

VN_Fire Inspection

Factory Name : **Bac Giang LGG Garment Corporation**
Address: **Bang Village, Nghia Hoa Commune Bac Giang Vietnam**
Discipline Name: **VN_Fire Inspection**
Assessment Date : **26 Dec 2019**



FACTORY INFORMATION

General Information

Factory Name	Bac Giang LGG Garment Corporation
Factory Status	

Basic information

Country	Vietnam
FFC Id	9120

Assessment Information

Assessment Date	26 Dec 2019
-----------------	-------------

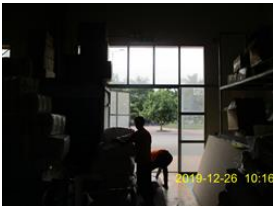
Designation : Graduated

FINDINGS AND REMEDIATION ISSUES

F1: Means of Escape - Escape Paths

Reference Number	FIRE 09
Issue type	F1: Means of Escape
Sub Issue Type	Escape Paths
Sub Issue Detail	F1.1.1 Escape path width inadequate
Suggested Plan	
Details Of Issue Found	Inadequate aisle width was observed at sample room -Workshop #1 only 700mm.
CAP Priority	FP3
Recommended Action Deadline Date	23 Jun 2020
Recommended Action	Aisles shall be provided with a minimum unobstructed clear-width of 915mm, according to the LABS Standard CI 6.5.1.
Factory CAP Date	2/13/2020 12:00:00 AM
Date CAP Completed	3/31/2020 12:00:00 AM
Responsible Person	Mr Tran Duc Hung - Electrical Engineer and Ms Hoang Thi Hanh - Compliance staff.
CAP	Regarding the fact that the escape room in the sample room, workshop 1 is currently not in compliance with the 70 cm rule, the factory has a plan of action, will try to reset the escape route to the right 91.5 cm according to the latest regulation. by the end of March 2020
Action Taken	The factory has pasted the link to the factory model 1 according to Labs standards
CAP Completed	No
CAP signed off status	Signed off
CAP signed off status Comments	Widening the aisle to ensure the escape path width shall be 915mm width in minimum Upload evidence to FFC after remedy
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected

Progress%	100
Progress Comments	
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	The escape paths was widening to 1000mmm
Comments	
Photo(s)	   Aisle width at sample room workshop 1 only 700mm Path way at sample room workshop 1 Escape path width was widening to 1000mm
Reference Number	FIRE 02
Issue type	F1: Means of Escape
Sub Issue Type	Escape Paths
Sub Issue Detail	F1.1.2 Escape paths not clear of temporary obstacles
Suggested Plan	
Details Of Issue Found	The path ways on the exit routes must be kept clear all time. However, the exit path at mechanical storage main warehouse had been blocked by temporary obstacles.
CAP Priority	FP1
Recommended Action Deadline Date	29 Dec 2019
Recommended Action	The pathways on the exit routes must be clear of all temporary storage and other obstacles in accordance with Cl.6.3 LABS Standard.
Factory CAP Date	1/1/2020 12:00:00 AM
Date CAP Completed	7/18/2021 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan
CAP	We have asked staff at the main warehouse to pay attention to hygiene issues, 5s in our work area to keep the walkway clear and clean.
Action Taken	The factory provides training on PCC content: escape routes... to all workers working at the factory. The factory has completed the remedy of this situation

CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Remove obstacles from escape paths. Training to workers to keep clearance on the escape paths. Upload evidence to FFC after remedy
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	Due to the lack of comprehensive training of workers
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	Obstacles on the escape path were removed. Training for workers to keep escape paths clear of obstacles was done.
Comments	
Photo(s)	 Exit path was blocked by temporary obstacle  Exit path was blocked  kho.jpg  Obstacle on the escape path was removed  Obstacles on the escape paths warehouse building were removed
Reference Number	FIRE 01
Issue type	F1: Means of Escape

