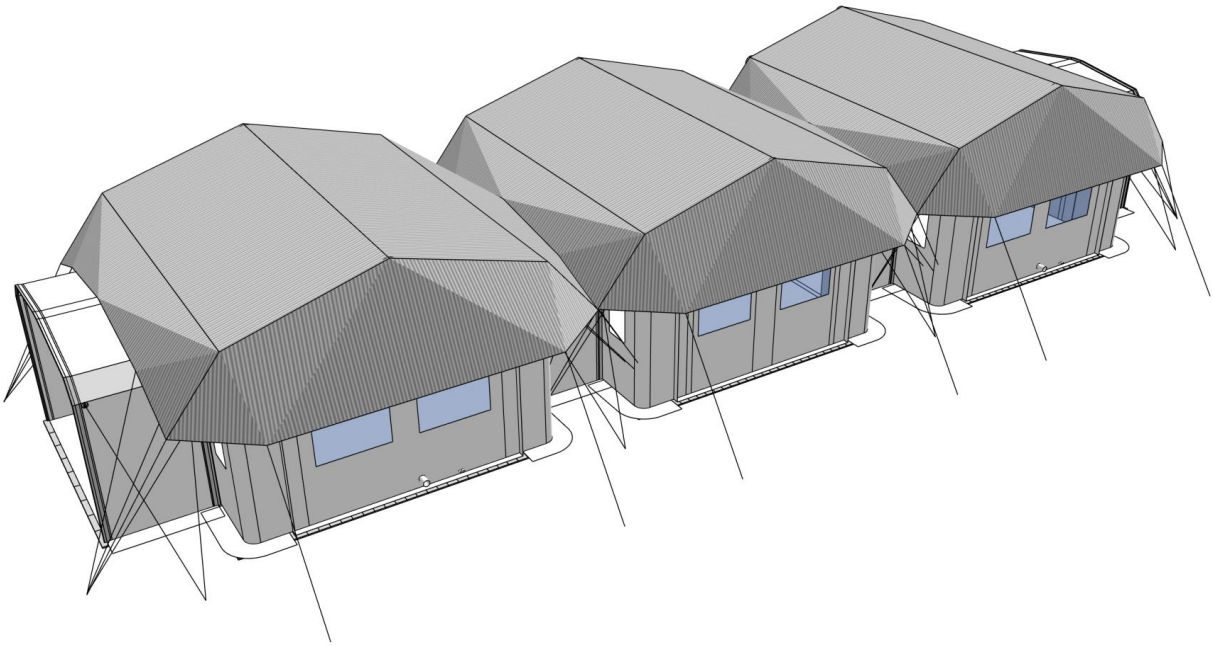
LANCO

TentTech · DeconTech · FlexTank

USER MANUAL

IDTM BASED ON AZF4-27 INFLATABLE TENT



CONTACT

LANCO TentTech · DeconTech · FlexTank

LANCO Srl
Via Luca Gaurico 9/11| *00143 Roma (RM), Italy*
Phone: *+39 654832915*
info@lanco.it | www.lanco.it

LIST OF PEOPLE RESPONSIBLE FOR THE PREPARATION, REVIEW AND APPROVAL OF THE REVISION

Prepared by:	Approved by:	Revision Number
Domenico LOMBARDO Date:	Domenico LOMBARDO Date:	Revision No. 00

REVISION LOG

Version no.	Date of issue	Description of changes	Page no.	Draft	Approval
02					
01					
00	24/01/25	Creation			

TABLE OF CONTENTS

1 INTRODUCTION

1.1 Contractor Information

LANCO Srl
Via Luca Gaurico 9/11| *00143 Roma (RM), Italy*
Phone: *+39 654832915*
info@lanco.it | www.lanco.it

1.2 Operability

Our AZF4-27 Inflatable Tents are designed to:

- Provide a safe and reliable accommodation for health facilities.
- Allow rapid erection and connection by trained, unskilled personnel.
- Allow continuous operation, 24 hours a day, 365 days per year, with minimum maintenance.
- Be deployed, for short or on long-term periods of time, as required.
- Be packed and loaded quickly for specific missions.
- Be dismantled, repacked, stored and re-used several times with minimum refurbishment.
- Be maintained by personnel with basic skills during deployments (1st level maintenance) and by skilled personnel after deployments (Level 2 and 3 maintenance).
- Be stored in ISO containers outdoors, at ambient temperatures, ready to deploy.
- Be transported by sea or land, using standard 20ft ISO shipping containers.

1.3 Limitation of Liability

The purpose of this document is to provide all necessary documentary support for the deployment, dismantling, packing and maintenance (Levels 1 to 3) of the Infectious Disease Treatment Centre and its equipment. The information and data contained in this document have been compiled both internally and from external suppliers and are intended for the system's users, maintenance technicians and logisticians. Users and maintenance operators using this document should be adequately trained before they are qualified to undertake the specific tasks described in this manual. Component part numbers are provided to facilitate future refurbishment and replacement parts ordering. This document includes various warnings and cautionary notes that must be followed to reduce the risk of injury or damage to the equipment. Good engineering and safety practices should be observed at all times to ensure the system remains fully operational during deployments and thereafter.

1.4 Definition of Terms and Symbols

Definition of terms and symbols (Abbreviations)	
CMIs	Corrective Maintenance Instructions
CN	Calculation Note
FM	Facility Manual
HFW	High Frequency Welding
Hz	Hertz, frequency unit
IDTM	Infectious Disease Treatment Centre
IP	Protection degree
MSDS	Material Safety Data Sheet
N	(Newton) International metric system (IS) unit of force
OEM	Original Equipment Manufacturer
PMIs	Preventive Maintenance Instructions
P/N	Part Number
PVC	Polyvinyl Chloride
TDS	Technical Data Sheet
TS	Technical Specifications
V	Volt
W	Watt, power unit
Ø	Diameter
°C	Celsius degree, temperature unit

1.5 Definition of Symbols

The following symbols apply throughout this document.

Symbols and definitions for general health and safety warnings	
	**WARNING:** A warning shows a hazard that can cause death or serious injury. **CAUTION:** A caution shows a danger that can cause damage to the equipment.
	Tips and suggestions for conducting the relevant tasks or activities more easily
	Stop and check before you proceed.
	Visual inspection is needed.

1.6 Warranty Terms and Conditions

LANCO guarantees the items delivered under the contract are new and free from defaults or defects in materials and/or workmanship, and fit for their intended purpose. All damages arising from the use of the delivered system, whether incidental or otherwise, other than those caused by fair wear and tear shall be covered by LANCO's warranty for a period of 24 months following final acceptance.

Warranty does not cover items damaged as a result of mishandling or neglect or a lack of maintenance, as detailed in this manual.

All warranty claims shall be submitted in writing, and with details of the failure. LANCO reserves the right to either repair or replace items, at their own discretion, if those are deemed as a warranty failure.

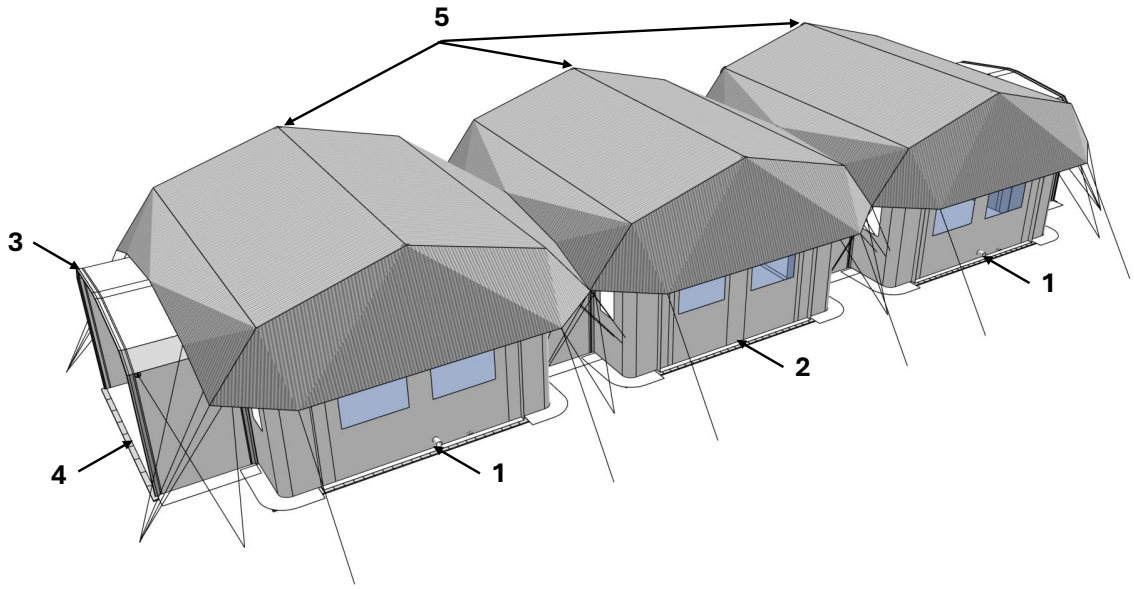
LANCO shall ensure availability of spare parts for at least 5 years following completion of the warranty period.

2 IDTM DESCRIPTION

2.1 General Description

The Infectious Disease Treatment Centre (**IDTM**) consists of 3 tents designed with an external low-pressure inflatable structure, and it includes a series of innovations such as a straight wall design, very fast installation, and small lightweight packaging to enable transportation to hard-to-reach locations and the following Zip-in **Opening Modules Systems**:

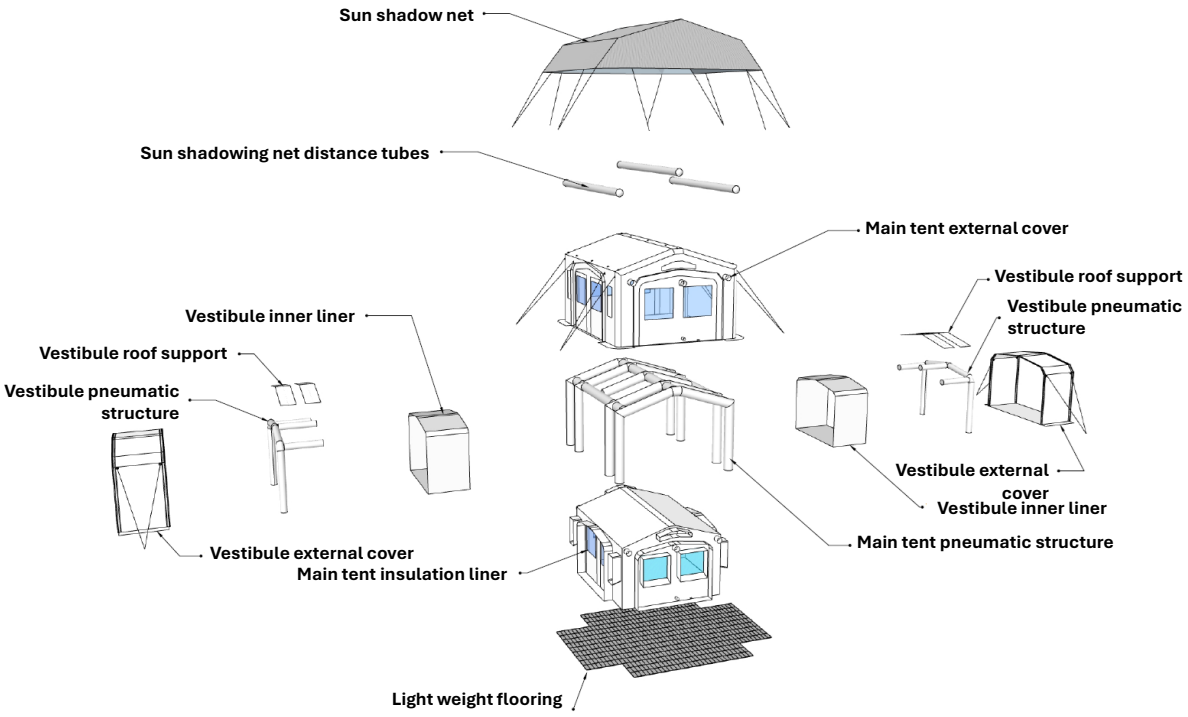
- Green zone interaction transparent screen;
- Closed connection interface;
- Outside access door and window; and
- Outside window only.



