DLX®

SHELTER TRAINING COURSE

ENGLISH

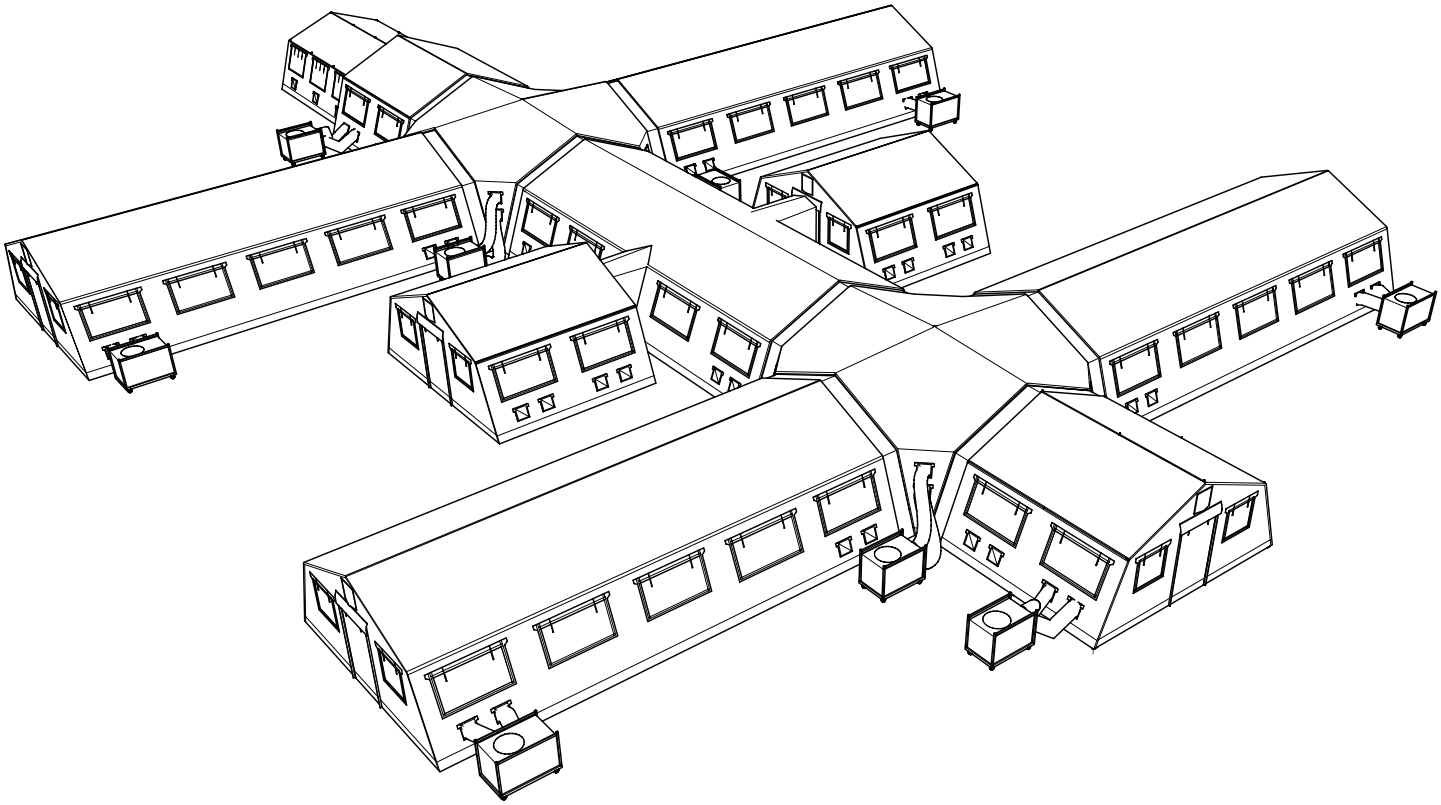
Proudly made in the USA. I CAGE CODE: 7CFK2
DUNS#: 079751064 I 8(a) Certified
VERSION 1.02

WELCOME

Welcome to your DLX Shelter Training Course. The future of deployments is here.
We envisioned faster, safer, and more efficient products designed with first responders in mind.
Our primary goal? You spend less time with equipment and more time saving lives.

Deployed Logix has been supporting agencies and organizations in the USA and around the globe since 2012.
We pride ourselves on providing top-tier equipment and training for the world's heroes.