Sub Issue Type	Exit doors
Sub Issue Detail	F1.2.1.1 Exit doors not always easily openable, doors have locking devices
Suggested Plan	
Details Of Issue Found	Exit doors are supposed to be always easily openable. However, locking mechanism was observed at most of the exit doors. The doors have the staple [ring] from inside and outside which can be used to lock doors after working hours; the locking devices have been found on the exit door at Main Warehouse during audit.
CAP Priority	FP1
Recommended Action Deadline Date	29 Dec 2019
Recommended Action	Replace outside/inside locks with locking mechanisms that allow easy opening from inside with one action only in accordance with Cl.6.1 and Cl. 6.9.4 of the LABS Standard.
Factory CAP Date	12/30/2019 12:00:00 AM
Date CAP Completed	4/11/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh tuan- compliance staff
CAP	We have overcome the situation of the emergency exit at the company's warehouse. Exit doors are always open, and well ventilated until the end of working hours
Action Taken	The factory has overcome the situation of emergency exit locked at many locations. The factory has specified, and requires employees to be open during the process of work, and perform the replacement of doors that do not meet emergency exit door requirements in emergency situations.
CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Locking mechanisms must be followed LABS cl 6.9.4 Exit doors must always ready to open from inside without using a key. Upload evidences to FFC after remedy.
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	
Action Verified Date	8/19/2022 12:00:00 AM

Action Verified Comments	The locking mechanisms on the exit of warehouse, workshop 1-2, 3-4 were removed. Factory has plan to upgrade the panic bars for workshop 1-2,3-4 Panic bars were installed for exit doors of workshop 5-6			
Comments				
Photo(s)	 Exit door with locking mechanism  Exit door at Main warehouse with lock  Exit door with locking device at Main warehouse-mechanical storage  Exit door with locking mechanism  Exit door at main warehouse was locked during working time  Locking mechanisms on the exit door was removed at wokshop 1  No locking mechanisms on the exit door  No locking mechanisms on the workshop 1,2,3,4  Panic bar was installed on the exit door			

F1: Means of Escape - Exit doors

Reference Number	FIRE 03
Issue type	F1: Means of Escape
Sub Issue Type	Exit doors
Sub Issue Detail	F1.2.2.1 Exit doors not side hung to swing correctly in direction of escape
Suggested Plan	
Details Of Issue Found	Exit doors not side hung to swing correctly in direction of escape. The sliding doors had

	been used for internal exit door in packing, dry room at workshop 2.
CAP Priority	FP1
Recommended Action Deadline Date	29 Dec 2019
Recommended Action	Replace doors with side hung doors that open in the direction of escape in accordance with Cl. 6.1, 6.3 and 6.9 of the LABS Standard
Factory CAP Date	12/27/2019 12:00:00 AM
Date CAP Completed	5/30/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan - Compliance staff
CAP	We have planned to change the sliding doors that are not suitable according to fire protection standards. We will calculate the number of sliding doors not reached, and contact the responsible unit for replacement
Action Taken	- Sliding doors are replaced by push doors with handles - Some doors are removed, because they are not used as emergency exits.
CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Replace sliding door by side hung door in according to LABS standard Cl.6.9.1. New exit door should meet LABS standard cl 6.3; 6.5; 6.7; 6.9 Upload evidences to FFC after remedy
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	Currently all sliding doors used as exits in the previous audit report of the factory have been replaced by sliding doors according to fire safety standards. or the door is no longer used for the purpose of escape.
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	Sliding doors at the dehumidifier room were replaced by two side hinged doors which are met LABS Standard cl 6.1;6.3;6.5;6.7
Comments	
Photo(s)	



Sliding door on exit path dry room workshop 2



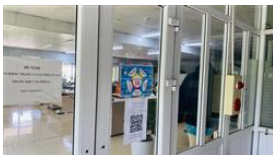
Sliding door at dehumidifier room workshop 2 was replaced by side hinged door



Sliding door of dehumidifier room workshop 2 was replaced by side hung door

F1: Means of Escape - Floor Exits

Reference Number	FIRE 10
Issue type	F1: Means of Escape
Sub Issue Type	Floor Exits
Sub Issue Detail	F1.6.3 Alternative directions for escape not provided
Suggested Plan	
Details Of Issue Found	The office rooms on the mezzanine south side workshop#4 (with 50 occupants), had only one exit with the travel distance around 25m, without the coverage of sprinkler.
CAP Priority	FP2
Recommended Action Deadline Date	06 Feb 2020
Recommended Action	According to the LABS standard CI 6.6.2, only one exit shall be required in existing building where the occupant load not exceeding 50 people and travel distance not exceeding 15m without the automatic suppression or 30m with the automatic suppression. Therefore, the options could be adding another exit or reduce the occupants in that area.
Factory CAP Date	2/13/2020 12:00:00 AM
Date CAP Completed	6/30/2020 12:00:00 AM
Responsible Person	Mr Tran Duc Hung - Electrical engineer Mr Nguyen Minh Tuan - compliance
CAP	The factory will reset the 2nd floor of Workshop 4 to meet Labs standards
Action Taken	The current office ensures less than 20 people to work
CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Reduce the occupant's load at the mezzanine floor to less than 50 is correct action Upload evidence to FFC after remedy
Design and drawing	No

required	
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	The current office ensures less than 20 people to work
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	The office area at mezzanine workshop 4 was reduced and only less than 20 occupants working only
Comments	
Photo(s)	    Common path at 2nd floor workshop 4 FIRE 10.jpg Only office room for workshop 4 (less than 15 occupants) was rearranged Office room for workshop 4 was rearrange