IDTM - General View

The IDTM tent is composed of:

1. Two patient pods (**AZF4-27**) – (Code to be defined)
2. One staff pod (**AZF4-27**) – (Code to be defined)
3. Four vestibules – (Code to be defined)
4. Hard flooring – (Code to be defined)
5. Three sun shadowing nets – (Code to be defined)



IDTM – Exploded View Drawing (Code to be defined for all parts)

2.2 Climatic Resistance

The Infectious Disease Treatment Centre is designed to remain functional in a wide range of environmental conditions: from climatic zones A3 – Intermediate Hot to C1 – Cold.

Temperature: The tent is designed to sustain effective operations in ambient temperatures ranging from -32 C and +45 C (–33 °C to +58 °C for storage and transit).

Terrain: the tent can be installed on almost all compact, levelled ground surfaces, provided sufficient space is available.

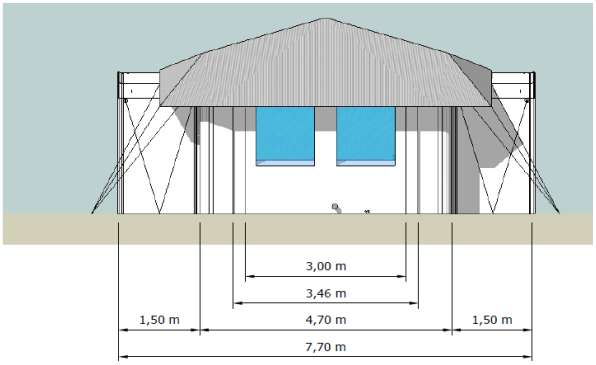
Wind loading: the facilities can sustain steady winds of up to 100 km/h and gusts of up to 120 km/h, from any direction, provided all wind protection measures described in this manual are implemented in due time.

Snow loading: the tent can sustain snow loads of up to 15 kg/sqm without significant distortion or damage. The shape of the roof, together with the fact that the tent can be heated in winter conditions, also contribute to reduce snow accumulation and therefore damage.

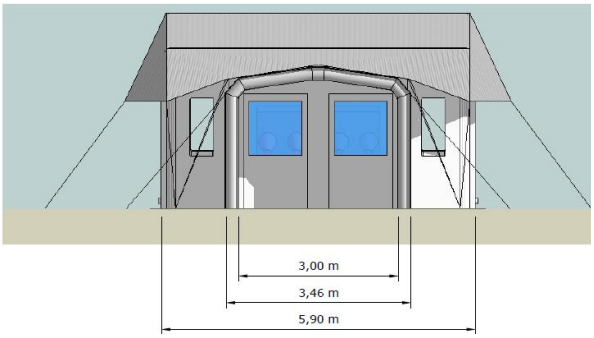
2.3 IDTM Dimensions

AZF4-27 External Dimensions (±3%)				
Width (m)	**Length (m)**	**Eaves Height (m)**	**Ridge Height (m)**	**Footprint (m²)**
4,70	5,70	2,65	3,35	26,79
AZF4-27 Internal Dimensions (±3%)				
Width (m)*	**Length (m)**	**Eaves Height (m)**	**Ridge Height (m)**	**Min. Surface (m²)**
4,00	5,00	2,40	3,00	20,00

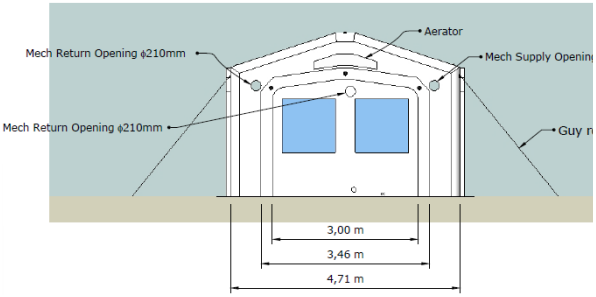
* Minimum clear width considering two (2) tent legs with ⌀ 35 cm (deducted).



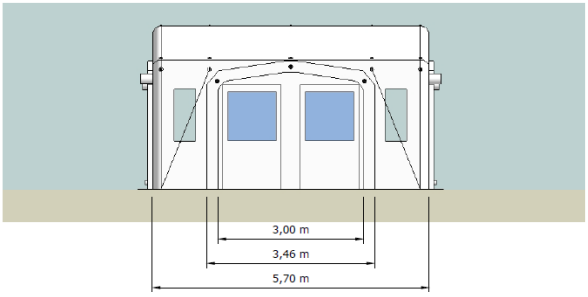
Front View



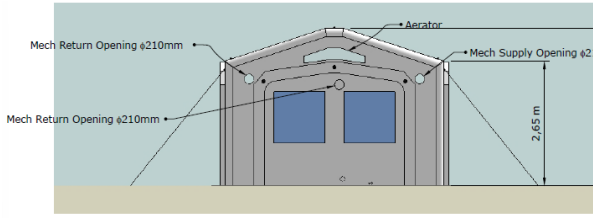
Left View



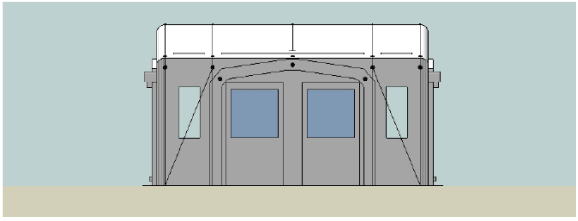
Patient view



Family porch

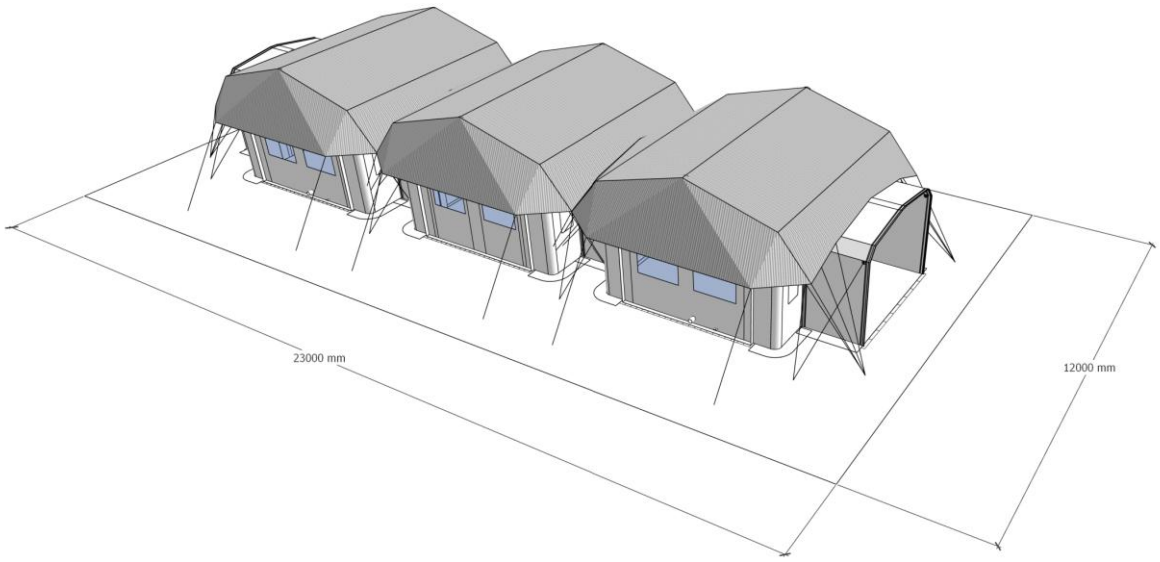


Services

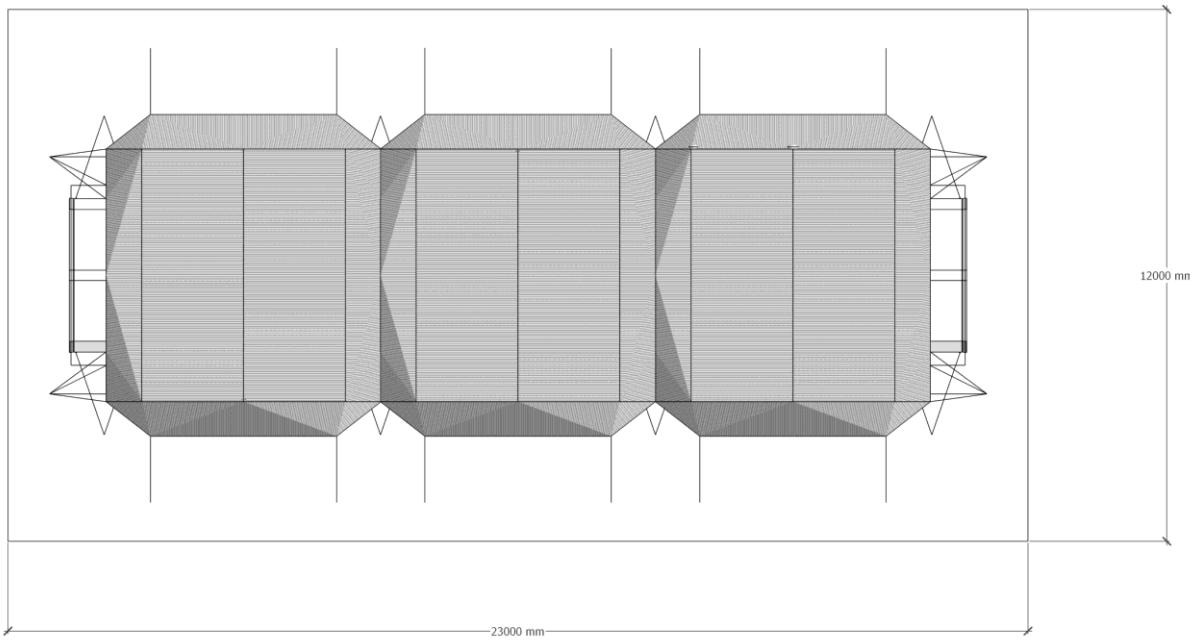


Transferring Screen

A minimum surface area of 276 m^2 is required to install the IDTM.