Successful performance under critical conditions often relies on the training and knowledge of team members.
DLX's certified professionals have designed training courses to provide just the right mixture of information and hands-on experience needed to deploy our shelters under any condition.



NOTE: For more details about Deployed Logix Shelter Training or additional product information, please visit us at deployedlogix.com.

// DLX SHELTER TRAINING COURSE //

DATE	SERVICE PERFORMED BY	SERVICE INSTRUCTED BY

OVERVIEW

We can all agree: emergency response requires properly trained people to work together in pursuit of a common goal. In other words: teamwork makes the dream work. One size training does not fit all, which is why our DLX Advanced Trainers adapt to your needs. All training courses are designed to be site-specific, taking into consideration who will set up and use your shelters. Whether it be with training or the gear itself: we've got you covered. Literally.

PERIOD OF PERFORMANCE

The challenges presented to an all-hazard team that must be deployment-ready 24 hours a day, 365 days a year, is not lost on us. We understand that when a crisis calls - seconds count. With that in mind, we recommend that anyone who might interact with a DLX shelter practice using the equipment by attending our training.

Length: 8 hours

Class Size: Up to 20 trainees

Award: Certificate of Training upon successful completion

Recommend Refresher: Annual

DLX TRAINING COURSE AGENDA

This agenda is flexible. Times will be adjusted based on the status of training and mission requirements of trainees.

TIME	AGENDA	INSTRUCTOR
0800-0815:	Introduction and orientation - Introduction - Administrative notes - Safety briefing	Lead Instructor
0815-0845:	Classroom: shelter presentation	Lead Instructor
0845-0900:	**Break**	
0900-1015:	Hands-on training: shelter setup	All Instructors
1015-1030:	**Break**	
1030-1145:	Hands-on: interior build-out	All Instructors
1145-1245:	**Lunch**	
1245-1400:	Hands-on: interior teardown	All Instructors
1400-1415:	**Break**	
1415-1530:	Hands-on: shelter teardown	All Instructors
1530-1600:	**Daily wrap-up: course critique**	**Lead Instructor**

OBJECTIVE

Instill trainees with confidence and knowledge that will prepare them to lead the setup and teardown of their shelter system in a safe and organized manner.

TRAINING INCLUDES

This course is designed for intermediate to advanced level personnel and provides in-depth training on Deployed Logix Systems. Topics covered include site selection, shelter deployment, shelter teardown, and accessory instruction (HVAC, lighting, connectors, etc.). We also cover the logistical and operational challenges of shelter deployment during emergencies or extreme weather.

AWARD

Upon successful completion, trainees will receive a Certificate of Completion.

SAFETY, WARNING AND RELEASE OF LIABILITY

SAFETY FIRST

Deployed Logix shelters are inherently safe, but safety measures must always be adhered to. Some things to consider:

- Don't lift more than you have to. Shelter components are stored in transport cases or bags with enough handles so that nobody should have to lift more than 50 lb (22 kg)
- Wear gloves
- Be mindful of pinch points
- **Always** anchor the shelters
- Ground all generators
- Space generators at a distance for carbon monoxide precaution and noise reduction
- Ensure all HVACs and generators are on level ground for safe operation
- Cable management: eliminate tripping hazards and prevent damage to cables from vehicles
- Chock/brake all tires
- Wear sunscreen and bug repellent when necessary
- Keep plenty of drinking water on site and stay hydrated

SITE SELECTION REQUIREMENTS

- Sufficient area for desired configuration (see DLX support site for shelter specific space requirements)
- Level ground
- Think about dry ground and the direction of water flow during heavy rains
- Determine proximity to running water and power
- Consider accessibility to power and grounded outlets
- Protection from wind, sun, and rain
- Leave access space for diesel generators and water bladders to be serviced