F2: Fire Safety Construction - Protection of openings

Reference Number	FIRE 11
Issue type	F2: Fire Safety Construction
Sub Issue Type	Protection of openings
Sub Issue Detail	F2.2.3Lack of enclosure of Stairs connecting more than 2 floors
Suggested Plan	
Details Of Issue Found	Incompleted enclosure of the stair at first , second floor workshop#5 were observed.
CAP Priority	FP2
Recommended Action Deadline Date	06 Feb 2020
Recommended Action	Provide fire rated protective enclosures to the stairs to comply with Cl. 4.8, 4.10 and 6.14 of the LABS Standard
Factory CAP Date	2/2/2020 12:00:00 AM

Date CAP Completed	7/30/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan - Compliance staff
CAP	The factory observed the unreasonability of the Incomplete enclosure of the staircase on the first floor, the second workshop # 5 of the factory would require the construction unit to repair and create a wall enclosure in accordance with the standards of Labs
Action Taken	The factory has replaced the glass wall of the elevator with fixed bricks according to labs . standards
CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Replace the glassed window by brick wall is correct action in accordance with LABS CI 6.14 Upload evidence to FFC after remedy
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	The factory has replaced the glass wall of the elevator with fixed bricks according to labs . standards
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	The exit stairs were enclosure by brick walls more than 150 minutes fire rated
Comments	
Photo(s)	 Incompleted enclosure of the stair at workshop 5  Incompleted enclosure of the stair at workshop 5  Enclosure for stair at workshop 5-6 , 1st floor



Enclosure for stair at
workshop 5-6 , 3rd
floor



Enclosure for stair at
workshop 5-6 , 2nd
floor

F2: Fire Safety Construction - Storage areas

Reference Number	FIRE 07
Issue type	F2: Fire Safety Construction
Sub Issue Type	Storage areas
Sub Issue Detail	F2.3.1 Designated storage areas not separated with FR construction
Suggested Plan	
Details Of Issue Found	In the workshop#1, #2, #3,#4 north/south storage areas were observed without sprinkler system, the storage area was roughly 6.5% of the floor area. However, the layout of the in-process storage didn't conform to the requirement of LABS standard, with the 3m clearance between every island of 23m ² in area. Actual clearance is only around 1.5m.
CAP Priority	FP3
Recommended Action Deadline Date	23 Jun 2020
Recommended Action	To restrict the spread of fire, options could be: 1) to install complete fire separation between the production and storage area; 2) if fire separation was not applied, then the factory need to follow the requirement of storage layout for non-sprinkler as per LABS standard CL. 3.11.5.6.
Factory CAP Date	1/6/2020 12:00:00 AM
Date CAP Completed	6/30/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan
CAP	We will arrange airy cargo at multiple cargo locations to ensure safety in fire protection
Action Taken	In this regard, the factory has arranged a cargo area with an area more suitable to the standards of the laboratory, ensuring that the clearance space of 3m between each island has an area of 23m ² .
CAP Completed	Yes
CAP signed off status	Signed off

CAP signed off status Comments	Rearrange material as in-process storage with the requirement from LABS CI 3.11.5.6 Upload storage layout for review Upload evidence to FFC after remedy			
Design and drawing required	No			
Approval of the Design				
Approval of the Design and Drawings Comments				
Progress status	Corrected			
Progress%	100			
Progress Comments	In this regard, the factory has arranged a cargo area with an area more suitable to the standards of the laboratory, ensuring that the clearance space of 3m between each island has an area of 23m2.			
Action Verified Date	8/19/2022 12:00:00 AM			
Action Verified Comments	Material arrangements were re-arranged as per LABS CI3.11.5.6			
Comments				
Photo(s)	 Temporary storage area at the north workshop 2  Temporary storage area at the north workshop 4  Temporary storage at the north workshop 2  FIRE 7.jpg  In-process storage arrangement at workshop 1-2  In-process storage arrangement at workshop 3-4			
Reference Number	FIRE 08			
Issue type	F2: Fire Safety Construction			
Sub Issue Type	Storage areas			
Sub Issue Detail	F2.3.4			