IDTM – Dimensions 1/2

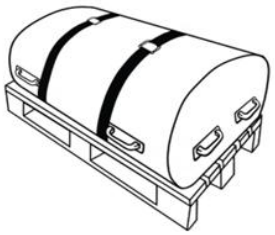
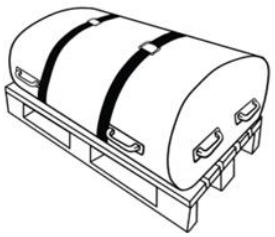
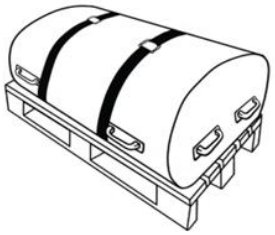
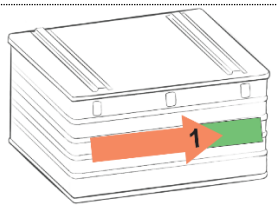
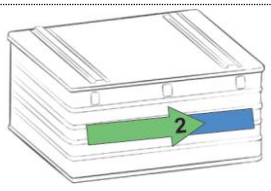
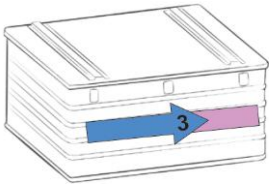


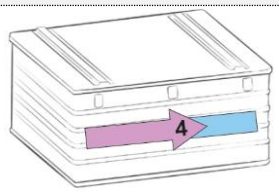
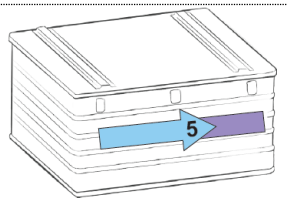
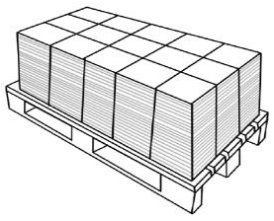
IDTM – Dimensions 2/2

2.4 Tent Features

Technical Description		
Specification	**Unit**	**Value**
Cover material	-	PVC coated Polyester Fabric
Cover weight	g/m²	750
Inflatable frame material	-	PVC coated Polyester Fabric
Inflatable frame thickness	g/m²	1100
Inflatable beams diameter	cm	35
Operating pressure	bar	0.30
Groundsheet material	-	PVC coated Polyester Fabric
Groundsheet thickness	g/m²	700
Inflation Valve	-	Three (3)
Overpressure Valve	-	One (1)
HVAC duct sleeves	-	Three (3) pairs, adjustable diameter
Cable sleeves	-	One (1) on each gable, adjustable diameter
Fire classification	-	B s2 d0 (EN 13501-1:2007+A1)
Standard colours	-	White

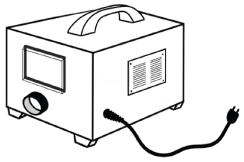
2.5 Packing List (To Update in Brindisi)

LvL	MAIN PACK	Qty	Dimension	Weight	Illustration
1	**EUROPALLET**	1	130x90x100 cm	245 kg	
2	AZF4 27 WFP	1			
2	BAG FOR INNER CABINS	1	200x20x20 cm		
2	BAG FOR SUN SHADOWING NET	1	200x20x20 cm		
1	**EUROPALLET**	1	130x90x100 cm	245 kg	
2	AZF4 27 WFP	1			
2	BAG FOR SUN SHADOWING NET	1	200x20x20 cm		
1	**EUROPALLET**	1	130x90x100 cm	245 kg	
2	AZF4 27 WFP	1			
2	BAG FOR SUN SHADOWING NET	1	200x20x20 cm		
1	**LOGISTIC BOX 1**	1	115x105x58 cm	95 kg	
2	SUN SHADOWING NET	1			
1	**LOGISTIC BOX 2**	1	115x105x58 cm	136 kg	
2	MID LINER	1			
2	INNER LINER	1			
1	**LOGISTIC BOX 3**	1	115x105x58 cm	116 kg	
2	**VESTIBULE**	3			

LvL	MAIN PACK	Qty	Dimension	Weight	Illustration
1	**LOGISTIC BOX 4**	1	115x105x58 cm	199 kg	
2	AZF4 27&VESTIBULE STAKING KIT	3			
2	MANUAL INFLATOR	3			
2	REPAIR KIT	3			
1	**LOGISTIC BOX 5**	1	115x105x58 cm		
2					
1	**LOGISTIC BOX 6**	1	115x105x58 cm		
2					
1	**LOGISTIC BOX 7**	1	115x105x58 cm		
2					
1	**LOGISTIC BOX 8**	1	115x105x58 cm		
2					
1	**LOGISTIC BOX 9**	1	115x105x58 cm		
2					
1	**TILES PALLET**	1	80x120x125 cm	180 kg	

3 OPERATING INSTRUCTIONS

3.1 Required Conditions

REQUIRED CONDITIONS				CLIMATIC CONDITIONS	
	x 4		**5 min** Per tent **4 hours** Complete system		**Frame with Main Canvas:** 40 Km/h max
					**+ 5°C** desirable unless special dispensation
TOOLS					
					
Power Source (TBDm extension cable with schuko socket)	**Electric Inflator (with 7m electrical cable - schuko socket)**	**Inflation Hose Manifold**	**Hammer**		

3.2 Safety and Security Warnings

	**Weather conditions for installation**	The tent should under no circumstances be installed under wind speeds higher than 40km/h. In case of higher wind speeds, please make sure all components are safely packed and stored, away from external high winds.
	**Snow load (max)**	The tent is designed and tested for snow loads of up to **15 kg/sqm**. Nevertheless, major snow loads should be removed immediately, with a telescopic snow brush if available.
	**Wind load (max)**	The tent is designed for wind speeds of up to **100 km/h (120 km/h gusts).** However, such wind resistance is only possible if the tent has been installed and anchored correctly, and that the following measures are implemented as soon as wind speeds reach 40km/h: • Close all openings such as doors, windows, HVAC duct and cable sleeves. • Check that the ground is able to hold the loads and that the pegs are correctly anchored. • Replace all damaged pegs with new ones. • Make sure all furnishings inside are placed at an adequate distance from the walls and roof of the tent, as they can damage or destroy the tent cover through abrasion. Remember the wind will push the tent to the downwind side. • Outside the tent, store away all objects that may fly away, touch the tent or be touched by it.

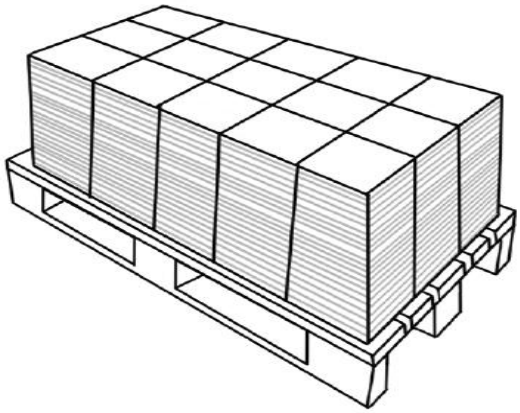
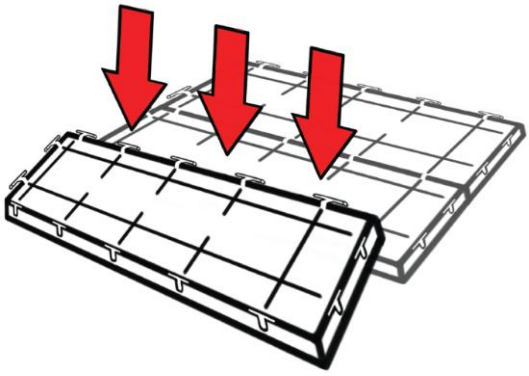
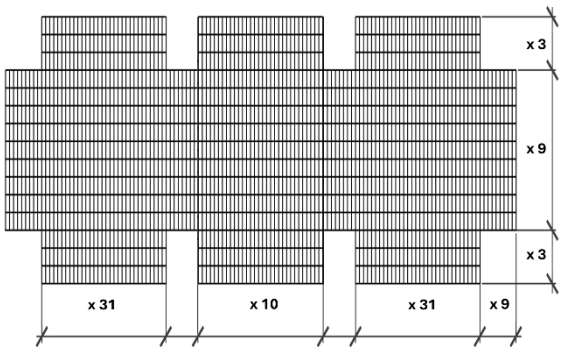
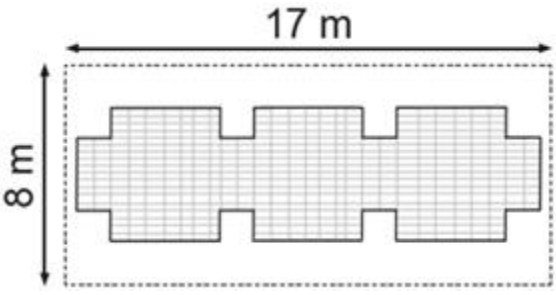
	**Rain**	The impact of rain on the tent itself is negligible, but the selection of the installation site has a big influence on the usability in rain. The tent cover and groundsheet are fully water-tight, but some measures can be taken to help prevent the tent from sinking into mud in case of heavy rains: • Make sure the tent is installed on an elevated area and not in a dent where the water can accumulate. • Do not build up the tent close to rivers or in dry riverbeds where flooding can occur. • Prevent the water from running under the tent by digging a drainage trench around it. Make sure the pegs can still fix the tent to the ground.
	**Temperature changes**	Temperature changes can affect the pressure inside the inflatable frame. • Check regularly that the system is sufficiently pressurized, and re-inflate the tent once or twice a week. • Get an inflator with automatic pressure maintenance if temperature changes (day/night) occur regularly in your geographical area. In the event of condensation inside the tent, remember to open the windows to ventilate the tent, or use a suitable air-conditioning unit.

3.3 Installation Site Selection and Preparation

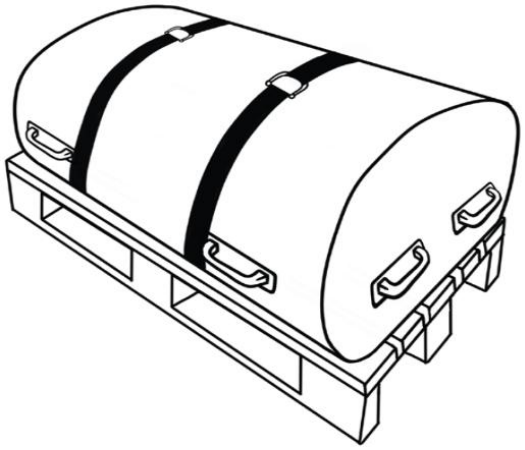
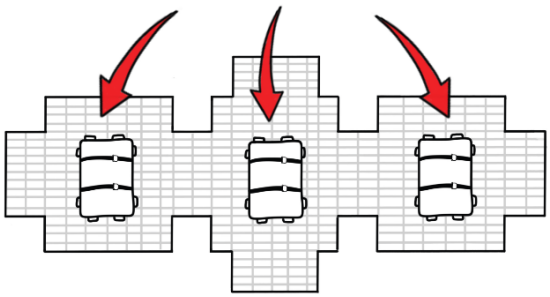
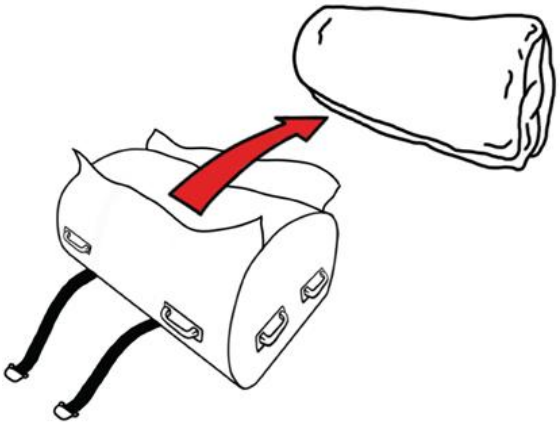
The following rules can help prolong the life span of our AZF Tents and improve operations:

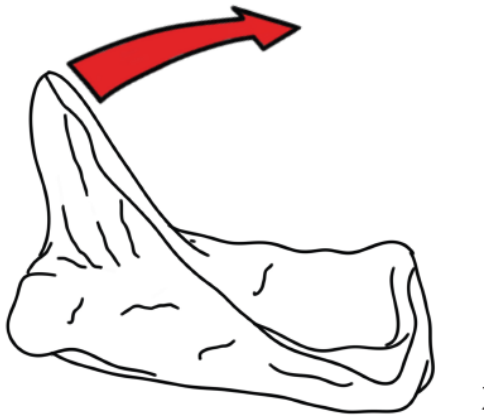
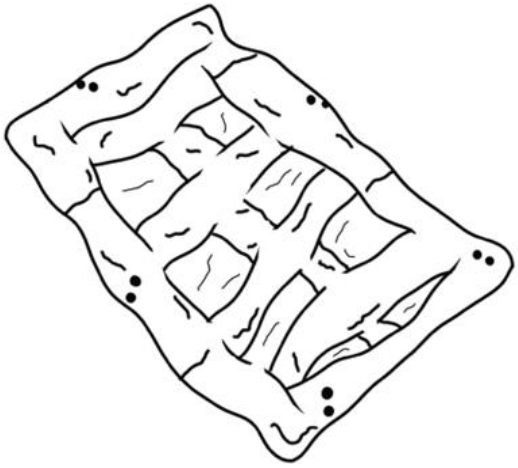
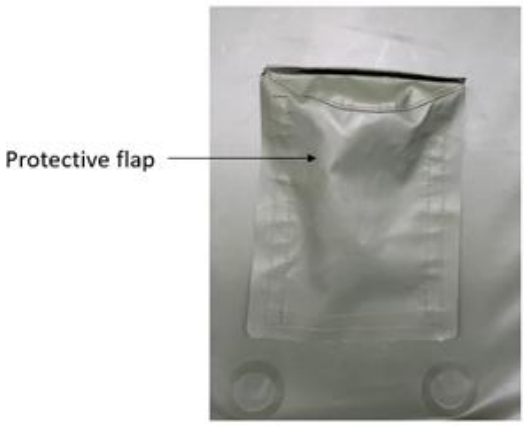
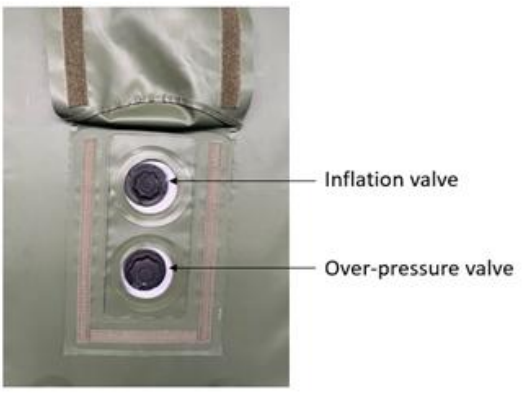
- The installation site should be flat to provide optimal stability for the tent and its furnishings. A maximum slope of 5% is allowed, and deep recesses should be filled prior to installation. A minimum surface area of 276 m^2 is required to install the IDTM.
- The installation site should be clean and free from sharp objects such as stones, chippings, branches, etc. to avoid damages to the tent groundsheet.
- Measure the space needed for the installation of the tent and its equipment, including a safety perimeter all around the designated installation area. The tent should be installed at least 2 m away from the nearest trees or buildings.
- The ground surface of the installation site should be compact and dry enough to provide sufficient grip for the pegs.
- We recommend digging a water drainage trench around the tent installation perimeter, to prevent water from sipping under the tent groundsheet in case of heavy rainfall.
- During installation, avoid dragging the tent components over the ground.
- Never pull with too much force, otherwise the tent's fabric will be damaged. If something cannot be moved, find a different method or get more manpower.
- Little stones, loose chippings and other peaky objects will damage the tent flooring. Always make sure to keep the inside of the tent as clean as possible.

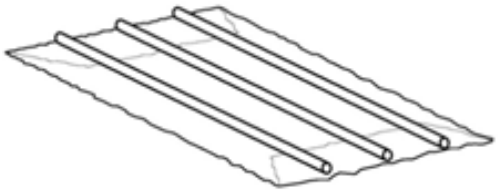
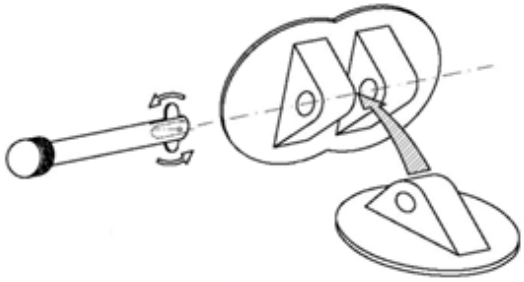
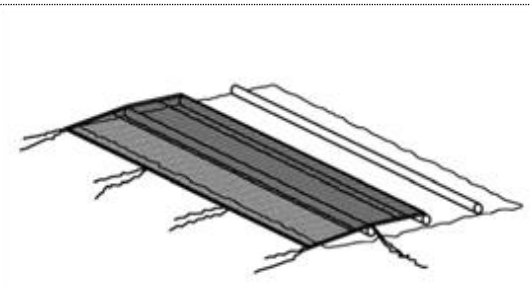
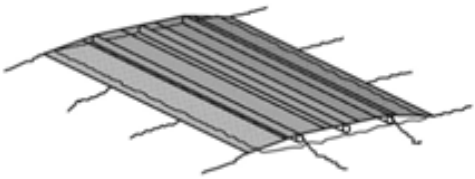
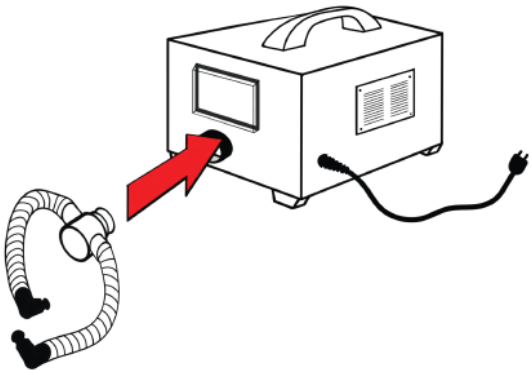
3.4 Hard Floor Installation

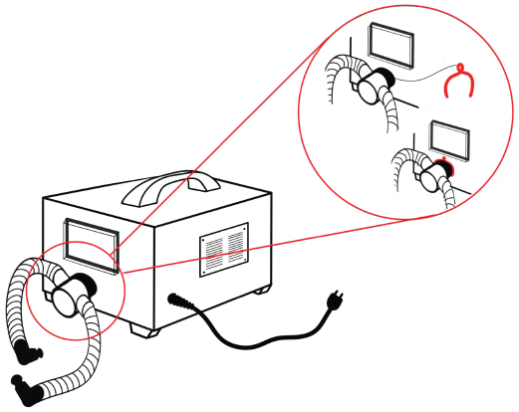
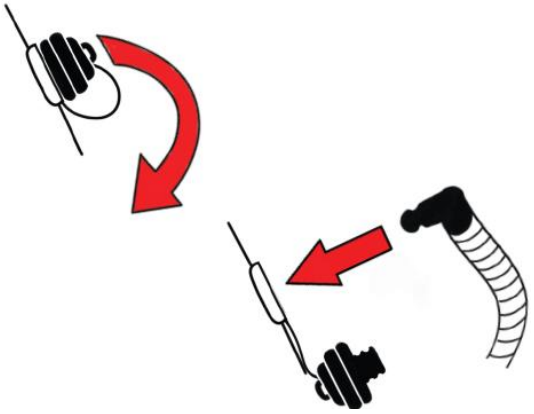
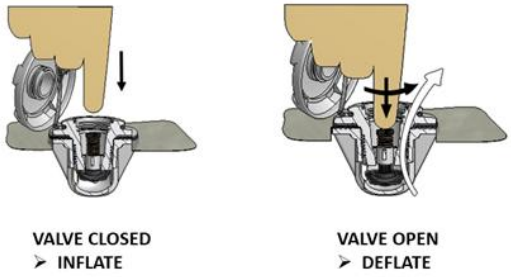
Step	Description	Illustrations
1.0	With a pallet truck, place the tiles pallet next to the installation area. **Please note that the pallet weight is TBD kg.**	
2.0	Install the hard floor according to the layout. **Check if the hard floor is correctly installed and dimensions of the installation area.**	  

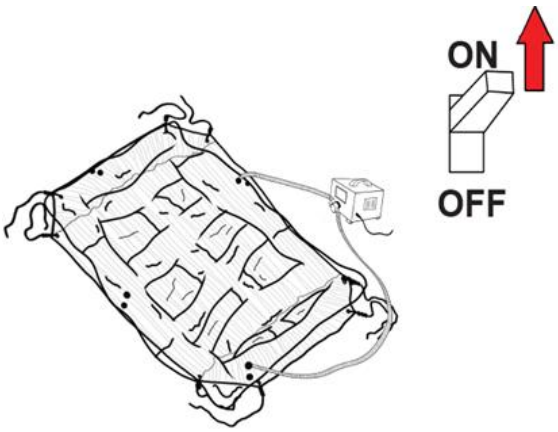
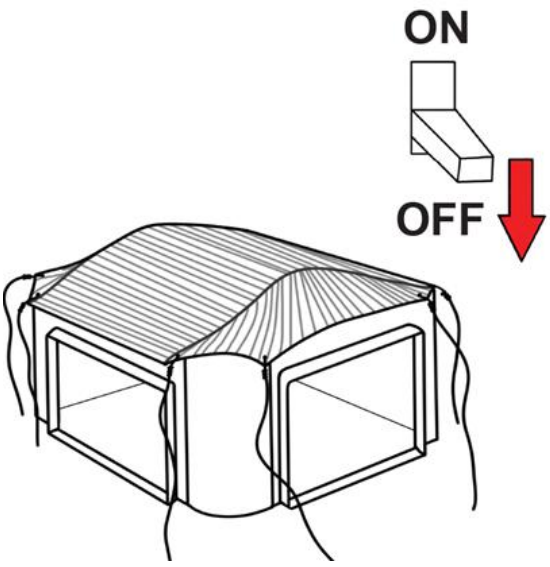
3.5 Tents Inflation and Pressure Monitoring System

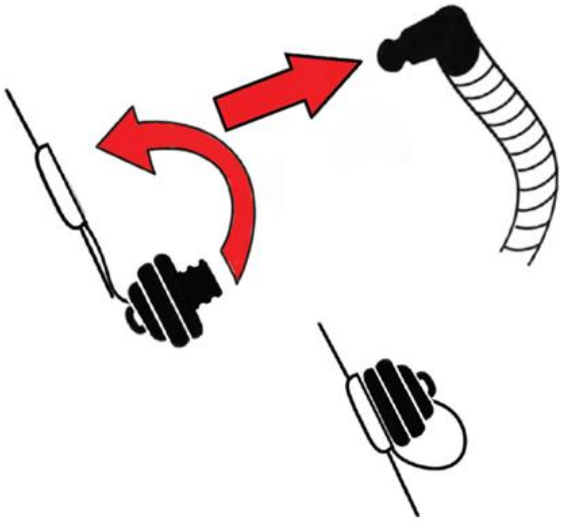
Step	Description	Illustrations
1.0	With the help of TBD persons, place the 3 bags (Code to be defined for all parts) next to the installation area. **Please note that one bag weight is 245 kg.** **Make sure you have all the necessary items for set-up, including the electric inflator and a power source.**	
2.0	With the help of TBD persons, place the 3 bags on the hard floor. **Please note that one bag weight is 245 kg.**	
3.0	Open the 3 bags. **Check that each tent can be rolled out in the correct direction, otherwise lift the bag and turn it by 180°.**	
4.0	Roll out the 3 tents.	

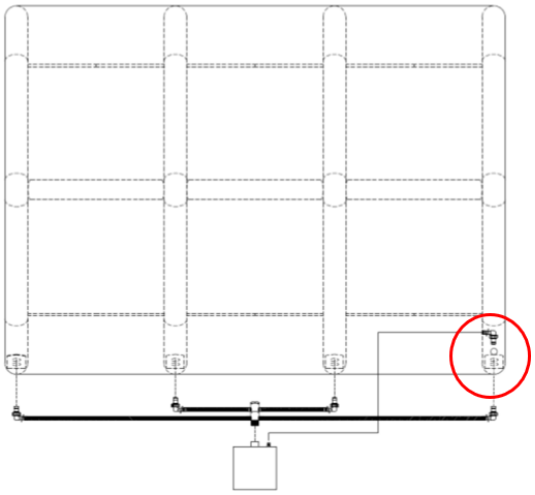
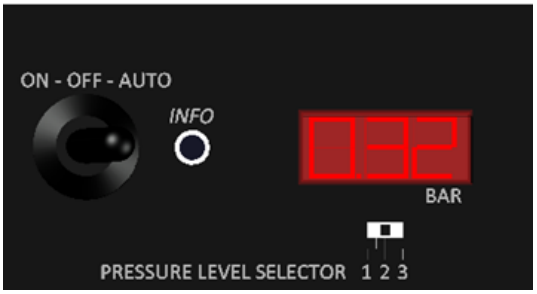
Step	Description	Illustrations
5.0	Unfold the 3 tents and remove the tent bags from beneath the tents. **Store the 3 tent bags in a clean and secure location.**	
6.0	Spread the 3 tents out by pulling on the four corner loops.	
7.0	Locate the inflation valves on the lower end of each pneumatic arch, on one side of the tent, beneath the protective flaps. The inflation valve is located above the over-pressure valve. Each pneumatic arch is fitted with an inflation valve and all valves need to be connected to the electric inflator for simultaneous inflation.	 

