Open Questions - Assessment Report - Nirapon

Factory Name :	**Toufiq Denim & Knitwear Ltd.**
Address:	**House #A-3/2, Ward # 05, Talbag, Savar, Dhaka-1340, Bangladesh**
Assessor:	**Uttaron Technologies**
Audit Scope:	**Nirapon Initial Fire Safety Assessment**
Audit Date :	**07 Sep 2019**

Introduction to the Report

The following report contains a site profile and summary of non-conformities identified during an onsite assessment commissioned by the Nirapon and conducted by Nirapon Vetted Qualified Assessment Firm (QAF). The assessment was conducted against the relevant standard and regulations of Bangladesh National Building Code (BNBC), National Fire Protection Association (NFPA), IEC and National Tripartite Plan of Action (NTPA). The goal of the Nirapon process is to provide clear and practical technical requirements by which Bangladeshi Ready-Made Garment (RMG) Factories producing for Nirapon 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 Nirapon organization and its members will seek to further support factory improvements through technical assistance, training and implementation support for functional Worker Committees.

The contents of the report do not constitute a guarantee of compliance with the applicable laws, the relevant 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 Qualified Assessment Firm.

Neither the vetted QAF nor the Nirapon can certify or guarantee the quality, outcome, or effectiveness of actions taken in response to the report.

It should also be noted that any changes in layout of a factory or new construction, extension or alterations to any of the factory buildings are likely to create additional NC’s; leading to further action plans being added to any existing or previously signed off corrective action plan (CAP).

For more information and report feedback please go to: www.nirapon.org

FACTORY INFORMATION

General Information	
Factory Name	Toufiq Denim & Knitwear Ltd.

Basic Information	
Address :	House #A-3/2, Ward # 05, Talbag, Savar, Dhaka-1340, Bangladesh
Country :	Bangladesh
Province/State :	
City/Town :	
Postal Code :	
Audit Duration :	1 Days 0 Hours
Re-Audit :	No Re-Audit
Draft Report Date :	9 September 2019
Final Report Date :	10 October 2019
Main Buildings in Complex (Should be identical as per ASP 6.1) :	Main Building.
Is the building(s) owned or rented by the Factory :	Owned
Number of Main Building Levels/ stories (Should be identical as per ASP 6.1) :	Main Building = 7 (GF+ 6) Storied. [Originally 6 storied building. Additional Canteen, Office, Toilet have been constructed on rooftop. Therefore considered as 7 storied.]
Approximate Building Area (SF) (Floor wise) (Should be identical as per ASP 6.1) :	Main Building =Ground Floor_6,583+ 1st Floor_6,583+ 2nd Floor_6,583+ 3rd Floor_6,583+ 4th Floor_6,583+ 5th Floor_6,583+ 6th Floor_1,766= 41,266 sft.
Date of Building Construction (Should be identical as per ASP 6.1) :	1. Main Building= 2017. 2. Generator Shed= 2017. 3. Compressor Shed= 2018. 4. Boiler Room= 2019.
Date of Building Occupation :	1. Main Building _Year of Building Occupation 2017. 2. Generator Shed _Year of Building Occupation 2017. 3. Compressor Shed _Year of Building Occupation 2018. 4. Boiler Room _Year of Building Occupation 2019.
Date of Last Building Renovation/ Expansion :	No renovation or additional work has been done after construction.

Ancillary Structures in Complex (Should be identical as per ASP 6.1) :	1. Generator Shed 2. Compressor Shed. 3. Boiler Room.
Approximate Ancillary Structures Area (SF) (Should be identical as per ASP 6.1) :	1. Generator Shed= Ground Floor_162 sft. 2. Compressor Shed= Ground Floor_160 sft. 3. Boiler Room= Ground Floor_67 sft.
Number of Occupants (Should be identical as per ASP 6.1) :	1. Main Building =Ground Floor_45+ 1st Floor_65+ 2nd Floor_153+ 3rd Floor_47+ 4th Floor_36+ 5th Floor_26+ 6th Floor_70= 442 Persons. 2. Generator Shed= Ground Floor_0 Person. 3. Compressor Shed= Ground Floor_0 Person. 4. Boiler Room= Ground Floor_0 Person.
Number of Ancillary Levels (Stories) (Should be identical as per ASP 6.1) :	1. Generator Shed= 1 (GF Only) storied. 2. Compressor Shed= 1 (GF Only) storied. 3. Boiler Room= 1 (GF Only) storied.
Occupancy Type (floor wise) (Should be identical as per ASP 6.1) :	1. Main Building = GF, 1st, 2nd, 3rd, and 4th Floor_ G2, 5th floor_F1, E2, H2, and Roof top_ E4, F1. 2. Generator Shed = K1. 3. Compressor Shed = K1. 4. Boiler Room = k1.
Construction Type (Should be identical as per ASP 6.1) :	The building construction types are as follows: 1. Main Building = Non-rated structure. 2. Generator Shed = Non-rated structure. 3. Compressor Shed = Non-rated structure. 4. Boiler Room = Non-rated structure.
Building Height (Should be identical as per ASP 6.1) :	1. Main Building = 75’-5”. 2. Generator Shed= 11’-33”. 3. Compressor Shed= 9’-8”. 4. Boiler Room= 13’-0”.
Height of Highest Occupied Floor Level Above Grade (Should be identical as per ASP 6.1) :	1. Main Building = 66'-4". 2. Generator Shed= 3'-0". 3. Compressor Shed= 1’-6”. 4. Boiler Room= 0'-4".
Slab thickness (per floor wise) (Should be identical as per ASP 6.1) :	The slab thicknesses of the assessed structure are as follows: Main Building = 1st Floor_Corrugated deck slab 76 mm(Min base thickness) with floor finish = 40mm, 2nd floor_Corrugated deck slab 78 mm (Min base thickness) with floor finish = 40mm, 3rd floor _ Corrugated deck slab 77 mm(Min base thickness) with floor finish= 40mm, 4th floor_ Corrugated deck slab 75 mm(Min base thickness) with floor finish = 40mm, 5th floor_ Corrugated deck slab 89 mm(Min base thickness) with floor finish= 20 mm and Rooftop _ Corrugated deck slab 89 mm(Min base thickness) with floor fiinish= 20mm.
Surrounding Building Information (Occupancy type) with Proximity Distance as per BNBC Table 3.2.2 (Should be identical as per ASP 6.1) :	Surrounding building proximity distance: 1. Main Building _GF = Compressor Shed(K1) attached with Main Building at the South-East side. Generator Shed(K1) attached with Main Building at North-East side. Boiler Room(K1) attached with Main Building at South-West side. No surrounding occupancies besides the rest of the floors. 2. Generator Shed = Attached with Main Building(G2) at the South-West side. 3. Compressor Shed = Attached with Main Building(G2)at the North-West side. 4. Boiler Room = Attached with Main Building(G2) at the South-East side. Peripheral Proximity distance to boundary wall: 1. Main Building north side - 52" (A1 occupancy within approximately 5 feet of the boundary line) 2. Main Building south side - 42" (A2 occupancy(10 storied building) within approximately 5 feet of the boundary line) 3. Main Building east side - 119" (Main road attached with factory boundary line) 4. Main Building west side - 58" (A1 occupancy approximately 5 feet of the boundary line)
Number of Existing Occupants (Floor-wise) (Should be identical	1. Main Building =Ground Floor_45+ 1st Floor_65+ 2nd Floor_153+ 3rd Floor_47+ 4th Floor_36+ 5th Floor_26+ 6th Floor_70= 442 Persons. 2. Generator Shed=

