compliance Level:	1	
Description:	Renovation work is going on at 4th floor beside north side stair of new part. During the construction safety requirements of section 9 are not being followed. Such as: 1) Workers did not wear safety equipment.	
Source of Findings:	Visual Assessment: Visually confirmed.	
Suggested Plan of	Follow the Construction Practices and Safety requirements of Section 9	

Action:	properly.	
Suggested Deadline Date:	15 Apr 2015	
Standard:	Alliance Standard Part 9 Construction Practices and Safety.	
Question:	Are expansion joints provided at appropriate intervals on the exterior façade?	 
Priority Level:	Low	
Non-Compliance Level:	3	
Description:	There are two expansion joints on the façade of the main building. One is between the new part and old part of the building. Another expansion joint is along north south direction of façade of old part of the main production building but this expansion joint does not go through façade of fourth floor. These expansion joints are undocumented.	
Source of Findings:	Visual Assessment: Visually confirmed.	
Suggested Plan of Action:	Have a qualified structural engineer identify the locations where a expansion joint is needed and then have a remediation plan developed.	
Suggested Deadline Date:	15 Apr 2015	
Standard:	Alliance Standard Part 8 Section 8.2 Structural Integrity of Existing Factory Buildings	
Question:	Is expansion joint material free from cracking and other forms of deterioration?	 
Priority Level:	Low	
Non-Compliance Level:	2	
Description:	The expansion joints in the building are filled with mortar and covered with tiles. Mortar and tiles material is not an appropriate expansion joint material.	
Source of Findings:	Visual Assessment: Visually confirmed	
Suggested Plan of Action:	Remove deteriorated expansion joint material and provide new approved material at the expansion joint.	
Suggested Deadline Date:	15 Apr 2015	
Standard:	Alliance Standard Part 8 Section 8.26 Durability and Maintenance	

Question:	Is the building free of active signs of water intrusion or ponding due to lack of performance of the façade system?
Priority Level:	Low
Non-Compliance Level:	2
Description:	Dampness has been observed at the position of expansion joint between old part and new part of the main production. Also, dampness has been observed on facade of west side of the building and washing shed.
Source of Findings:	Visual Assessment: Visually confirmed.
Suggested Plan of Action:	Repair the exterior facade system to prevent water intrusion.
Suggested Deadline Date:	15 Apr 2015
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 is no program that will ensure that the designated load in each floor will not be exceeded.
Source of Findings:	Document Review: Documents reviewed on-site.
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:	15 Apr 2015
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:	In case of both parts of the main building there is no load plan available showing the actual maximum operational loading that is allowable.
Source of Findings:	Document Review: Load Plan unavailable

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:	15 Apr 2015	
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:	In case of both parts of the main building there is no load plan available showing the actual maximum operational loading that is allowable.	
Source of Findings:	Visual Assessment: Visually confirmed.	
Suggested Plan of Action:	Have a qualified structural engineer prepare load plans including the information required in Section 8.20 of the Alliance Standard and post Load Plans visibly throughout the structure.	
Suggested Deadline Date:	15 Apr 2015	
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:	In case of both parts of the main building there is no load plans available and the areas are not marked to indicate the acceptable loading limits.	
Source of Findings:	Document Review: Documents reviewed on-site., Visual Assessment: Visually confirmed.	
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:	15 Apr 2015	
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:	There is no 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 loading.
Source of Findings:	Document Review: Document reviewed on-site.
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:	15 Apr 2015
Standard:	Alliance Standards Part 8 Section 8.9 Factory Load Manager