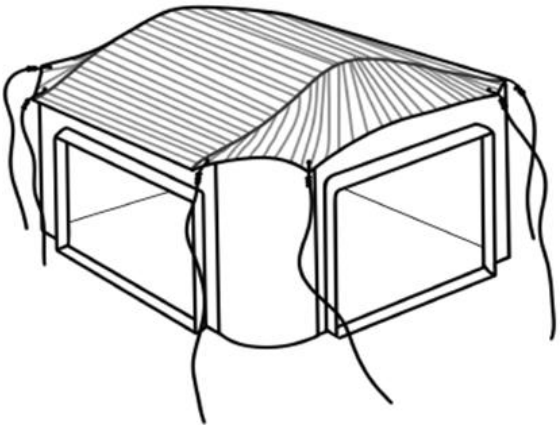
Step	Description	Illustrations
8.0	Install the 3 sun shadowing nets on the 3 tents. Install the pneumatic spacers on the roof. Fix them lengthwise on the tent using the couplings located at the eaves and ridge of the tent. Connect the double stud on the spacer to the single stud on the tent by using a locking pin / bolt. Inflate the pneumatic spacers until the operating pressure of 0,3 bar is reached. Spread out the 3 sun shadowing nets over tent and pneumatic spacers. Fold it in half lengthwise. Align the centre line of the sun roof on the central spacer. Fold over the other half of the 3 sun shadowing nets completely, taking care to spread out the guy ropes to the outside.	   
9.0	Place the electric inflator at approximately 1 m from one tent, next to the inflation valves. Insert the inflation hose manifold inside the 'OUTLET' coupling.	

Step	Description	Illustrations
10.0 ⚠	**Secure the manifold using the provided fastening pin.**	
11.0	Remove the protective cap of the inflation valves by turning it counterclockwise.	
12.0 ☞	Close all open valves by pushing the central pin down and turning the valve tappet clockwise. **Check that all valves are closed. When the valve is closed, the central spring pin is up, at approximately 1 cm below the rim of the valve body.**	
13.0	Connect the end of the inflation hoses to the valves. Fasten the hoses to the valves by turning the screw ring clockwise, and make sure the tap is open.	

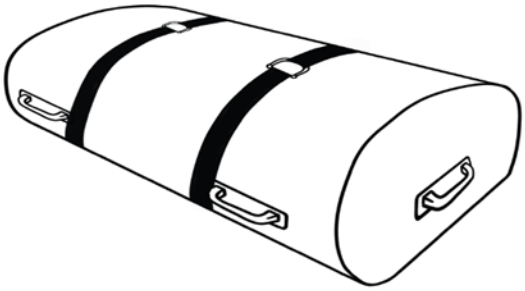
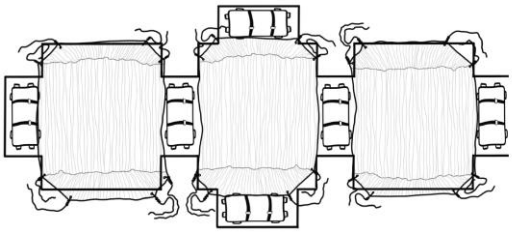
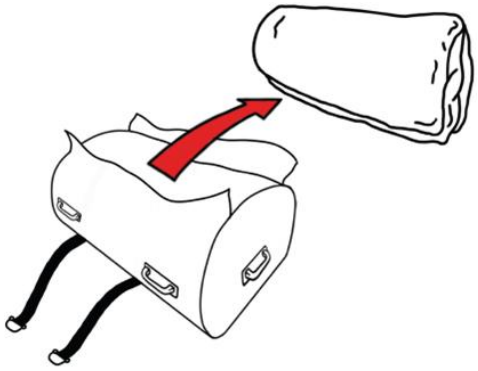
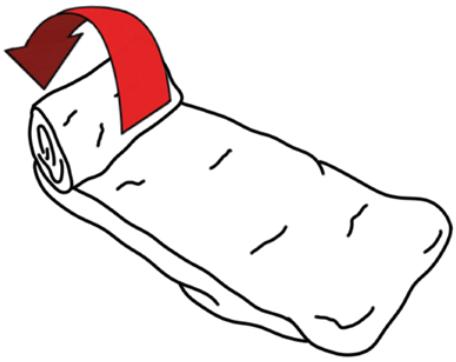
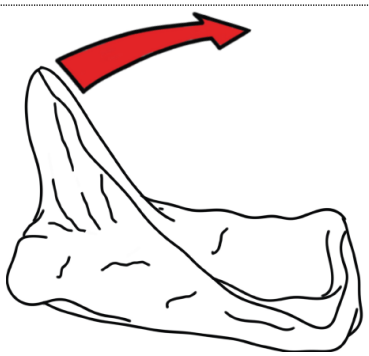
Step	Description	Illustrations
14.0	Connect the inflator to a power source and switch it on. The pneumatic frame automatically inflates. **Check that all valves are connected to an inflation hose.** **We recommend you to open the doors and pull on the gable guy ropes during inflation, to facilitate the tent erection process and to prevent damages on the air passage valves of the tent.** **If the inflator you are using has too many hoses, we recommend you close the tap of the unused hoses for a more efficient inflation.**	
15.0	Once the working pressure of 0.3 bar is reached, you can turn the inflator off. If your inflator isn't fitted with a pressure indicator screen, you can use the sound of the inflator as a pressure indicator. When the sound of the inflator becomes higher, wait for approximately 1 minute and turn the inflator off. **The maximum pressure of the electric inflator is 0.45 bar, which is well below the opening threshold of the pressure relief valves. This is why the over-pressure valves generally don't open during the filling process.** **Do not wait for the overpressure valves to open before switching off the inflator, as this may lead to overheating.**	

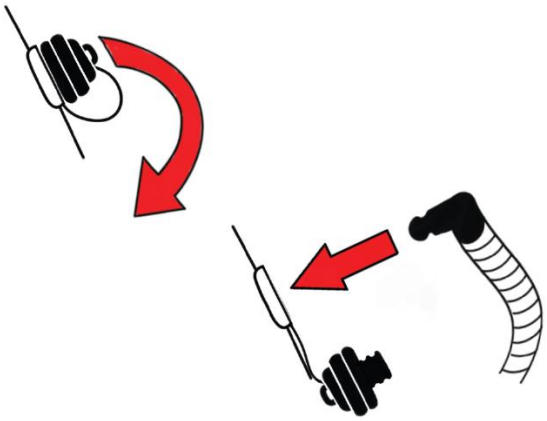
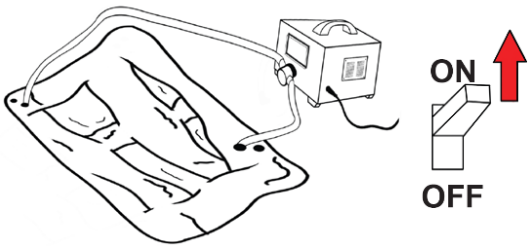
Step	Description	Illustrations
16.0	Unfasten the inflation hoses from the tent valves, screw the protective caps back on and close the PVC flap to protect the valves from sand, mud, etc.	
17.0	**Checklist:**	☑
	Check that the inflation manifold is inserted in the OUTLET coupling.	☐
	Check that the inflation hoses are all connected to the tent valves.	☐
	Check that the inflation taps are all open.	☐
	Check that the inflator is connected to a power source.	☐
	Check that the inflator is turned off.	☐
18.0	Locate the white pressure feedback tube inside the inflator bag, and insert the free end (with no inflation tap) in the pressure monitoring coupling of the inflator.	
19.0	Unroll the pressure feeding tube and insert the other end (with a tap) inside the tent. **You can use the HVAC duct sleeves to insert the pressure feeding tube inside the tent, or slide it through the openings of the inflation valves, as shown.**	

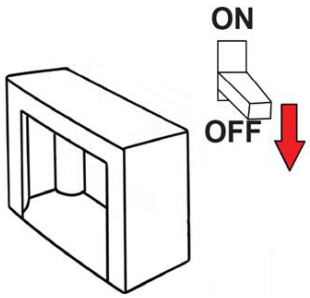
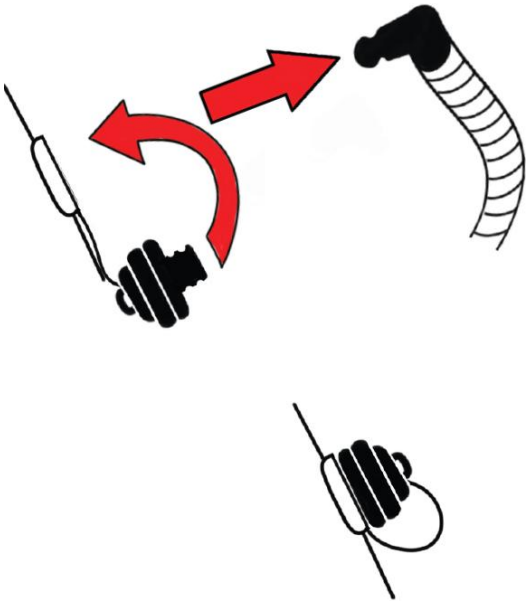
Step	Description	Illustrations
20.0	Inside the tent, locate the pressure feedback valve on the rear pneumatic arch and open the protective cap. **You many need to disconnect the inner liner sections if an inner liner is installed.**	
21.0	Insert the inflation tap inside the pressure feedback valve, fasten the screw ring, and open the tap	
23.0	Once the feedback tube is connected to the arch inside the tent, you can turn the inflator on AUTO. The current pressure inside the tent frame is displayed on the pressure control screen, and the inflator automatically turns on if the pressure is too low (below 0.2 bar). **The inflator should never be switched on AUTO if the feedback tube is not connected to the tent frame, as the inflator will be detecting an incorrect pressure level and turn on repeatedly, until it overheats.** **In case of a power outage, the inflator needs to be turned OFF, and all the hose taps should be closed immediately, to prevent the air inside the frame from escaping through the inflator, which is not air-tight.**	

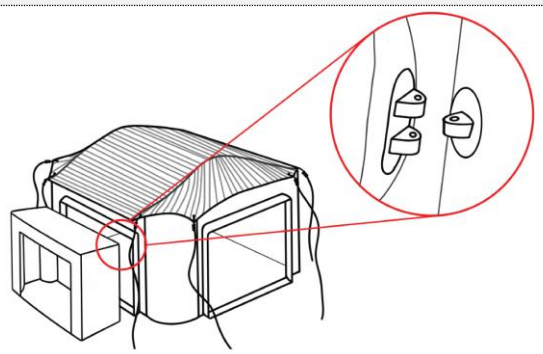
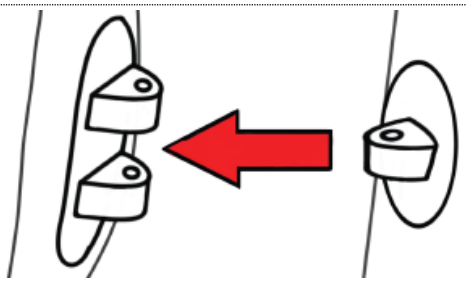
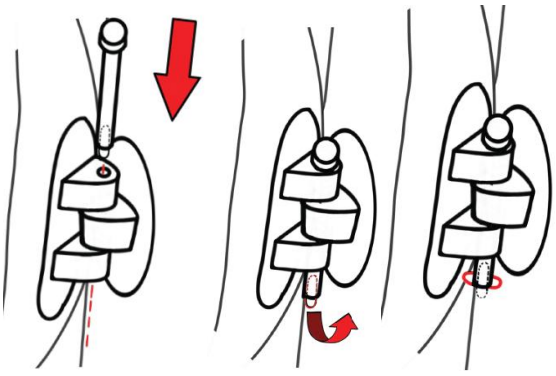
Step	Description	Illustrations
24.0	Pull on the four corners of the 3 tents to straighten the groundsheet and avoid folds inside the tent.	