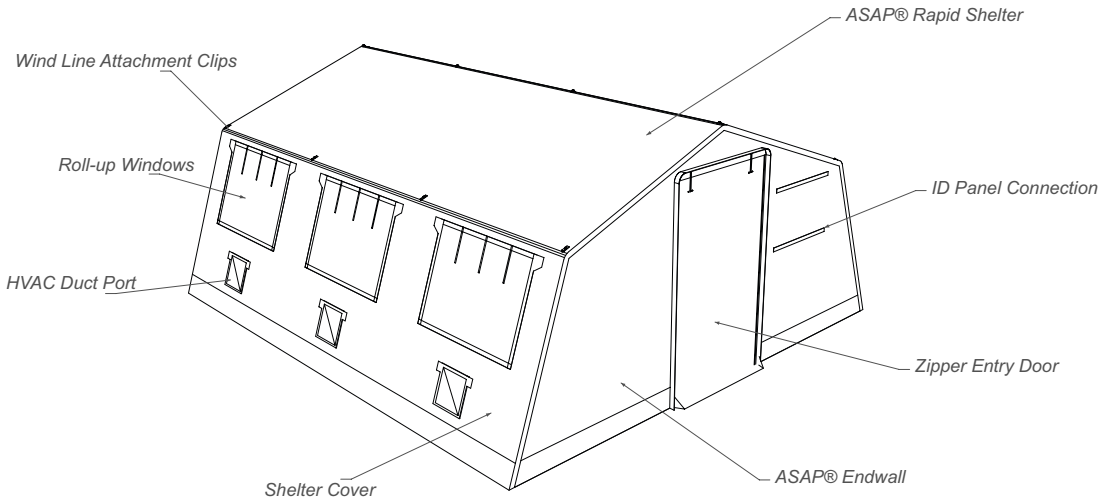
RECOMMENDED TOOLS

- Forklift (1+)
- Pallet jack (1+)
- Power drills and bits (2+)
- Zip ties
- Multi-tool or pocket knife
- Electrical tape
- Duct tape
- Tool kit
- Permanent marker
- General tool kit

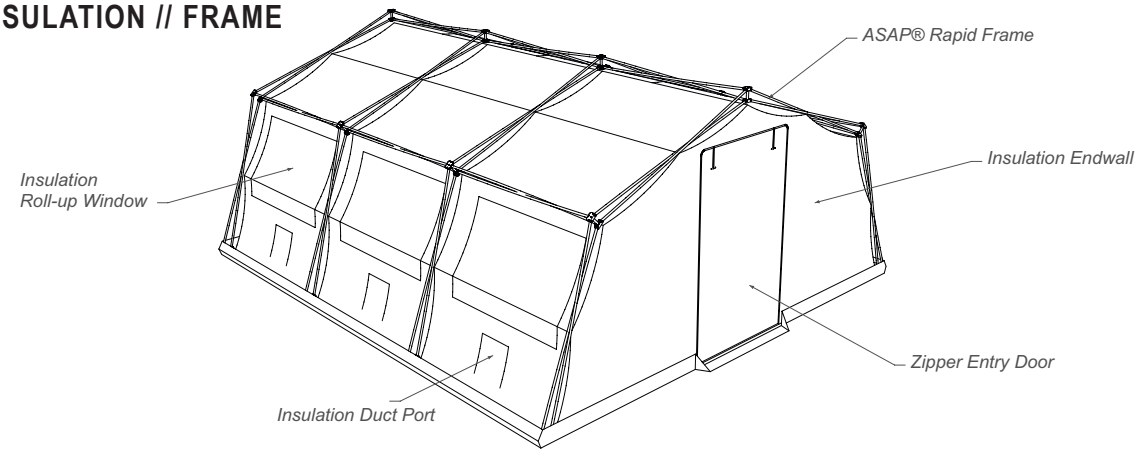
NOTE: During site selection, keep in mind a shelter may require a larger area for setup and teardown than it will occupy when fully deployed.