as per ASP 6.1) :	Ground Floor_0 Person. 3. Compressor Shed= Ground Floor_0 Person. 4. Boiler Room= Ground Floor_0 Person.
Number of Exit Stairs (Should be identical as per ASP 6.1) :	The stairs only found in the 'Main Building' and the numbers of the stair are two which are connected from the ground floor to the first floor. The rest of the structures are single-storied.
Location of Exit Stairs (Should be identical as per ASP 6.1) :	The stairs only found in the 'Main Building' and the locations are = Stair-1 at the South-East corner of the building and Stair-2 at the North-East corner of the building.
Individual Exit Stair Width (Should be identical as per ASP 6.1) :	The individual Exit Stair Width in Main Building = 1st Floor(S1_53", S2_ 52"), 2nd floor(S1_53", S2_ 53"), 3rd floor(S1_52", S2_54"), 4th floor(S1_51", S2_ 51"), 5th floor(S1_51", S2_ 52") and Rooftop(S1_53", S2_ 53").
Individual Exit Width (Should be identical as per ASP 6.1) :	The individual Exit Width in Main Building = Ground Floor(14', No door), 1st Floor(43", 42"), 2nd floor(42", 43"), 3rd floor(42", 42"), 4th floor(35", 41"), 5th floor(35", No door) and Rooftop(64", 47"). In rest of the structures there was no door .
Detail of central fire alarm detection system with proposed and as- built design approval date :	The Central Fire Detection system is not installed yet in the Main Building. The proposed drawing of the CFDS system found in the factory during the assessment. But the proposed drawing of CFDS has not been approved by Nirapon Vetted Fire Assessor.
Detail of fire protection system with proposed and as- built design approval date :	The standpipe system is not installed yet in the Main Building. The proposed drawing of the standpipe system has not been found in the factory during the assessment.
Detail of certified fire rated doors if applicable :	The certification of fire-rated doors was not done yet by Nirapon Vetted Fire Assessor.
Detail of certified fire rated gypsum board if applicable :	N/A
Detail of certified fire rated expansion gap sealant if applicable :	N/A
Detail of certified fire rated damper if applicable :	N/A
Detail of certified fire rated shutter if applicable :	N/A
Detail of certified fire rated lift landing door if applicable :	N/A

Last Assessment Information	
Auditor	Uttaron Technologies
Assessment Date	07 Sep 2019

ASSESSMENT FINDINGS

NP - Fire Safety Report - Fire Protection Construction	
Question	Are exit enclosures provided with fire-resistive rated construction barriers?
Level(Priority Level)	High
Non-Compliance Level	3
Description	Fire exit enclosures are installed with fire-rated construction barriers at the required places of the Main buildings except for the noted locations and these are:- i. At the ground floor in the discharge path of stair-2 (North-East side of building). ii. 5th floor stair-2 (North-East corner of the floor). In these two locations, the doors are not installed yet.
Source of Findings	Visual Assessment: The exits are not enclosed with proper fire-rated exit enclosures at the Ground floor and the 5th floor in front of stair-2 which is located at the north-east side of the building.
Suggested Plan of Action	Provide 2-hour fire-resistive rated exit enclosures at required locations as per BNBC part-3, Table-3.3.1.
Suggested Deadline Date	31 Oct 2019
Standard	BNBC Part 3 Table 3.3.1-Enclosure of fire Exits NFPA 101 (2018 Edition) Section 7.1.3 (Separation of Means of Egress)-Exit enclosure Fire barriers shall be constructed of materials meeting the testing requirements of ASTM E 119
Evidence	 Non-rated exit enclosure at GF  Non-rated exit enclosure at 5th floor  Fire-rated exit enclosure 01  Fire-rated exit enclosure 02
Question	Are openings and penetrations through rated walls and/or assemblies protected?
Level(Priority Level)	High
Non-Compliance Level	3
Description	Two nos. of the door opening found without fire rated at GF of stair-1, and 5th floor of the building which is located at the Stair-2 as well as another opening found without fire rated at Transformer room at GF in beside the Stair-2, one window also found in between the ground floor of Main Building and Boiler Room which need to be closed in order to reduce the hazard. As the Generator shed is attached with the Main building where the glass opening found in between two structures which are also needed to be closed as well. Penetrations found in the stair-2 to the floor which are needed to properly seal with a fire stop system.
Source of Findings	Visual Assessment: Non-rated exit enclosers and window found at different locations of Main Building.
Suggested Plan of Action	Provide a fire-resistive rated assembly in mentioned locations as well as all of the openings are need to be closed