Suggested Plan	
Details Of Issue Found	In the material warehouse#1 , 1st floor workshop#5 , solid shelves were applied, with the width of 1.2m-2m and 4 tiers in height.
CAP Priority	FP3
Recommended Action Deadline Date	23 Jun 2020
Recommended Action	According to the LABS standard CL 5.3.8.2, unless in-rack automatic sprinklers have been designed and installed, solid shelf racking shall not be used. A minimum of 50% openings in shelving material shall be considered open shelves. shelving units not greater than 760 mm deep can have solid shelves. Back to back solid shelf units not greater than 760 mm deep each with a solid vertical barrier can have solid shelves.
Factory CAP Date	3/2/2020 12:00:00 AM
Date CAP Completed	5/30/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan - Compliance staff
CAP	In this regard, the factory will change the shelves to conform to the standards of the labs, in the No. 1 warehouse and the 5th factory warehouse.
Action Taken	The factory uses cutting method to create a gap on the horizontal surface of the shelf, ensuring that 1.5m has a gap of 15cm in area and is consistent between floors.
CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Solid shelves must be treated as LABS CI 5.3.8.2 Sample should be submitted for review The solution could be: Separated solid shelves to the single solid shelves areas less than 1.9m2 and keep flue space 150mm. or making at least 50% opening holes and treat as the open rack by arranging the material and keep flue spaces as NFPA13 required.
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	The factory uses cutting method to create a gap on the horizontal surface of the shelf, ensuring that 1.5m has a gap of 15cm in area and is consistent between floors.
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	Factory has maintained transverse flue space for solid racks at warehouse and workshop 5-6 1st floor

Comments				
Photo(s)	 Solid shelves main warehouse 1	 Solid shelves main warehouse 5	 Solid shelves warehouse 1	 Tranverse flue space for solid rack at the Warehouse
	 Tranverse flue space for solid rack at the Warehouse was made	 Flue space at 1st floor workshop 5-6		
	 Tranverse flue space at 1st floor workshop 5-6			

F3: Fire Safety Systems - Emergency Lighting

Reference Number	FIRE 05
Issue type	F3: Fire Safety Systems
Sub Issue Type	Emergency Lighting
Sub Issue Detail	F3.1.1Insufficient Emergency Lighting for escape pathways
Suggested Plan	
Details Of Issue Found	Illuminated exit signs must be activated and the back up batteries which is able to feed for emergency light at least 90 minutes . However, some back up batteries at workshop #1 are only able to feed for emergency lighting for around 20 minutes during test.
CAP Priority	FP2

Recommended Action Deadline Date	06 Feb 2020
Recommended Action	Ensure the relevant backup battery for emergency lighting should be able to feed it for at least 90 minutes according to LABS Standard CI.5.8.3
Factory CAP Date	2/4/2020 12:00:00 AM
Date CAP Completed	5/30/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan - Compliance staff
CAP	The Factory will carry out the replacement of the lights at the exits in accordance with the standards of the labs However, because of the large number of lights that need replacing, the factory will carry them into different stages until all of them are replaced.
Action Taken	The factory has performed the replacement of emergency lights, with a 90-minute lighting time according to audit standards
CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Backup for emergency lightings shall be followed LABS CI5.8.3 Upload evidences to FFC after remedy
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	The factory has performed the replacement of emergency lights, with a 90-minute lighting time according to audit standards
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	The emergency light and exit lights were working well during test
Comments	
Photo(s)	    Emergency light at Testing backup for

workshop 1 only active around 20minute with backup power

z2617581147063_9796722a4481b9d91198d1f17d79190b.jpg

Emergency light Exit door at workshop 5-6



illuminate exit signage

Overhead exit signage was illuminated

F3: Fire Safety Systems - Fire Alarm

Reference Number	FIRE 04
Issue type	F3: Fire Safety Systems
Sub Issue Type	Fire Alarm
Sub Issue Detail	F3.2.4Inadequate back-up power to Fire Alarms
Suggested Plan	
Details Of Issue Found	Back-up power for fire alarm control panel should be provided continuously. The fire control panel which is covered for workshop 4 was not working by the backup power during test.
CAP Priority	FP1
Recommended Action Deadline Date	29 Dec 2019
Recommended Action	Back-up power for the Fire Alarm system to be provided in accordance with Cl.5.13 of the LABS Standard.
Factory CAP Date	12/28/2019 12:00:00 AM
Date CAP Completed	1/11/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan- Compliance ; Mr Tran Duc Hung - Electric engineer
CAP	The fire control panel is covered for workshop 4 not working with backup power source because the battery is exhausted we have replaced the new, existing battery Standby power source for Fire alarm system is working normally
Action Taken	The factory has replaced a new battery for the fire alarm control panel
CAP Completed	Yes
CAP signed off status	Signed off