ASAP® FEATURES

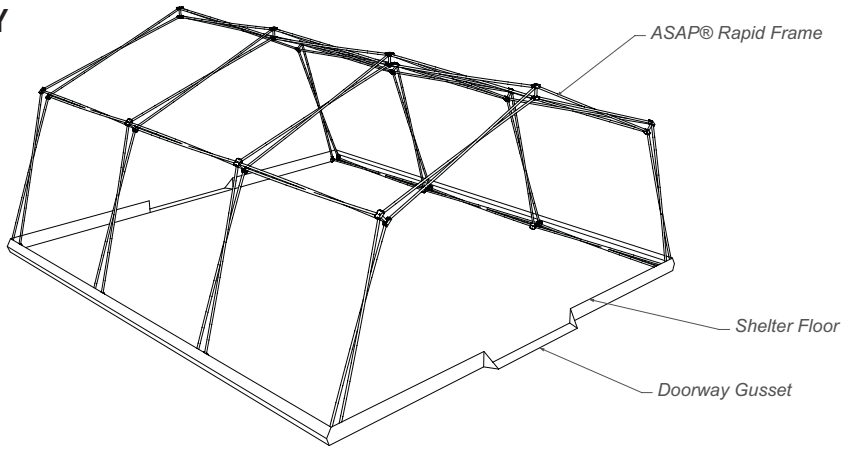
Section A - FULL VIEW



Section B - INSULATION // FRAME



Section C - FRAME ONLY



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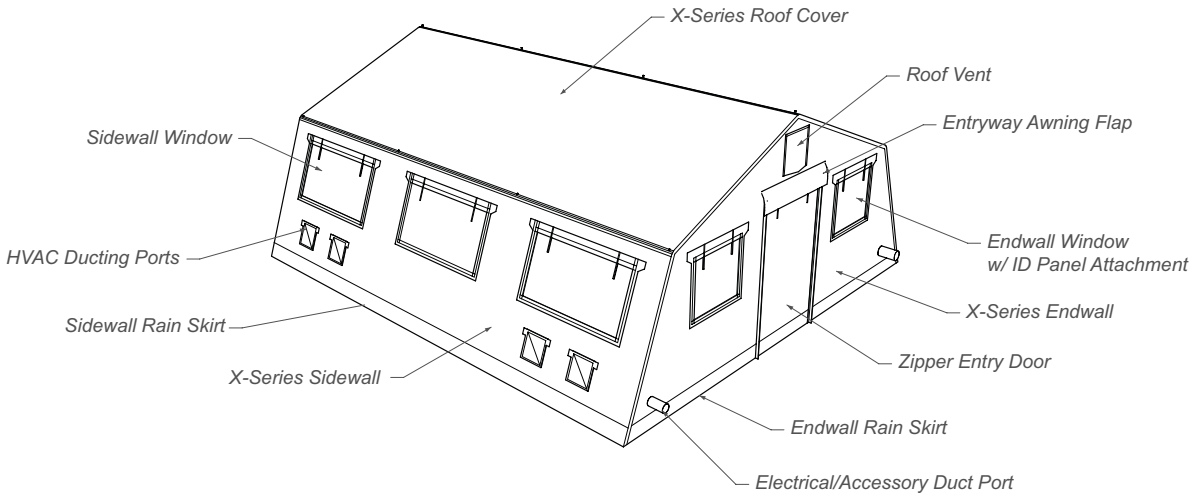
X-SERIES FEATURES

Section A - FULL VIEW



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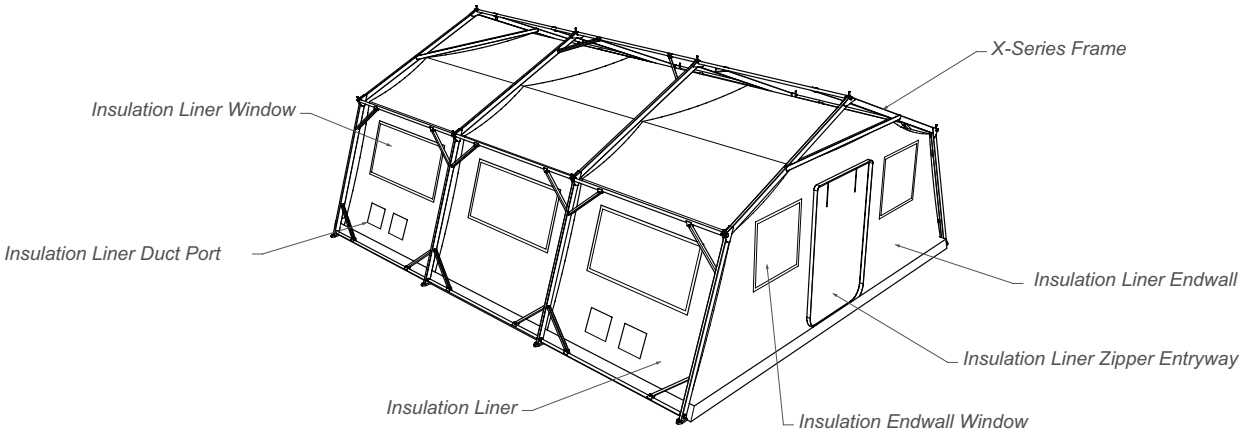
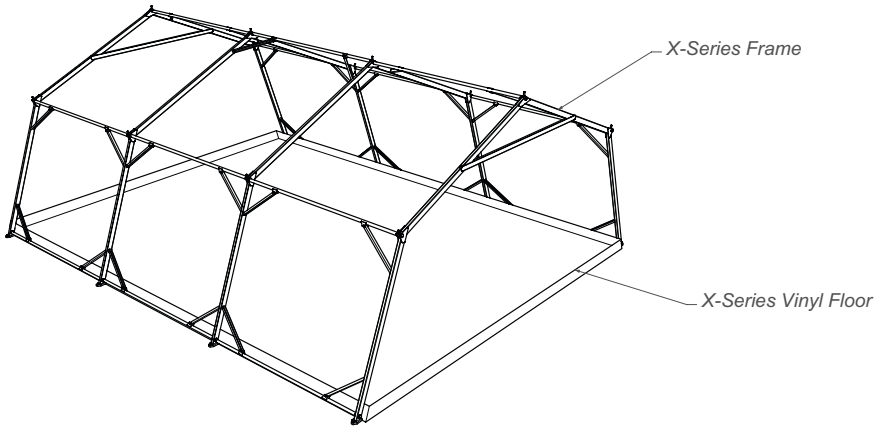