	in order to minimize the hazard and penetrations shall be consel with fire rated matarials. The rated assembly should be approved by a Nirapon vated Fire Assessor.
Suggested Deadline Date	31 Oct 2019
Standard	Openings & penetrations through Wall: BNBC Part 3 Table 3.2.3-Requirements for Opening Protection Assembly Rating of Exterior Walls BNBC Part 4 Section 2.5-OPENINGS IN SEPARATING WALL NFPA 101 (Edition 2012) Chapter 8 Section 8.3.5 (Penetrations) NFPA 101 (Edition 2018) Chapter 8 Section 8.3.4 (Penetrations) Doors: NFPA 80 & NFPA 252 BNBC Part 4 Section 1.5.4-The fire door assemblies shall conform to the test requirements of ASTM E 152 Windows: BNBC Part 4 Section 1.5.5-The fire windows and fire shutters shall meet the test requirements of ASTM E 163 NFPA 257 Ducts & Fire Damper: NFPA 90 A
Evidence	 Non-rated opening at GF of Main Building  Non-rated opening at Transformer Room  Non-rated window in between the Generator and Main Building  Non-rated window in between the Compressor  Cable pipe's penetration 01  Cable Pipe's penetration 02  Cable Pipe's penetration 03
Question	Are separations between hazards provided with fire-resistive rated construction barriers.
Level(Priority Level)	Medium
Non-Compliance Level	2

Description	Mix occupancies have been found in the different levels of Main Building so that the fire-rated occupancy separations are required in the following locations: i. Finish Goods storages(H2) found beside the knitting machines areas(G2) and office room(F1) at the ground floor . ii. Temporary finished storage found beside the Finish section at 1st floor. iii. Lastly, on the 5th floor, female canteen(siting capacity 30-40) and Prayer area (siting capacity 20-25)found beside the finish goods storage and Accessories storage as well as an office and sewing area next to the same Finish Goods Storage. At the GF of Main building, Transformer room found without any sort of fire-rated separation beside the stair-2 which is also need to be fire separated from the stair.
Source of Findings	Visual Assessment: Separations are required at the noted locations.
Suggested Plan of Action	Provide fire-resistive rated occupancy separations in between the different occupancies accordance with BNBC Part 3 Table 3.2.1. Consult a qualified fire protection engineer to design the required rated construction barrier.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 3 Table 3.3.1-Required Fire Resistance Ratings of Building Elements (in hours) for Various Types of Construction BNBC Part 3 Table 3.2.1-Fire Resistance Rating Requirements for Separating Walls and Floor/Ceiling Assemblies between Mixed Occupancies (hours)
Evidence	 Mix occupancies at 5th floor 01  Mix occupancies at 5th floor 02  Mix occupancies at 5th floor 03  The floor layout of the 5th floor  Mix occupancies at 1st floor  Mix occupancies at Ground floor 01  Mix occupancies at Ground floor 02  Mix occupancies at Ground floor 03  No door at Transformer Room  Occupancy of 2nd Floor  Occupancy of 4th Floor  Occupancy of 3rd Floor

Proximity distance at East side 01

Proximity distance at East side 02

Proximity distance at North side 01

Proximity distance at North side 02

Proximity distance at South side 01

Proximity distance at South side 02

Proximity distance at West side 01

Proximity distance at West side 02

Question	Are shafts provided with the minimum fire-resistance rating?
Level(Priority Level)	High
Non-Compliance Level	3
Description	In Main Building, there was no other shaft except the stairs and lift shaft. The lift has been found in front of the stair-2. Both shafts have been found to be of rated fire-resistant construction as well as with approved enclosers. But, the fire doors are not reviewed by a credible authority.
Source of Findings	Visual Assessment: Two vertical stair shafts and lift shaft along with a lift shaft have been found fire separated by fire-resistive rated construction barriers as well as with fire-rated doors. But, the fire door's approval is required.
Suggested Plan of Action	Provide fire-resistive rated construction barrier and listed fire-rated opening protectives were not installed yet to enclose the shaft. Rating requirement must be in accordance with the standard. Consult a qualified fire protection engineer to design the required rated shaft and after installations take approval from Nirapon Vetted QAF.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 3 Table 3.3.1-Required Fire Resistance Ratings of Building Elements (in hours) for Various Types of Construction
Evidence	 Fire separated lift shaft 01  Fire separated lift shaft 02

Question	Certificates of Occupancy for each building have been issued and are on file.

Level(Priority Level)	Low
Non-Compliance Level	1
Description	Occupancy certificate was not available for any of the building during this assessment.
Source of Findings	Document Review: No occupancy certificate was found for the building among the documents shown by the factory concerned people.
Suggested Plan of Action	Apply to the appropriate authority in an expeditious manner for the issuance of the Certificates of Occupancy for each building and ancillary structure according to building use.
Suggested Deadline Date	26 Oct 2019
Standard	Factory concern should communicate with the relevant authority for the occupancy certificate.
Evidence	
Question	Is each floor separated with a fire-resistive rated construction barrier?
Level(Priority Level)	High
Non-Compliance Level	3
Description	In the Main Building, the vertical floor separations are provided on each floor by RCC Corrugated deck slabs and the slab thickness are 76 mm(Min base thickness) with floor finish= 40mm. at the 1st floor, 78 mm(Min base thickness) with floor finish= 40mm at 2nd floor, 77 mm(Min base thickness) with floor finish= 40mm at 3rd floor, 75 mm(Min base thickness) with floor finish= 40mm. at 4th floor, 89 mm(Min base thickness) with floor finish= 20 mm at 5th floor and 89 mm(Min base thickness) with floor finish= 20mm at the rooftop(because the rooftop is occupied by the canteen and office room). But the 7-storied 'Main Building' is a non-rated steel structure as per BNBC(2006), part-3, sec- 3.3.1 because the non-rated beams and columns are connected from ground floor to rooftop. So, in this case, proper fire-rated floor separation may not be fully ensured due to non rated steel beams and columns whereas the sizes are 18"x7" and 5"x9.5" respectively. As well as per BNBC(2006), Table- 3.2.4, non-rated structure are not allowed for G2 occupancy (Industrial purposes).
Source of Findings	Visual Assessment: Non-rated structural members have been found in the 7-storied 'Main Building' and rest of the structures are single-storied shed.
Suggested Plan of Action	As per BNBC (2006), part-3, sec- 2.4.3, for Industrial uses type-1 construction is required for this structure because the structure height exceeds 14m in height(BNBC, Part-3, Sec-1.8.2.3). Provide fire-resistive rated construction barriers between floors as per BNBC (2006), part-3, sec-3.3.1. Consult a qualified fire protection engineer to design the rated construction barriers along with required rated structural members.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 3 Table 3.3.1-Required Fire Resistance Ratings of Building Elements (in hours) for Various Types of Construction
Evidence	 Structural Members  Slab Thickness with Floor Finishing