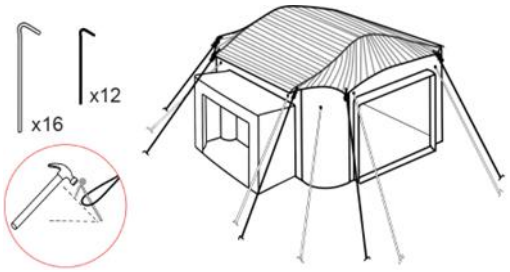
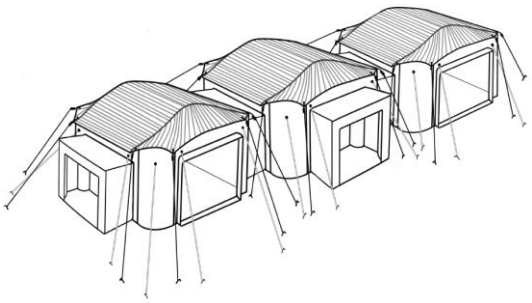
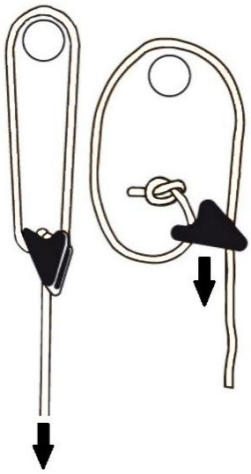
3.7 Vestibules Inflation and Connection

Step	Description	Illustrations
1.0 ⚠	With the help of TBD persons, place the 6 bags (Code to be defined for all parts) next to the installation area. **Please note that one bag weight is TBD kg.**	
2.0 ⚠	With the help of TBD persons, place the 6 bags on the hard floor. **Please note that one bag weight is TBD kg.**	
3.0 ☞	Open the 6 bags. **Check that vestibule can be rolled out in the correct direction, otherwise lift the bag and turn it by 180°.**	
4.0	Roll out the 6 vestibules.	
5.0 ☞	Unfold the 6 vestibules and remove the bags. **Store the bags in a secure location.**	

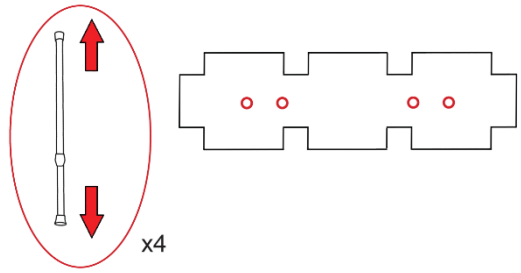
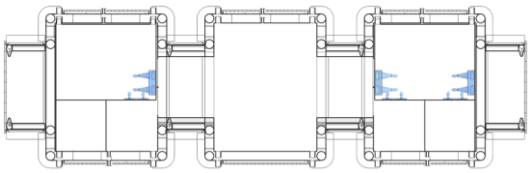
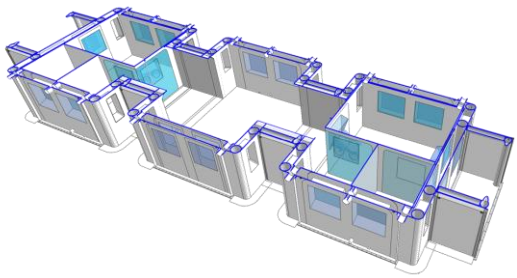
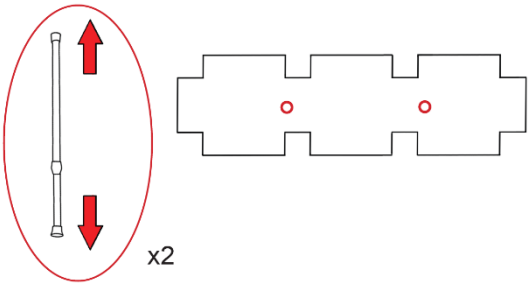
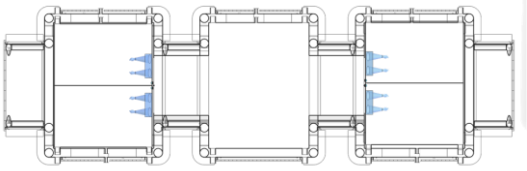
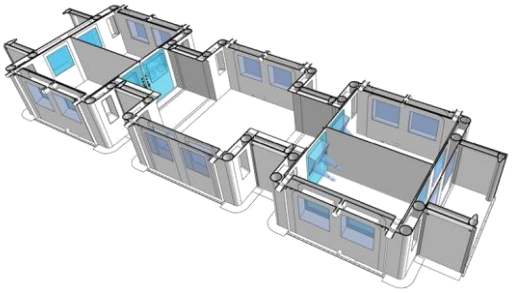
Step	Description	Illustrations
6.0	Spread the 6 vestibules out by pulling on the four corner loops.	
7.0	Remove the protective cap of the inflation valves by turning it counterclockwise.	
8.0	Connect the inflator to a power source and switch it on. The pneumatic frame automatically inflates. **Check that all valves are connected to an inflation hose.** **We recommend you open the doors and pull on the gable guy ropes during inflation, to facilitate the tent erection process and to prevent damages on the air passage valves of the tent.** **If the inflator you are using has too many hoses, we recommend you close the tap of the unused hoses for a more efficient inflation.**	

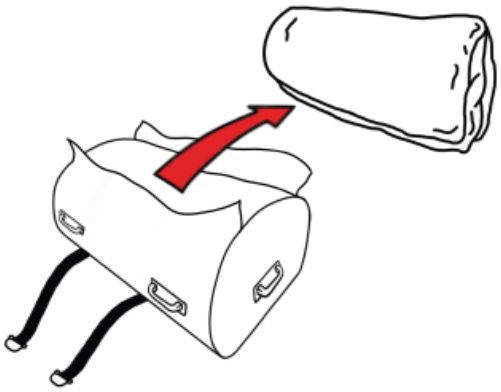
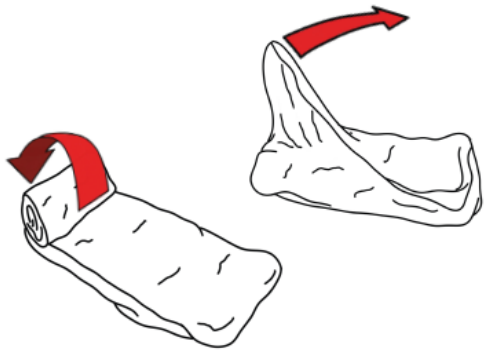
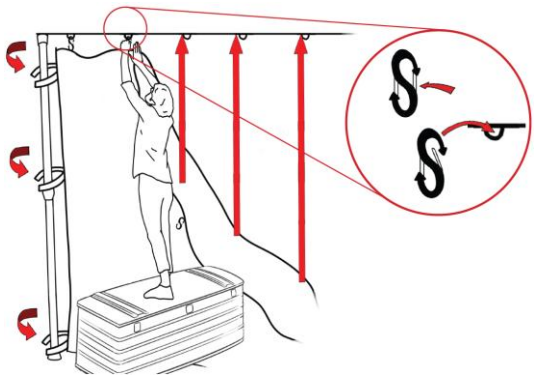
Step	Description	Illustrations
9.0 	Once the working pressure of 0.3 bar is reached, you can turn the inflator off. If your inflator isn't fitted with a pressure indicator screen, you can use the sound of the inflator as a pressure indicator. When the sound of the inflator becomes higher, wait for approximately 1 minute and turn the inflator off. **The maximum pressure of the electric inflator is 0.45 bar, which is well below the opening threshold of the pressure relief valves. This is why the over-pressure valves generally don't open during the filling process.** **<u>Do not</u> wait for the overpressure valves to open before switching off the inflator, as this may lead to overheating.**	
10.0	Unfasten the inflation hoses from the tent valves, screw the protective caps back on and close the PVC flap to protect the valves from sand, mud, etc.	

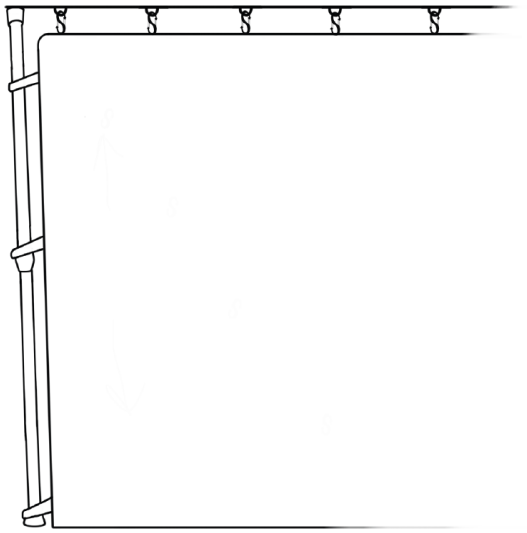
Step	Description	Illustrations
11.0	Connect all the double stud on the spacer to the single stud on the tent by using a locking pin / bolt.	   

Step	Description	Illustrations
12.0	Locate the bag that contains the tent pegs and hammer. Use the small 30 cm T-pegs to fasten the groundsheet loop ropes to the ground. **We recommend rolling the rope around the peg for optimal tension.** Insert the 30 cm T-pegs at an appropriate distance from the tent, so that the loops are well tensioned. Use the long 50 cm T-pegs to fasten the guy ropes to the ground. **We recommend rolling the rope around the peg for optimal adhesion.** **We recommend inserting the 50 cm T-pegs at approximately 1,5m from the tent.**	 
13.0	Adjust the tension of the guy ropes using the cleat tensioner.	

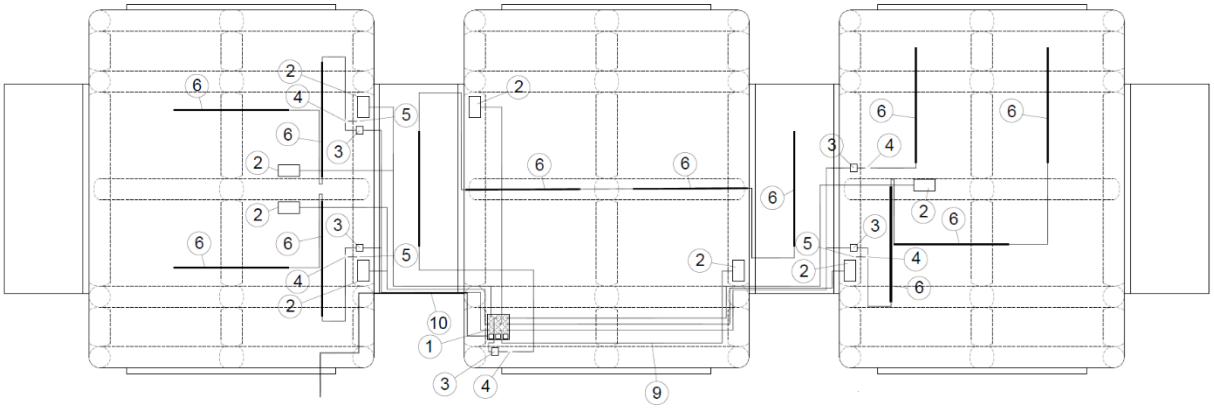
3.8 Installation of the Inner Cabins

Step	Description	Illustrations
1.0	Install the bars for inner cabins.	     

Step	Description	Illustrations
2.0	Place the bag inside the tent and open it.	
3.0	Unfold the inner cabin and remove the bags from beneath the inner cabin. **Store the bag in a secure location.**	
4.0	Starting from one side of the tent, insert the toggle buttons inside the plastic studs of the outer frame.	 