Section C - FRAME ONLY



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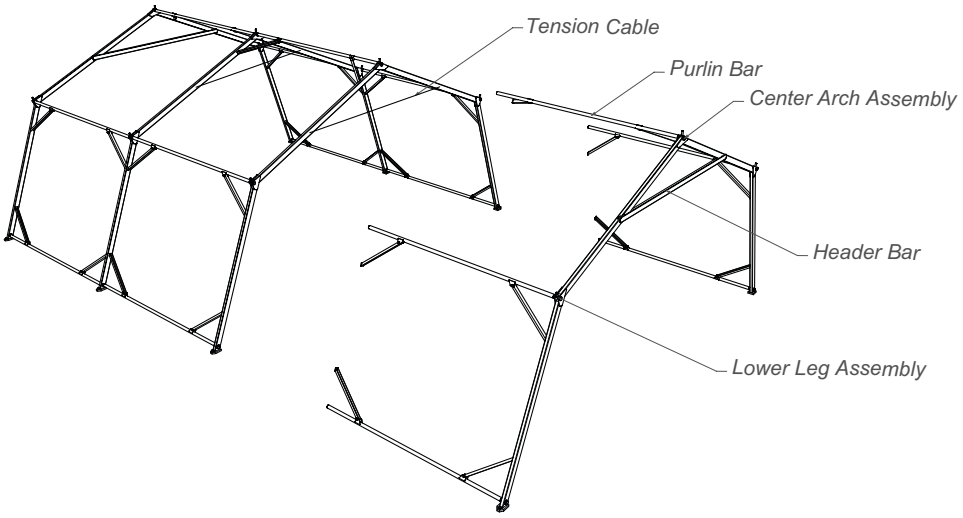
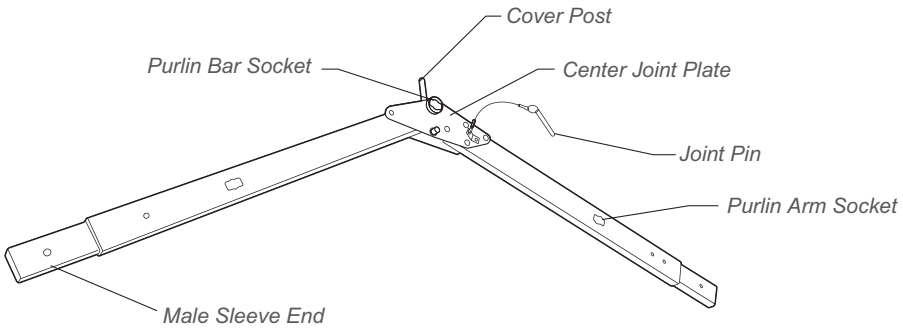
X-SERIES FRAME COMPONENTS