CAP signed off status Comments	Backup power for fire alarm shall be followed LABS CI 5.13 Upload evidence to FFC after remedy		
Design and drawing required	No		
Approval of the Design			
Approval of the Design and Drawings Comments			
Progress status	Corrected		
Progress%	100		
Progress Comments			
Action Verified Date	8/19/2022 12:00:00 AM		
Action Verified Comments	Backup for the fire alarm control panel was working well during test		
Comments			
Photo(s)	 Backup power for fire alarm control panel for workshop 4 was not working  fire alarm control panel.jpg  Fire alarm control panel  Testing backup for fire alarm control panel during CAP closure Visit showed the system working well		

F3: Fire Safety Systems - Fire Detection	
Reference Number	FIRE 06
Issue type	F3: Fire Safety Systems

Sub Issue Type	Fire Detection
Sub Issue Detail	F3.3.1.1 Incorrect Fire Detector spacing
Suggested Plan	
Details Of Issue Found	Inadequate detector coverage had been observed during audit: 1. Smoke detector spacings at workshop#1 were about 15m x 40m. 2. There was no detector in office rooms (Material warehouse#1 building), Canteen building, waste storages.
CAP Priority	FP2
Recommended Action Deadline Date	06 Feb 2020
Recommended Action	Provide detectors to all enclosed areas to ensure compliance with Cl.5.9 of the LABS Standard and Cl.4 TCVN 5738-2001
Factory CAP Date	2/2/2020 12:00:00 AM
Date CAP Completed	8/30/2020 12:00:00 AM
Responsible Person	Mr Nguyen Minh Tuan - Compliance staff
CAP	The factory will add smoke detectors to all areas to ensure fire safety Accordingly, the plant still has other fire prevention and fighting equipment: fire alarm, sprinkler system at these locations.
Action Taken	
CAP Completed	Yes
CAP signed off status	Signed off
CAP signed off status Comments	Fire detector spacing shall follow Cl.5.9 of the LABS Standard and Cl.4 TCVN 5738-2001 Upload evidence to FFC after remedy.
Design and drawing required	No
Approval of the Design	
Approval of the Design and Drawings Comments	
Progress status	Corrected
Progress%	100
Progress Comments	
Action Verified Date	8/19/2022 12:00:00 AM
Action Verified Comments	The addition smoke detectors were added at office area, workshop 1-2, waste storage and canteen Testing the addition fire detection was showing correct locations and system

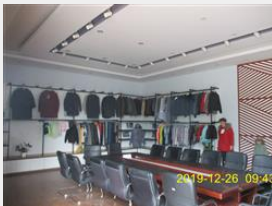
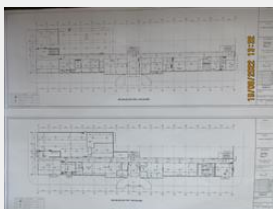
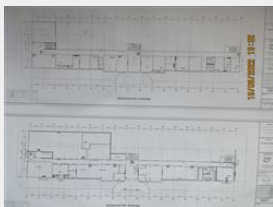
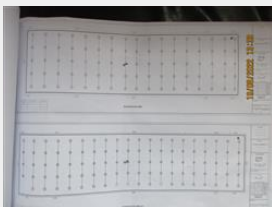
	was working well. The as-built drawing is available for review.			
Comments				
Photo(s)	 2019-12-26 09:31	 2019-12-26 09:43	 2019-12-26 10:25	 2019-12-26 10:27
	No smoke detector in office room	No smoke detector in showroom office	Smoke detector spacing at workshop 1 is too long	Smoke detector spacing at workshop 1
	 18/08/2022 11:26			
	Addition smoke detectors asbuilt drawing of 1st floor office building			
	 18/08/2022 11:28	 18/08/2022 11:29	 18/08/2022 13:47	 18/08/2022 13:48
	Addition smoke detectors asbuilt drawing of 2nd floor office building	Addition smoke detector drawing of workshop 1	Tesing addition smoke detector at office building	Testing smoke detector at canteen building
	 18/08/2022 13:19			
	Addition smoke detector for waste storage			

PHOTO EVIDENCE

PHOTO DOCUMENTATION

SharingPlatformReminder