Question	Is the fire resistance materials of structural members have required fire rating as per BNBC Table 3.3.1. In addition, all structural members are found in good condition and free of damage?
Level(Priority Level)	High
Non-Compliance Level	3
Description	From visual inspection, all structural members of Main Building and ancillary structures in this factory premises were found free of damage or distress during the assessment. But the structural members do not fulfill the requirements of BNBC Chapter 3, Table 3.3.1 because of the non-rated steel structural members and slabs. As the building is a high rise building, it needs to accomplish the criteria of Type-1 building construction type whereas we found the sizes of the steel columns 5"x9.5", 8"x19", and10"x22" steel beam 5"x10", 7"x18", Exterior Baring wall 6 inches in west and north sides and 10 inches in stairs areas. The slabs are provided on each floor by RCC Corrugated deck slabs and the slab thickness are 76 mm(Min base thickness) with floor finish= 40mm. at the 1st floor, 78 mm(Min base thickness) with floor finish= 40mm at 2nd floor, 77 mm(Min base thickness) with floor finish= 40mm at 3rd floor, 75 mm(Min base thickness) with floor finish= 40mm. at 4th floor, 89 mm(Min base thickness) with floor finish= 20 mm at 5th floor and 89 mm(Min base thickness) with floor finish= 20mm at the rooftop(because the rooftop is occupied by the canteen and office room). In the "Boiler Room", it's an extended part of the Main Building where the masonry wall is 10inches.
Source of Findings	Photograph: The building does not comply with the standard.
Suggested Plan of Action	Comply with the structure as per BNBC Chapter 3, Table 3.3.1. Structural integrity shall be maintained for the time needed to evacuate, relocate, or defend in place occupants who are not intimate with the initial fire development.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 3 Chapter 3
Evidence	 Steel Column 01  Steel Column 02  Steel Beam 01  Steel Beam 02  Non-rated structural members 01  Non-rated structural members 02  Boiler room

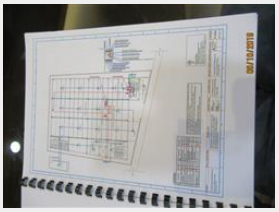
NP - Fire Safety Report - Fire Protection Systems

Question	Are fire department connections provided and clearly identified for the Fire Protection Systems?

Level(Priority Level)	Medium
Non-Compliance Level	2
Description	Highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access but the standpipe system has not been installed yet.
Source of Findings	Visual Assessment: The standpipe system has not installed yet in 7-storied 'Main Building'.
Suggested Plan of Action	First of all, install the standpipe system at the required structures. Once installed, provide fire department connections along with identification signage of Fire Department (Siamese) connections in accordance with NFPA 14 (Edition 2019) Chapter 4 Section 4.8. Connections shall match the Fire Service and Civil Defense hose thread standard.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 14 (Edition 2019) Chapter 4 Section 4.8 (Fire Department Connections)
Evidence	
Question	Are hose connections and hoses, if required, provided for the standpipe system at required locations based on system class?
Level(Priority Level)	High
Non-Compliance Level	3
Description	Highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access but the standpipe system has not been installed yet.
Source of Findings	Visual Assessment: The standpipe system has not installed yet in 7-storied 'Main Building' and its proposed design was not found in the factory.
Suggested Plan of Action	First of all, prepared the proposed design of the standpipe system and take the review and approval from the Nirapon vatted QAF then install the standpipe system in 7-storied 'Main building' and then provide hose connections at required locations per NFPA 14.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 14 (Edition 2019) Chapter 7
Evidence	
Question	Are inspection, maintenance, and testing procedures of the fire pump documented and up to date?
Level(Priority Level)	Low
Non-Compliance Level	1
Description	As the fire pump system has not installed yet in the factory, so inspection, maintenance, and testing procedures and records were not found in the factory.
Source of Findings	Document Review: No document has been seen regarding fire pump inspection, maintenance, and testing procedures.
Suggested Plan of Action	Install a fire pump system first, then create an inspection, maintenance, and testing procedures for the fire pump system as per NFPA 25 and relevant standard.

Suggested Deadline Date	31 Oct 2019
Standard	NFPA 25 Edition 2017 Chapter 8 Fire Pumps
Evidence	
Question	Are inspection, maintenance, and testing procedures of the standpipe and hose system documented and up to date? Including inspection and testing of hoses if provided.
Level(Priority Level)	Low
Non-Compliance Level	1
Description	Considering building height the standpipe system is required in 7-storied ‘Main Building’ where the structure's occupied height is 65 feet. The standpipe system has not been installed yet.
Source of Findings	Visual Assessment: The standpipe system has not installed yet in 7-storied 'Main Building'.
Suggested Plan of Action	First of all, install the standpipe system at the required structures. Once installed, establish an inspection, maintenance, and testing program for the standpipe and hose system. The program must comply with the requirements of NFPA 25.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 25 Edition 2017 Chapter 6 Standpipe and Hose Systems Table 6.1.1.2
Evidence	
Question	Are notification and initiation devices for the fire alarm system installed at required locations based on occupancy type?
Level(Priority Level)	High
Non-Compliance Level	3
Description	The automatic fire alarm and detection system have not been installed yet in all of the assessed structures. Only the proposed drawing found in the factory but it was not approved by a Nirapon vetted QAF.
Source of Findings	Visual Assessment: The automatic fire alarm and detection system are not installed at noted locations.
Suggested Plan of Action	Consult a qualified fire protection engineer to design a proposed system for all of the structures as per NFPA 72. Then before the installation process, the proposed drawings are required to take approval from a Nirapon vetted QAF.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 72
Evidence	
Question	Are portable fire extinguishers installed throughout the building at required locations and mounted at the correct height?
Level(Priority Level)	Medium
Non-Compliance Level	2