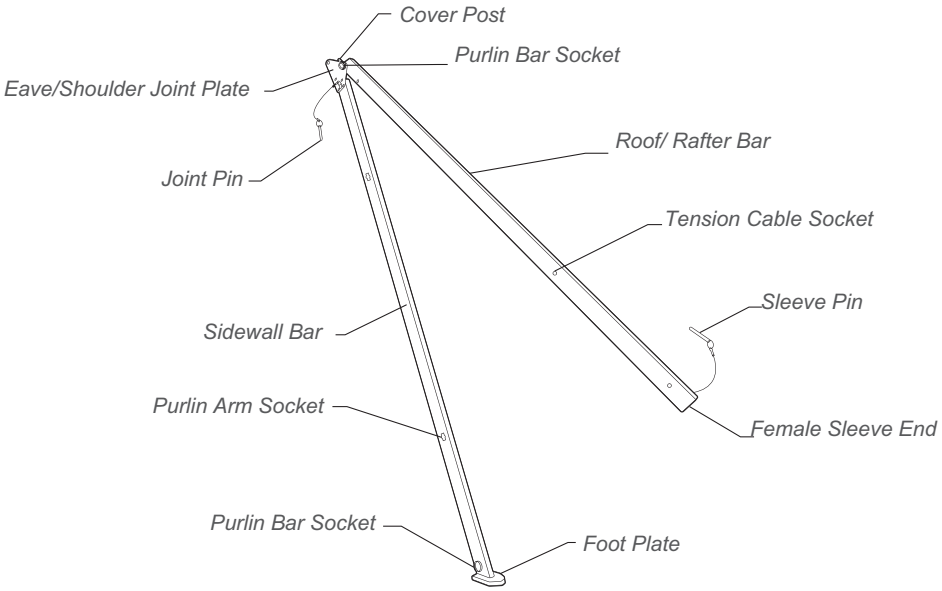
FRAME ASSEMBLY



CENTER ARCH ASSEMBLY



LEG ASSEMBLY



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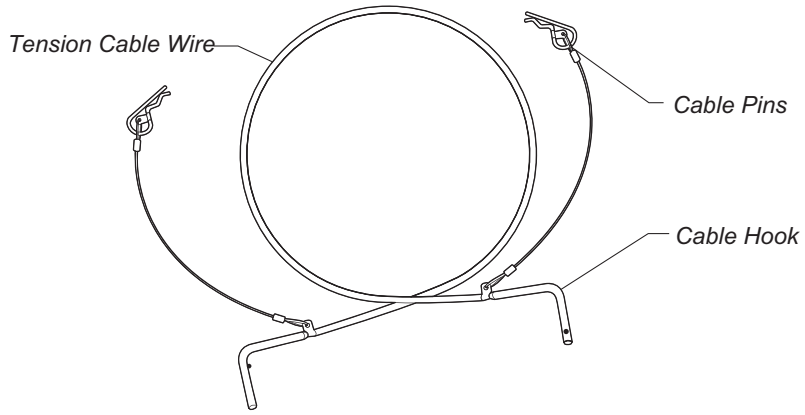
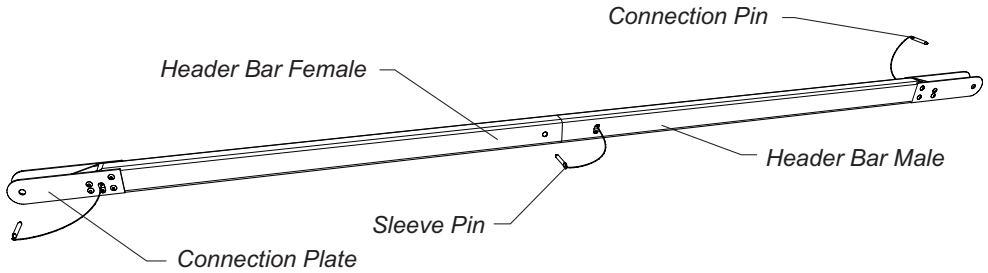
X-SERIES FRAME COMPONENTS (CONT'D)

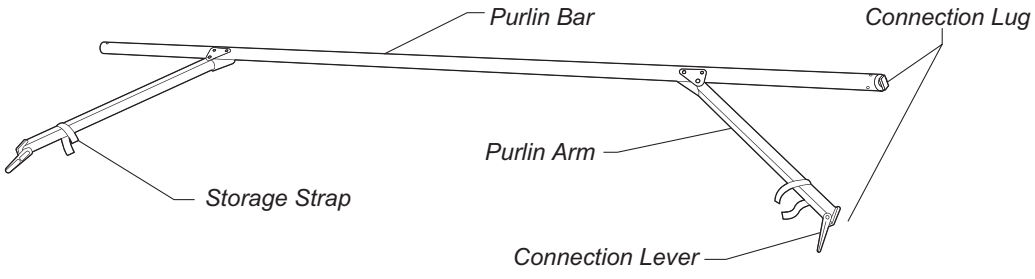
TENSION CABLE



HEADER BAR



PURLIN BAR



DEPLOYMENT QUICK TIPS

TIPS FOR A SMOOTH SETUP

HAVE A PLAN

- Before your training, it is essential to have a plan that takes the following into consideration:
    - Item inventory
    - Site selection and layout (see page 4)
    - Weather conditions
    - Anchoring technique and material (see page 13)
    - Access to water and sanitation
    - Necessary labor/staff

  NOTE: When possible, we suggest using staff that will also be available for shelter teardown.