Step	Description	Illustrations
5.0	Move along the arches, and connect the toggle buttons until you reach the other side of the tent.	 
6.0	**Check that all the toggle buttons are correctly connected.**	 

3.10 Electrical System Installation



IDTM – Electrical System

The following parts are required for this operation:

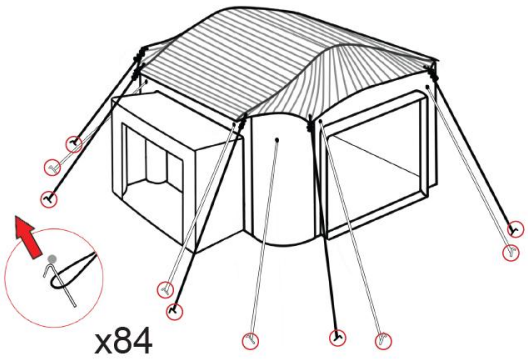
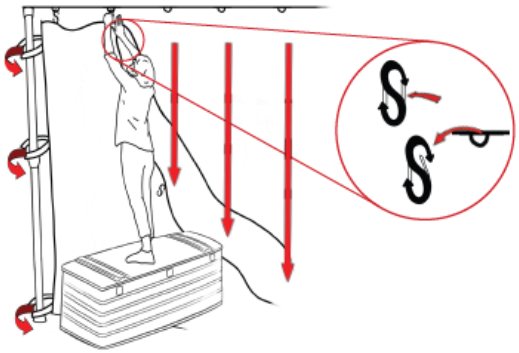
POS	Designation	Qty
1	MAIN DISTRIBUTION BOX	1
2	MULTISOCKET WITH EXTENSION CABLE 15m	8
3	STRIPE LED FEEDER	5
4	STRIPE LED DIMMER (MASTER)	5
5	STRIPE LED DIMMER (SLAVE)	3
6	STRIPE LED	12
7	SPLITTER 230V 16A IP54	4
8	EXTENSION CABLE 48V DC L=3m	6
9	EXTENSION CABLE 230V 16A IP54 L=10m	1
10	EXTENSION CABLE 230V 16A IP54 L=5m	1

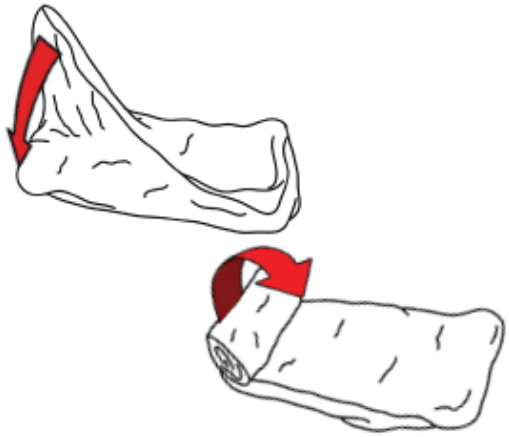
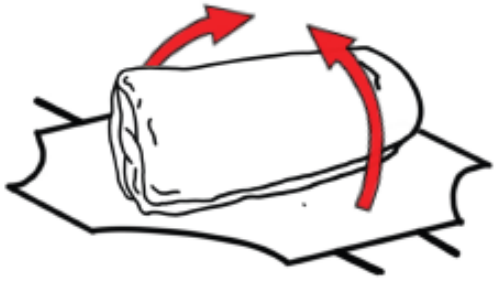
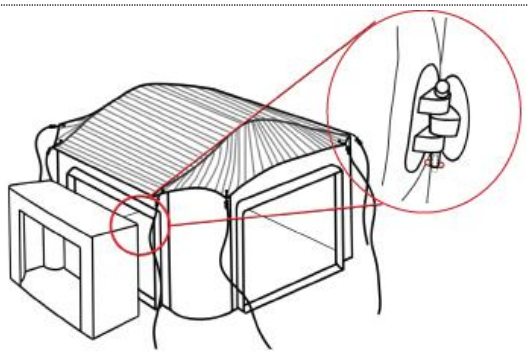
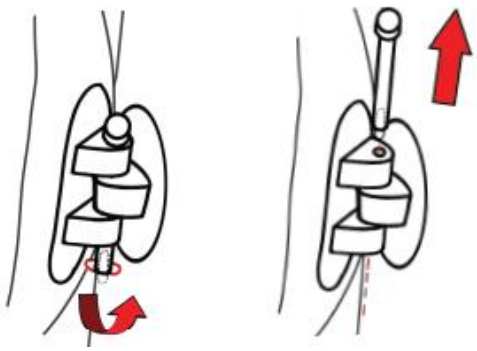
3.11 Tent Dismantling and Packing

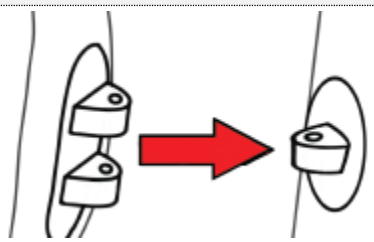
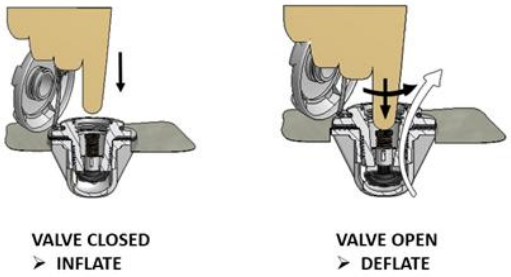
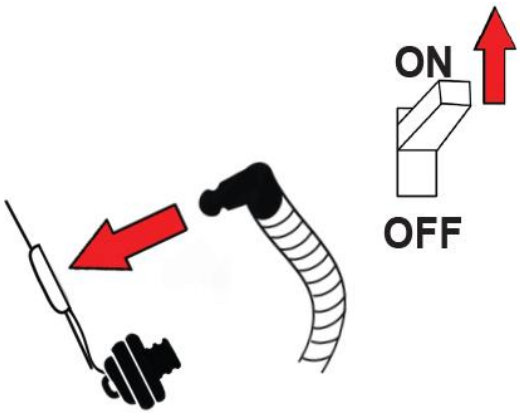
Dismantling of the tent consists in repeating the installation procedure in reverse order.

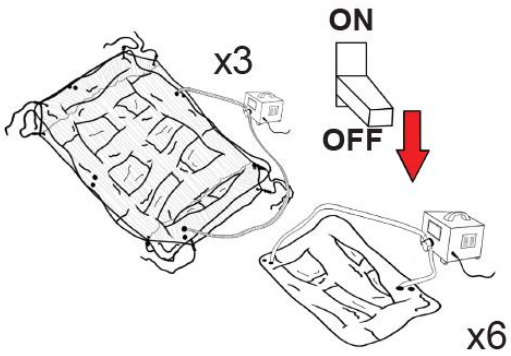
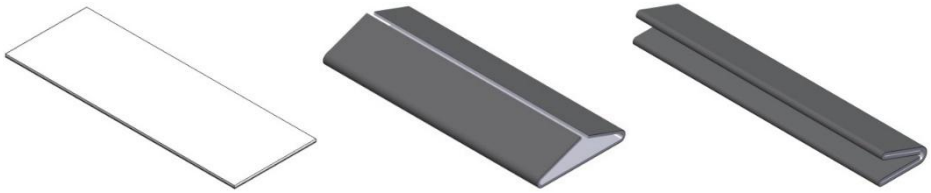
Two (2) to three (3) persons are needed for this operation, depending on the tent size.

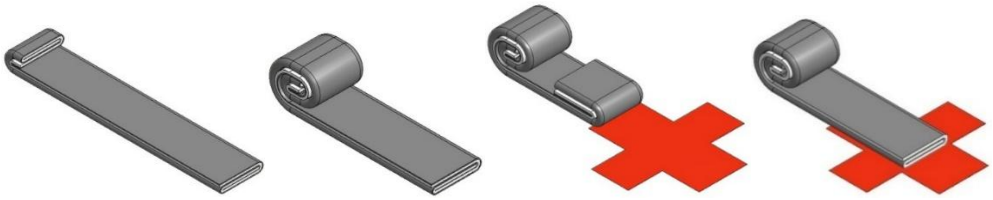
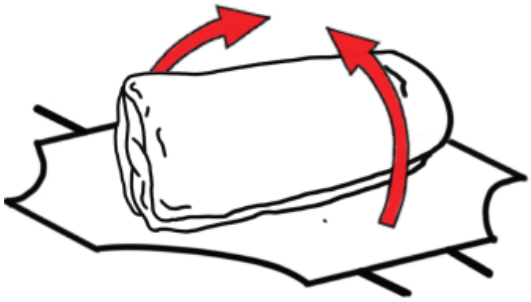
	Before proceeding, please ensure that all accessories have been removed from the inside of the tent, and proceed to clean the groundsheet to ensure no sharp object (stones, branches, etc.) is left inside the tent, as these could damage the tent during storage.

Step	Description	Illustrations
1.0	Clean and dry all the tents. Refer to 4.1.	
2.0	Remove all the guy ropes and their pegs, and place them in their corresponding bags	
3.0	Remove the inner cabins.	
4.0	Remove the bars for inner cabins.	

Step	Description	Illustrations
5.0	Fold on a clean surface/ over plastic sheeting or something similar the inner cabins fold and place them in their corresponding bags.	
		
6.0	Disconnect all the double stud on the spacer from the single stud on the tent.	
		

Step	Description	Illustrations
		
7.0	Close the windows. **Leave the tent doors open so that the air doesn't get trapped inside the tent during deflation.** Once the tent is deflated, proceed to open the inflation valves. Open the protective cap, insert your finger inside the valve and, with your nail, turn the central pin counterclockwise to let the air out. Once all the valves are open, wait for the tent to deflate.	
8.0	**To facilitate the ensuing folding process, we recommend you press on the arches at waist level to help the tent collapse onto itself, and so that the roof falls on top of the groundsheet (and not sideways).** Whist the tent is deflating, take the inflator from its bag and connect the inflation hose manifold in the INLET coupling.	
9.0	Once the tent is deflated, insert the inflation hose taps in the inflation valves, fasten the screw ring and open the tap. **The use of the inflator in deflation mode (INLET) is very important as it helps empty the tent frame completely and greatly simplifies the ensuing folding procedure.** Once all the inflation valves are connected to a tap, turn the inflator	

Step	Description	Illustrations
	ON and wait for the tent frame to be completely empty (approximately 5 minutes). When the tent frame is fully deflated, turn the inflator OFF, remove the hose taps from the valves and close the valves.	
10.0	Adjust the position of the tent roof so that it sits on top of the groundsheet. Place the guy ropes on top of the tent roof.	
11.0	Proceed to fold the tent as per the below drawings.	
12.0	Make sure the tent is clean you fold and pack it. Try to remove gravels and stones beneath the groundsheet whilst you are folding the cover. These will damage the tent cover during storage.	
13.0	Make sure the tent is dry when you fold and pack it. If the tent is wet when you pack it, you should install it again later in your warehouse to clean it and let it dry as preparation for storage.	
14.0	Proceed to roll the resulting bundle, starting from the opposite side of the transport bag. Fold one end of the resulting bundle and place the tent transport bag beneath before folding the bundle back onto the bag.	

Step	Description	Illustrations
		
15.0	Before you start rolling the tent bundle, check that the width of the bundle matches the width of the bag.	
16.0	Make sure the bundle is well centred in the bag, and close the bag using the provided straps.	