Description	Portable fire extinguishers have been installed throughout the assessed structures at required locations with the appropriate height. As they have not prepared yet the design plan sothat the required locations throughout the building may not be ensured by visual assessment.
Source of Findings	Visual Assessment: Portable fire extinguishers found on required locations with the appropriate height and that is 3ft to 4 ft above the ground level.
Suggested Plan of Action	Prepared the design plan for portable fire extinguishers that ensure /comply with the NFPA 10.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 4 Section 4.10 and NFPA 10 Edition 2018
Evidence	 Mounting height of portable fire extinguisher 01  Mounting height of portable fire extinguisher 02
Question	Does the building have a listed & functional fire pump as per requirement?
Level(Priority Level)	High
Non-Compliance Level	3
Description	Highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access but the standpipe system has not been installed yet.
Source of Findings	Visual Assessment: The fire pump has not been installed in the factory.
Suggested Plan of Action	The fire pump shall be so designed that is shall satisfy the required pressures and flow for fire fighting equipment at the highest and most remote part of the protected premises during their peak demand hour. Fire pump, driver, and the controller must be listed from the 3rd party certification authority. Before the installation, the design and hydraulic calculations are needed to take approval by a Nirapon vetted QAF.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 20
Evidence	
Question	Does the building have a Standpipe System?
Level(Priority Level)	High
Non-Compliance Level	3
Description	In the 7-storied "Main Building" a system consisting of 1-inch piping connected with a reserve tank on the rooftop is present, which is not as per standard standpipe requirements. A Class III standpipe system is required for the 7-storied "Main Building" because the occupied floor height is 65 feet. The Class III system is not installed yet and proposed drawing is not also found in the factory. Rest three structures are single-storied shed so that standpipe facility is not required there.

Source of Findings	Visual Assessment: The required Class III standpipe system has not been installed yet in the 7-storied 'Main Building'.
Suggested Plan of Action	Install a standpipe system at Main Building designed by a qualified fire protection engineer. Before the installation process, the proposed drawing shall be reviewed and approved from Nirapon vetted QAF.
Suggested Deadline Date	26 Oct 2019
Standard	IBC (Edition 2015) Section 905, Art.905.3.1 - Applicable for new building construction
Evidence	 Existing Fire Fighting Equipment
Question	Does the building have an automatic or manual fire alarm and detection system?
Level(Priority Level)	High
Non-Compliance Level	3
Description	In the 7-storied "Main Building" a manual fire alarm and detection system consisting manual call points, non-addressable detectors and manual sounders are present. An automatic fire alarm and detection system have not been installed yet in all of the assessed structures. But the proposed drawing of CFDS was found in the factory where the drawing was not reviewed/approved by a Nirapon vetted QAF.
Source of Findings	Visual Assessment: The automatic fire alarm and detection system are not provided at noted locations.
Suggested Plan of Action	Install an automatic fire alarm and detection system throughout all of the structures. The system design must be completed by a qualified fire protection engineer. Before the installation, the proposed drawings need to approval by a Nirapon vetted QAF.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 72
Evidence	 Existing Manual Fire Alarm System-01  Existing Manual Fire Alarm System-02  Proposed Automatic Fire Alarm System Drawing
Question	Does the Standpipe System Class comply with the type of Class required for the building?

Level(Priority Level)	High
Non-Compliance Level	3
Description	Highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access but the standpipe system has not been installed yet.
Source of Findings	Visual Assessment: The standpipe system has not installed yet in 7-storied 'Main Building'.
Suggested Plan of Action	Consult a qualified fire protection engineer to design a proposed system for all of the required structures as per NFPA 14. Then before the installation process, the proposed drawings are required to take approval from a Nirapon vetted QAF.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 14 (Edition 2019) Chapter 5 and requirements for Class I, Class II, or Class III Standpipes
Evidence	

Question	Fire extinguishers are inspected, tested, and maintained as required.
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	Plan and record of inspection, maintenance and testing of fire extinguishers were found during the assessment but not as per standard.
Source of Findings	Document Review: Inspection, maintenance and testing documents of fire extinguishers were found in the factory but not as per standard.
Suggested Plan of Action	Establish an inspection, testing, and maintenance program for all fire extinguishers. The program shall comply with the requirements of NFPA 10 Chapter 7.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 10 Edition 2018 Chapter 7
Evidence	 Inspection, maintenance and testing documents of fire extinguishers 01  Inspection, maintenance and testing documents of fire extinguishers 02  Inspection, maintenance and testing documents of fire extinguishers 03

Question	Is signage for the standpipe system installed at required locations and on required components?
Level(Priority Level)	Low
Non-Compliance Level	1
Description	Highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access but

	the standpipe system has not been installed yet.
Source of Findings	Visual Assessment: The standpipe system has not installed yet in 7-storied 'Main Building'.
Suggested Plan of Action	First of all, install the standpipe system at the required structures. Once installed, provide permanent signage of the standpipe system on required components as per NFPA-14, chapter-6, section 6.3.8.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 14 (Edition 2019) Chapter 6
Evidence	
Question	Is the fire alarm and detection system monitored by a central station monitoring service or directly connected to the Fire Service and Civil Defense?
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	The automatic fire detection system has not been installed throughout all of the assessed structures.
Source of Findings	Visual Assessment: CFDS system is not installed yet in all of the assessed structures.
Suggested Plan of Action	Install an automatic fire alarm and detection system in all of the structures as per NFPA 72 as required by the relevant Standard and arrange for direct connection of the system to a central station monitoring service or the Fire Service and Civil Defense as per Standard. Until that time that a central station monitoring service or direct connection to the Fire Service and Civil Defense can be set up, a person shall be assigned to contact the fire department in the event of fire alarm activation. An annunciator shall be located in a constantly attended location (such as a fire control room) to alert this person.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 72 Section 3.3.284 (Supervising Station Alarm Systems) NFPA 72 Edition 2019 Section 3.3.291 (Supervising Station Alarm Systems) NFPA 101 Edition 2018 Section 9.6.4 (Emergency Forces Notification)
Evidence	
Question	Portable fire extinguishers have been selected based on potential fire class and hazards?
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	Portable fire extinguishers have been selected based on potential fire class and hazards. But the design and selection regarding documents were not found in the factory.
Source of Findings	Visual Assessment: ABCE dry powder, foam and CO2 type portable fire extinguishers are used at the proper place based on potential fire class and hazards.
Suggested Plan of Action	Portable fire extinguishers shall be installed throughout all new and existing facilities in accordance with BNBC Part 4 Section 4.10 and NFPA 10. Prepared a plan and design procedure so that it can reflect your selection process as per NFPA 10 Edition 2018 Chapter 5.
Suggested Deadline Date	26 Oct 2019