APPOINT LEADERS

- Designate a group leader who has experience in shelter setup and/or has reviewed the appropriate instruction manuals in detail.
- Group leader will be a point of contact for the DLX Trainer and help to keep the group on task and call out instructions.
- Staff with specialized experience should be on site (such as a plumber/electrician).

FOLLOW INSTRUCTIONS

- Not following instructions, working ahead, or falling behind can all cause safety issues for yourself or others. Always listen to verbal commands and instructions from your designated leader. Failure to do so can result in injury or damage to equipment.
- Increase retention of hands-on training by reviewing instructions in support material.

STAY ORGANIZED

- After removing their contents, fold empty soft component bags and shelter frame wraps with the label facing out.
- Put folded soft component bags and shelter frame wraps in their corresponding cases or crates. This is very important for a smooth teardown/redeployment.
- Keep a list of any questions or problems you run into to share with your DLX Trainer.

ANCHORING & WIND PRECAUTIONS

No matter the weather, wind, or duration of deployment, it is essential that your shelter is properly anchored with either the provided stake kit or the optional Atlas® Anchor upgrade. Failure to do so may result in injury and/or damage to your shelter. Stakes and/or Atlas® Anchors should be periodically monitored to ensure wind line straps have not lost slack due to changing weather and moisture.

- If it is not possible to use the provided stake kit, the Atlas® Anchor Kit should be deployed as an alternative.

- Fill each Atlas® Anchors to a minimum of 500 lb with whatever is readily available: water, sandbags, gravel, etc. Keep in mind:
  - Water weighs about 8 lb/gal. (63 gal. per Atlas® Anchor)
  - An average sandbag weighs about 35-40 lb (12-15 sandbags per Atlas® Anchor)

- Each shelter has wind lines attached to it for anchoring.
  - When using Atlas® Anchors, connect 2 wind lines per Atlas® Anchor (FIG. A)
  - When using stakes, connect 1 wind line per stake. (FIG. B)

  NOTE: Figures below demonstrate anchoring/staking on an X-40 shelter. Each shelter variation has a slightly different wind line configuration, but the same anchoring principles apply.

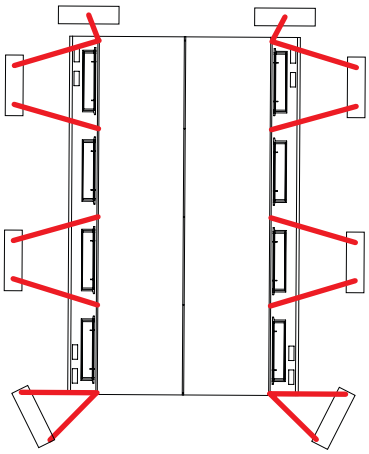


FIG. A

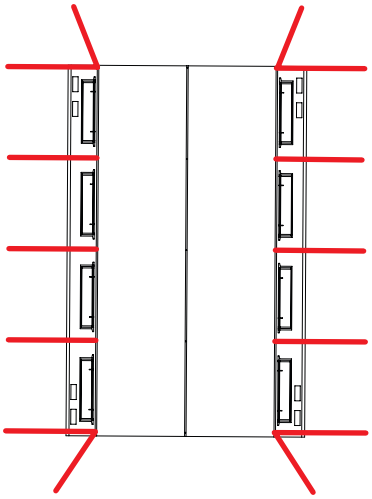


FIG. B

MORE ON USING STAKES

WARNING – IF POSSIBLE, MARK ALL UTILITIES BEFORE STAKING INTO THE GROUND.

- **Soft Ground:** Use the sledgehammer and metal stakes provided for every anchoring point.
- **Asphalt**: Use a hammer drill to set hole and then finish with sledgehammer and stakes.
- **Concrete:** Use a hammer to set hole and use concrete masonry expansion eyebolts.

WARNING – If winds reach above 50 mph, remove gear and instruct personnel to leave the shelter. If high winds are expected with advanced notice, we recommend taking down the shelter if possible. Although the shelter may handle higher winds, flying debris is a potential hazard. Your safety is always our top priority.