4 TENT MAINTENANCE

4.1 Preventive Maintenance Instructions (PMIs)

Preventive Maintenance Instruction				
Reference	Description	Periodicity	Repair Level	Page
Before storage				
PMI 1	**Set-up of the tent**	During set-up	1	-
PMI 2	**Global inspection of the tent**	Daily	1	
PMI 3	**Outstanding weather conditions**	Windy days, during rain and snow fall, big temperature changes	1	-
PMI 4	**Dismantling**	During dismantling	1	-
Before Storage				
PMI 1	**Set-up of the tent**	During set-up	1	-
PMI 4	**Dismantling**	During dismantling	1	-
PMI 5	**Maintenance of textile parts**	Before storage	1	-
PMI 6	**Cleaning**	Before storage	1	-
PMI 7	**Storage process**	-	1	-
During storage				
PMI 8	**Storage conditions**	Weekly	1	-
After storage				
-	**None**	-	-	-

Ref	Description	Action
PMI 1	**Set-up of the tent**	1. Follow the set-up instructions in the manual. 2. Protect the tent skin from sharp objects in the set-up area. 3. Avoid dragging the tent skin over the ground. 4. Make sure internal objects like furniture do not have pointy or sharp-edged stands. 5. Internal furnishings should not touch the walls and roof of the tent, especially during high winds. 6. Do not leave the tent unattended for long periods of time, as high winds may occur.
PMI 2	**Global inspection of the tent**	1. Protect the tent skin from sharp objects inside, sweep and or vacuum-clean the groundsheet. 2. Check whether the zippers are smooth running, clean them from sand and apply some dry soap or Teflon-based spray if needed. 3. Check all pegs are solidly anchored and replace them if needed. 4. Arrange for good ventilation to avoid mildew.

Ref	Description	Action
PMI 3	**Outstanding weather conditions**	1. Wind: o Close all openings when the wind speed is above 40 km/h o During high winds, regularly check the pegs are firmly anchored and the guy ropes suitably tensioned. o Outside of the tent, store away all items that might fly around and damage the tent. 2. Rain: o Prevent the water from running under the tent by digging a small drainage trench around the tent. o Fasten the door threshold in upward position to prevent water from coming inside. o Check that the pegs are securely fastened to the ground. o Regularly check for water ponding. If necessary, push away water accumulations from the inside **at an early stage.** 3. Snow: Check regularly for snow and ice, remove immediately. 4. Big temperature changes: o Check the pressure of the tent frame and reinflate the tent if needed (if no pressure monitoring system is in place) o Check for condensation inside the tent and arrange for good ventilation or ACU. o Check for ice assemblies on the tent and remove them immediately.
PMI 4	**Dismantling**	1. Follow the dismantling instructions in the manual. 2. Remove all objects and dirt from inside and outside the tent to avoid damage. 3. Do not drag the tent covers over the ground. This may damage the tent skin. 4. The roof covers are easy to fold. If you notice any resistance stop folding and check for blockages. 5. Avoid packing the tent when it is wet, humid and / or dirty. In you have to pack the tent whilst it is still wet or humid, make sure you unpack, clean and dry it within 72 hours to avoid mildew! 6. Make sure you collect, clean and pack all items, and run an inventory before loading onto the truck. 7. Dismantling is strongly discouraged in case of strong winds or heavy rains.
PMI 5	**Maintenance of textile parts**	1. Clean all textile parts according to the cleaning instructions in this manual (see PMI 6 below). 2. Clean any special stains from grass, oil, ballpoint pens, etc. 3. Visually inspect all textile parts for cuts, holes, abrasions, tears, open seams or welded joints, broken parts that need to be replaced. Check whether the fabric needs any repair work. 4. Check for sharp objects inside the tent and remove them. 5. Check all the moving parts like zippers by opening and closing them, paying attention to broken or corroded parts.

<table>
<tr><th>Ref</th><th>Description</th><th>Action</th></tr>
<tr><td></td><td></td><td>6. Check the bags visually for any damage.
7. All parts should be dry before packing
8. Repack all clean, repaired and complete units on the correct pallets.</td></tr>
<tr><td>PMI 6</td><td>Cleaning</td><td>1. Use a soft brush (nylon) or sponge.
2. Wash using a water-based detergent solution using the following doses:
<table>
<tr><th>Dirt</th><th>Concentration</th><th>Water temperature</th></tr>
<tr><td>Slight</td><td>5%</td><td>20°C</td></tr>
<tr><td>Medium</td><td>10%</td><td>20°C</td></tr>
<tr><td>Stubborn</td><td>10%</td><td>50°C</td></tr>
</table>
3. Rinse with clean water.

Some deposits may be difficult to remove using the above cleaning technique. These may include the following substances:
- Mineral origin deposits: fats, tars, scale...
- Plant origin deposits: leaves, pollens, resins...
- Animal origin deposits: bird droppings, crushed insects...

These types of deposits may cause the classic cleaning to fail and involve the use of other techniques which may have a destructive action on the cover.

Therefore, before beginning any such work, carefully assess the need for such an operation and if so, call Lanco for advice.</td></tr>
<tr><td>PMI 7</td><td>Storage process</td><td>1. All items should always be stored in adequate packaging, away from water and vermin.
2. All items should be cleaned and fully dried before being stored.
3. Check for packing labels and replace missing labels if needed.
4. Make sure the packaging units haven’t been damaged during transport and/or stacking.
5. The most sensitive items should always be packed on top (e.g. lights).
6. Make sure no item can fall down during transport or storage condition.</td></tr>
<tr><td>PMI 8</td><td>Storage conditions</td><td>7. Ideally storage temperature should be between 18 and 21 °C
8. Air humidity should be between 60% and 65 %.
9. The storage area should have a good air circulation.
10. No vermin should come in to the storage area.</td></tr>
</table>

4.2 Corrective Maintenance Instructions (CMIs)

All equipment removal and assembly are covered in the various installation procedures thus specific corrective maintenance activities are not required. Most equipment is upkeep by exchange of line replaceable items.

Ref	Cause	Action	Periodicity
CMI 1	**Repair of textiles - minor damages**	Minor damages are damages smaller than 15 cm that do not affect load-bearing parts of the tent skin like attachment points of belts or ropes. 1. Sweep away any dirt / humidity with MEK (methyl ethyl ketone) solvent or methylated spirit. 2. Cut out a patch that overlaps the crack/hole by 3 cm on all sides. Round the corners of the patch. 3. Lay the patch on top of the hole and mark the surrounding. 4. Roughen the area where the patch will be applied using sand paper. 5. Roughen the side of the patch where glue will be applied. Note: Do not touch the clean area with your hands to avoid putting grease on it. 6. Apply glue equally on both areas (patch and damaged area). Follow the glue's instructions. 7. Wait for a certain time (Flash-off time). 8. Accurately place the patch on the prepared tent fabric. 9. Press on as hard as you can! Use a roll, a scraper etc. to press on the fabric. Take especially care of the rims of the patch. The quality of the gluing only depends on pressure at the beginning.	In case of damage
CMI 2	**Repair of textiles - major damages**	 **BOTH METHYLATED SPIRITS AND METHYL ETHYL KETONE ARE HIGHLY FLAMMABLE LIQUIDS. KEEP AWAY FROM NAKED FLAMES DURING APPLICATION. ALWAYS OBSERVE SAFETY PRECAUTIONS WHEN USING THESE SUBSTANCES.**  **OBSERVE ALL APPLICABLE SAFETY RULES AND REGULATIONS WHEN APPLYING THE GLUE. READ THE GLUE INSTRUCTIONS CAREFULLY.**  **THE FOLLOWING ENVIRONMENTAL CONDITIONS SHOULD BE MET WHEN PERFORMING REPAIRS WITH GLUE: TEMPERATURE > 5°C; RELATIVE HUMIDITY < 60%** Major damages are damages bigger than 15 cm and / or that affect the load-bearing parts of the tent skin like attachment points of belts, ropes or kedders. Depending on the nature and severity of the damage, additional tools like a sewing machine, hot-air blower or rivet gun etc. might be necessary. 1. Identify the materials needed for repair, contact Lanco for provision of spare parts and repair materials. 2. Close holes and fissures with a repair patch according to the CMI 1. 3. If the damage is too important to repair yourself, send the damaged part to Lanco for repair.	In case of damage

Ref	Cause	Action	Periodicity
CMI 3	**Replacement of frame parts**	1. Locate the source of the leak. 2. In case of a small leak, please refer to CMI 4 below. 3. In case of extensive damage, order a replacement part arch or beam. 4. Remove the damaged beam from the tent cover, using the wing bolts. 5. Install the new beam, using the wing bolts.	In case of damage
CMI 4	**Replacement of missing parts**	1. Identify the missing parts. 2. Contact Lanco for the provision of replacement parts.	In case of missing parts

4.3 Repair Kit

One (1) repair kit is provided with each tent. The repair kit is intended for 1st Level maintenance on the field, for small cuts and holes.

Repair Kit Contents	
Description	**Qty**
PLASTIC CAGE	1
SCISSOR	1
PNEUMATIC ARCH FABRIC PATCH (100 x 100 mm)	10
FLOOR FABRIC PATCH (100 x 100 mm)	10
PNEUMATIC ARCH FABRIC PATCH (100 x 100 mm)	10
COVER FABRIC PATCH (100 x 100 mm)	10
MID LINER FABRIC PATCH (100 x 100 mm)	10
INNER LINER FABRIC PATCH (100 x 100 mm)	10
CABIN FABRIC PATCH (100 x 100 mm)	10
INFLATION VALVE COMPLETE	1
OVERPRESSURE VALVE COMPLETE	1
VALVE SPANNER	1
SEWING KIT	1
NYLON BOLTS WITH WINGS	4
BRUSH	1
MANUAL	1

4.4 Contacts for Spare Parts and Factory Repairs

If you need spare parts or need your tent to be fully refurbished in our factory, please contact your local office at one of the following addresses:

Germany:

LANCO - Dr. Lange GmbH & Co. KG

Sure Wisch 6,

30625 Hannover, Germany

Tel.: +49 511367155-0

E-Mail: info@lanco.eu

Web: www.lanco.eu

Romania:

SC LANCO SRL

Pta Textilistilor 17,

555700, Talmaciu, Romania

Tel.: +40 269206758

E-Mail: info@lanco.ro

Web: www.lanco.ro

Italy:

LANCO Srl

Via Luca Gaurico 9/11

00143 Roma (RM), Italy

Tel: +39 654832915

E-Mail: info@lanco.it

Web: www.lanco.it

France:

LANCO SAS

Regus Tour CB21, 16 Place de l'Iris

92400 Courbevoie, France

Tel: +33 185658221

Email: info@lanco-tentes.fr

Web: www.lanco-tentes.fr

United States:

LANCO North America Corp

101 N. Tryon St., Suite 112 and 6000,

Charlotte, North Carolina,

28246, United States

E-Mail: info@lanco-rds.com

Web: www.lanco-rds.com

Tel : +1 7049985670

Norway:

Rofi AS

Eikremsvingen 2C

6422 Molde,

Norway

E-Mail: sales@rofi.com

Web: www.rofi.com

Tel: +47 71203333

For spare parts, please provide us with the following, where possible:

- The part number (P/N) of the part, if you have it, with a short description.
- Some pictures, if available.
- The required amount.

5 ENVIRONMENTAL CONSIDERATIONS

5.1 Disposal of the Product

The tent and its accessories are subject to special handling at the end of their life cycle. They must not be regarded as normal unsorted waste but must be disposed of at designated collection point.

Contact your local waste disposal service which will provide you with more detailed information about the disposal and recycling of this product. This way, you will contribute to prevent harmful consequences for the environment and human health. Failure to do so exposes you to legal penalties.

5.2 Environmental Commitments

Our tents fulfil the following objectives:

- Most materials used are recyclable, environmentally friendly, healthy and require the lowest possible amount of energy and transport.
- The light weight of our tents and their fast assembly make it possible to have low pollution work sites (little machinery needed, and therefore little noise, reduced waste, no ground or air pollution).
- Reduced power requirements during assembly and dismantling.
- Reduced power requirements during operation, thanks to insulation liner and flysheet
- No water is required to operate our tents.
- All waste material – aluminium, fabric, etc. - is collected and recycled during production.
- Special reusable racks can be provided upon request, to reduce the environmental impact of packaging and facilitate transport.
- Our tents come with a repair kit to simplify field maintenance and servicing, and thus contribute to reducing the carbon footprint of transport for factory repairs.

It is everyone’s responsibility to help protect the environment and there are a number of simple actions that can be carried out to help minimize any environmental impacts further, such as waste materials recycling.

materials recycling.