Standard	NFPA 10 Edition 2018 Chapter 5
Evidence	 ABCE Types of Fire extinguisher on the production Floor 01  ABCE Types of Fire extinguisher at Floor 02
Question	Standpipe system piping is free of mechanical damage, leakage, and corrosion?
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	Highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access but the standpipe system has not been installed yet.
Source of Findings	Visual Assessment: The standpipe system has not installed yet in 7-storied 'Main Building'.
Suggested Plan of Action	First of all, Install a standpipe system at required locations designed by a qualified fire protection engineer. The system must comply with the requirements of NFPA 14. Then keep maintenance of the system as per NFPA 14 and NFPA 25.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 25 Edition 2017 Chapter 6 Standpipe and Hose Systems
Evidence	
Question	Trouble or alarm notifications were not indicated on the fire alarm control panel
Level(Priority Level)	High
Non-Compliance Level	3
Description	The automatic fire alarm and detection system has not installed yet in the assessed structures of the factory.
Source of Findings	Visual Assessment: No CFDS facilities are provided in these assessed structures.
Suggested Plan of Action	Install an automatic fire alarm and detection system for the facility and its need to be free from faulty alarm/trouble alarms. The system shall comply with the NFPA 72. Consult a qualified fire protection engineer and/or authorized fire alarm company to design and install the system.
Suggested Deadline Date	29 Oct 2019
Standard	NFPA 72
Evidence	

NP - Fire Safety Report - Fire Safety Programs

Question	A Fire Safety Director position has been filled.
Level(Priority Level)	Low
Non-Compliance Level	1
Description	A dedicated person has been appointed and assigned for the fire safety issues. But till now, he has not received any fire safety training from appropriate authority.
Source of Findings	Document Review: i. Appointment letter of Fire Safety Officer. ii. Certificate (Fire Safety manager course) of the Fire Safety Officer. iii. ID card.
Suggested Plan of Action	Provide a minimum 6 months fire safety training from Fire service and Civil Defense to your appointed fire Safety officer so that he may able to fulfill the duties of the Fire Safety Director.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 4 A 4.8 (Fire Safety Plan)
Evidence	 Appointment letter of Fire Safety Officer  ID Card of fire safety officer  Picture of fire safety officer

Question	A written housekeeping policy is established and enforced.
Level(Priority Level)	Low
Non-Compliance Level	1
Description	The written corporate and plant policies have not been established on housekeeping to ensure scheduled cleaning for floor, wall, ceiling, supply and return air ventilation systems. Promptly reschedule skipped cleanings.
Source of Findings	Document Review: The written housekeeping policy has not prepared and established yet.
Suggested Plan of Action	A written housekeeping policy should be established and enforced to ensure scheduled cleaning for means of egress, floor, wall, ceiling, supply and return air ventilation systems.
Suggested Deadline Date	24 Oct 2019
Standard	BNBC Part 4 D 20 (Housekeeping)
Evidence	

Question	An emergency evacuation plan has been developed and communicated to all employees.
Level(Priority Level)	Medium
Non-Compliance Level	2

Description	A written emergency evacuation plan has not been found in the factory.
Source of Findings	Document Review: n emergency evacuation plan has not been developed and communicated yet to all employees.
Suggested Plan of Action	Develop an emergency evacuation plan which includes all components required by the relevant Standards(NFPA 101 Edition 2018 Section 4.8.2 (Plan Requirements) and NFPA 101 A.4.8.2.1) and communicates the plan to all employees.
Suggested Deadline Date	24 Oct 2019
Standard	BNBC Part 4 A 4.8 (Fire Safety Plan) NFPA 101 NFPA 101 Edition 2018 Section 4.8.2 (Plan Requirements) NFPA 101 A.4.8.2.1
Evidence	

Question	Are the required number of people trained and certified in fire fighting, first aid, and rescue training by the appropriate authority.
Level(Priority Level)	High
Non-Compliance Level	3
Description	The required number of people are not trained and certified in fire fighting, first aid, and rescue training by the appropriate authority. But during the assessment, we have been found some workers training attendance sheet.
Source of Findings	Document Review: Presently, 372 workers are working in the factory. Among them, only 40 persons are trained by the local Fire Service and Civil Defense authority and that is below 18% of the total worker as well as their certificates have not been found in the factory.
Suggested Plan of Action	Train and certify the required number of people (18% of total workers) in fire fighting, first aid, and rescue training by the appropriate authority in accordance with the Bangladesh Labor Rules 2015.
Suggested Deadline Date	26 Oct 2019
Standard	Bangladesh Labor Rules 2015
Evidence	 Training attendance sheet 01  Training attendance sheet 02

Question	Fire Department pre-planning has been completed.
Level(Priority Level)	Low

Non-Compliance Level	1
Description	Fire department pre-planning has not been completed by communicating and consulting with the local Fire Service and Civil Defense authority.
Source of Findings	Visual Assessment: No fire department pre-plan found in the factory.
Suggested Plan of Action	Complete fire department pre-planning activities with the local Fire Service and Civil Defense. It should be completed by communicating and consulting with the local Fire Service and Civil Defense authority.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 4 A 4.7 (Fire Safety Plan)
Evidence	

Question	Fire doors are inspected and tested on a quarterly basis.
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	The documents regarding the inspection and testing of fire-rated doors have not been found in the factory during the assessment.
Source of Findings	Document Review: Inspection and testing records have not found in the factory.
Suggested Plan of Action	First of all, install fire-rated doors in required locations where the installation have not done yet. Then develop an inspection and testing program for fire doors as per NFPA 80.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 80 Edition 2019 Chapter 5
Evidence	

Question	Fire Drills are conducted at required intervals based on building use type.
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	As per the factory management, Fire drills have been conducted on a monthly basis under the direction of a fire officer from Fire service and Civil Defense. But the fire drill records were not found in the factory.
Source of Findings	Document Review: The records of the fire drill have not been found in the factory.
Suggested Plan of Action	Fire drill should be conducted on a quarterly basis and the records should be kept according to BNBC part-4, Appendix-A, sec-(A 3.1).
Suggested Deadline Date	24 Oct 2019
Standard	BNBC Part 4 Section A 3 (FIRE DRILL) BNBC Part 4 Section 1.4 (FIRE DRILL)
Evidence	

NP - Fire Safety Report - Means of Egress	
Question	All doors in a means of egress are of the side-hinged swinging type.
Level(Priority Level)	High
Non-Compliance Level	3
Description	Side-hinged swinging type doors have been found during the assessment. But one collapsible gate has been found in the means of egress(stair-1) of Rooftop.
Source of Findings	Visual Assessment: All the fire doors are side-hinged swinging type except one collapsible gate at the entrance of the rooftop through the stair-1.
Suggested Plan of Action	Replace non-compliant doors and frames in the means of egress with side swinging doors. Replacement doors shall be a minimum standard width.
Suggested Deadline Date	24 Oct 2019
Standard	BNBC Part 4 Section 3.9.5
Evidence	 Collapsible gate in the means of egress of Rooftop 01  Collapsible gate in the means of egress of Rooftop 02  Side-hinged swinging type door 01  Side-hinged swinging type door 02
Question	All occupied roofs are provided with parapets or guards with a minimum height as per standard.
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	In our assessed structures, the rooftop of 7-storied "Main Building" is occupied by workers canteen and office room. The parapets are present on rooftops but not as per standard. The parapet height found 33 inches.
Source of Findings	Visual Assessment: The parapet height found bellow as prescribed in the standard.
Suggested Plan of Action	Maintain a minimum parapets height as per BNBC Part 3 Section 1.12.14.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 3 Section 1.12.14

Evidence	  Roofs parapet 01 Roofs parapet 02
Question	Doors along the path of egress have a minimum width of 0.8 m (32 in) and have required ratings.
Level(Priority Level)	High
Non-Compliance Level	3
Description	Doors along the path of egress minimum width are more than 32 inches found in all assessed floors of Main Building and fire-rated doors are required in the following locations:- i. At the ground floor in the discharge path of stair-2 (North-East side of building). ii. 5th floor stair-2 (North-East corner of the floor). iii. At the Transformer Room beside the stair-2.
Source of Findings	Visual Assessment: Doors along the path of egress have minimum width found more than 32 inches and it needs to fire-rated at noted locations.
Suggested Plan of Action	Installed required rated fire door at the noted location as per standard.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 101 Edition 2018 Section 7.2.1.2.3 (Minimum Door Leaf Width) BNBC Part 4 Section 3.9.3
Evidence	    No rated door at Ground Floor No rated door at 5th floor Fire-rated door width 01 Fire-rated door width 02
Question	Doors are not locked in the direction of egress under any conditions. All hasps, locks, slide bolts, and other locking devices have been removed where required.
Level(Priority Level)	High
Non-Compliance Level	3
Description	The doors are not locked in the direction of egress throughout the all assessed floors. But one collapsible gate has been found having locking devices in the means of egress(stair-1) of Rooftop.
Source of Findings	Visual Assessment: One collapsible gate with locking devices at the entrance of the rooftop through the stair-1.

Suggested Plan of Action	Replace non-compliant doors and frames from the means of egress with side swinging doors and there shall not be a locking device on the door.
Suggested Deadline Date	26 Oct 2019
Standard	BNBC Part 4 Section 3.9.8
Evidence	 A collapsible gate on the rooftop  Doors are not locked in the direction of egress 01  Doors are not locked in the direction of egress 02
Question	Emergency power for exit signs is tested at least once per year. If battery operated, these lights are tested on a monthly basis. Functional testing of battery powered signs is provided for a minimum 90 min once per year.
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	Emergency power for exit signs illumination is verified onsite by lux testing and found ok. The lux testing documents found on site which is not recorded or checked as per standard and 90 min battery functional testing documents have not been found on the site during the assessment.
Source of Findings	Document Review: Updated and standard illumination testing and 90 min battery functional testing records have not been seen on-site for the emergency exit signs during this assessment.
Suggested Plan of Action	Develop a testing and maintenance program that ensures the emergency power for exit signs is tested at least once per year. If battery-operated signs are used, these lights are tested on a monthly basis. Functional testing of battery-powered signs is provided for a minimum of 90 min once per year. The testing and documentation process must comply as per the relevant standard.
Suggested Deadline Date	24 Oct 2019
Standard	NFPA 101 Edition 2018 Section 7.9.3 (Periodic Testing of Emergency Lighting Equipment) NFPA 101 Edition 2018 Section 7.10.9 (Testing and Maintenance)
Evidence	 Illumination Testing Document for the exit sign 01  Illumination Testing Document for the exit sign 02
Question	Emergency power for means of egress illumination is verified at least once per year. If battery operated lights are used, these lights are tested on a monthly basis. Functional testing of battery powered lights is provided for a

	minimum 90 min once per year.
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	Emergency power for means of egress illumination is verified onsite by lux testing and found ok. The lux testing documents found on site which is not prepared as per standard and 90 min battery functional testing documents have not been found on the site during the assessment.
Source of Findings	Document Review: Updated illumination testing and 90 min battery functional testing records have not been seen on-site for emergency light during this assessment.
Suggested Plan of Action	Develop a testing and maintenance program that ensures the operation of all existing signs is verified at least once per year. If battery-operated signs are used, these lights shall be tested on a monthly basis. Functional testing of battery-powered signs shall be provided for a minimum of 90 min once per year. The documents must comply as per standard.
Suggested Deadline Date	24 Oct 2019
Standard	NFPA 101 Edition 2018 Section 7.9.3 (Periodic Testing of Emergency Lighting Equipment) NFPA 101 Edition 2018 Section 7.10.9 (Testing and Maintenance)
Evidence	 Illumination testing document for emergency Light

Question	Every door in a stair enclosure serving more than 4 stories is provided with re-entry provisions?
Level(Priority Level)	Low
Non-Compliance Level	1
Description	Within all assessed structures, re-entry access is required in 7-storied "Main Building". But re-entry access has not been provided yet.
Source of Findings	Visual Assessment: There are no re-entry access facilities in the 7-storied "Main Building".
Suggested Plan of Action	Provide re-entry to floor levels from the stairwells in accordance with BNBC Part 4 Appendix A 4.4.
Suggested Deadline Date	24 Oct 2019
Standard	BNBC Part 4 Appendix A 4.4 (Stair re-entry Provision) NFPA 101 Edition 2018 Section 7.2.1.5.8
Evidence	

Question	Exit discharge is directly to the exterior of the building, unless the requirements of protection of egress court has been adopted, at grade or provides direct access to grade. Exit discharge shall not reenter a building.
Level(Priority Level)	High
Non-Compliance Level	3
Description	Exit discharge meets directly to the exterior of the building and the exit discharge are not reenter in a building. But two non-rared door at the exit discharge point of both stair.
Source of Findings	Visual Assessment: Exit discharge meets directly to the exterior of the building as well as non-rated door opening found at the exit discharge point of both stairs.
Suggested Plan of Action	Replace the non-rated door with fire-rated assemblies at the Transformer room at stair-2 and wooden door at stair-1.
Suggested Deadline Date	26 Oct 2019
Standard	IBC Edition 2015 Section 1028 (Exit Discharge)
Evidence	   A non-rated door at stair-1 A non-rated door at stair-2 Exit Discharge

Question	Handrails are provided on both sides of each stairway. Intermediate handrails are provided when the stair width exceeds 2.2 m (87 in.). Handrails are not mounted lower than 760 mm (30 in.) or higher than 1100 mm (44 in.).
Level(Priority Level)	Medium
Non-Compliance Level	2
Description	Handrails are not provided on both sides of each stairway at each floor of Stair-2 of Main Building. Railing height of stairs also found in between 36 to 38 inches. Intermediate handrails are not required here because of all the stair width have been found below 87 inches.
Source of Findings	Visual Assessment: Both side handrails are required at the noted location.
Suggested Plan of Action	Provide handrails on both sides of each stairway of the stair-2 at each level of Main Building.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 101 Section 7.2.2.4.4 (Handrail Details) NFPA 101 Edition 2018 Section 7.2.2.4.5 (Handrail Details) BNBC Part 4 Section 3.10.5

Evidence	 No both side handrail on stair-2 01  No both side handrail on stair-2 02  N/A of Intermediate handrails
Question	Interior exit stairways and ramps terminate at an exit discharge except where terminating at a rated exit passageway.
Level(Priority Level)	High
Non-Compliance Level	3
Description	Interior exit stairways of the Main building is directly terminated through exit discharge and there was no exit access corridor in the path of egress. Rest of the assessed structures are single-storied and the ramp has not been found in the assessed structures. Besides the exit discharge point, we have seen the non-rated door opening and the locations are:- i. At the ground floor in the discharge path of stair-1 (South-East side of the building). ii. No-rated Transformer Room at the ground floor beside the discharge path of stair-2 (North -East side of the building)
Source of Findings	Visual Assessment: Interior exit stairways terminate directly at an exit discharge and non-rated door opening also found in the exit discharge path of egress.
Suggested Plan of Action	Install fire-rated doors in the noted locations in order to provide the rated exit passageway.
Suggested Deadline Date	26 Oct 2019
Standard	NFPA 101 Edition 2018 7.7.2 (Exit Discharge Through Interior Building Areas)
Evidence	 Exit discharge of interior stair 01  Exit discharge of interior stair 02
Question	Landings are provided with the same width in the direction of egress travel as the stair clear width provided at each level and at intermediate landings. Existing landings that are less than the stair width, shall reduce the overall available capacity of the stair.
Level(Priority Level)	High
Non-Compliance Level	2
Description	In the Main Building, only one stair landing has been found lower than the stair width. Location:- Stair-2, 1st-floor. The stair width is 53 inches whereas the reduced landing width is 44 inches. The rest of the landings are found with the same width in the direction of egress travel.

Source of Findings	Visual Assessment: The stair landing is reduced by 8 inches at stair-2 on 1st-floor of Main Building.
Suggested Plan of Action	Provide the stair landing in accordance with BNBC Part 4 Section 3.10.2.
Suggested Deadline Date	31 Oct 2019
Standard	NFPA 101 Edition 2018 Section 7.2.2.3.2 (Landings) BNBC Part 4 Section 3.10.2
Evidence	  Reduced stair landing 01 Reduced stair landing 02
Question	Stair designation signs are provided at each floor entrance from the stair to the floor in English and Bengali. Signs indicate the name of the stair and the floor level. Signs are posted adjacent to the door.
Level(Priority Level)	Low
Non-Compliance Level	1
Description	Stair designation signs have not been provided at each floor entrance from the stair to the floor in English and Bengali. Signs shall indicate the name of the stair and the floor level. But at present, only the floor level is provided on every floor.
Source of Findings	Visual Assessment: Stair designation signs are not provided at each floor.
Suggested Plan of Action	Install stair designation signage adjacent to each stair door indicating the stair name and the floor level at the noted locations in both English and Bengali.
Suggested Deadline Date	24 Oct 2019
Standard	BNBC Part 4 Section A 4.3 (Stair and Elevator Identification) NFPA 101 Edition 2018 Section 7.2.2.5.4 (Stairway Identification)
Evidence	  Floor level indication sign 01 Floor level indication sign 02