COLD WEATHER DEPLOYMENT

- Clear surface of ice and snow before setup if possible.
- Be aware that vinyl won't stretch as easily in the cold.
- Set up your first shelter to use as a warming area for personnel and vinyl fabric (it will help with the pliability of vinyl). Alternatively, wait to deploy until later in the day to take advantage of warmer temperatures.
- Once assembled, be sure to keep heavy ice and snow off roof (use broom handle or similar object to knock snow off from the inside).
- Keep doors and ramps clear of ice and snow buildup.
- Stake the shelter properly based on the soil/ground conditions – use Atlas® Anchors if ground is frozen or difficult to stake.
- Be sure to use carbon monoxide detectors inside shelters.
- Hang a fan within shelters to circulate warm air.

WARNING - Shelter should never be left unattended.

GUIDELINES FOR OCCUPANCY

Before prolonged shelter use, your space should be inspected by a Fire/Safety Officer. Setup should be complete and occupants moved in when the inspection takes place.

The following are typical items the Fire Department looks for during their inspection:

☐ **Assembly occupancies**

- Any room having an occupant load of 50 or more, and which is used for assembly purposes, shall have the capacity of the room posted in a conspicuous place on an approved sign near the main exit from the room (CFC 1004.3).

SHELTER	COT // BUNK BED OCCUPANCY	MEDICAL BED OCCUPANCY
ASAP-12	4	3
ASAP-18	6	4
ASAP-HUB®	6*	4*
X-16	8	4
X-24 // X-24 SC	12	6
X-32	16	8
X-40 // X-40 SC	20	10
X-HUB	10*	4*

*ASAP-HUB® // X-HUB occupancy may change depending on camp configuration and door use.

☐ **Smoke // carbon monoxide detectors:**

- Single or multiple-station smoke alarms shall be installed and maintained on the ceiling or wall regardless of occupant load. Smoke alarms shall be installed outside of each separate sleeping area (CFC 907.2.11.2).
- Carbon monoxide detectors should be installed in central locations outside sleeping areas. Alarms near sleeping quarters will detect levels at head height. Waist height is also acceptable, but do not hang the detector where there are obstructions to normal airflow.

☐ **Electrical:**

- The use of extension cords connected in a series (“daisy-chained”) is not permitted (CFC 605.4.2).
- There must be a minimum clearance of 30 inches wide and 36 inches deep around all electrical panels (CFC 605.3).
- Multi-plug extension cords must be equipped with an internal circuit breaker for safe use (CFC 605.4 & 605.4.1).

GUIDELINES FOR OCCUPANCY (CONT'D)

☐ **Fire extinguishers:**
- Fire extinguishers must be conspicuously located, readily accessible, and immediately available in the event of fire. Position them along normal paths of travel/exits from areas where they will not be obscured from view. Provide a locator sign above the extinguisher.
- Mount the top of a fire extinguisher no higher than 48 inches from the floor.
- The fire extinguisher shall have a minimum rating of 2A:10BC, required area of 3,000 square feet, and located within 75 feet of travel distance (CFC 906).
- For kitchens, a fire extinguisher must be within a 30-foot, unobstructed travel path from cooking appliance. (CFC 904.11.5.2).

☐ **Exit:**
- Exits shall remain free and clear of obstructions, including storage (CFC 1028.2).
- Exit signs must be maintained visible and in working condition (CFC 1011.1).
- Exit signs shall be fully illuminated at all times (CFC 1011.5.3).
- Exit path illumination shall be maintained in operable condition (CFC 1006).
- Exit doors must remain in an operable condition. They shall be able to open from the inside without the use of a key or special knowledge. They shall not be locked, chained, bolted, barred, latched, or otherwise rendered unusable (CFC 1008).

☐ **Combustible storage:**
- Combustible materials shall not be stored in shelter(s).
- Dumpsters shall not be located within 5 feet of shelter walls, shelter openings, or combustible roof eave lines (CFC 304.3.3).

☐ **Maintenance of fire protection and life-safety systems:**
- Portable fire extinguishers must be serviced annually and immediately after use (CFC 906.2).
- Fire protection, extinguishing and detection systems, components and appurtenances shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective (CFC 901.6).

PRODUCT CARE & TROUBLESHOOTING

PRODUCT LIFECYCLE MANAGEMENT

Product Lifecycle Management (PLM) is the process of managing the entire lifecycle of a product from inception to disposal of finished products. Thorough PLM includes specialized servicing of various products.

SHELTER VINYL:

- Shelter vinyl must be cleaned and dried prior to storage for longevity purposes.
- Store in a climate-controlled building/container with low humidity.
- Damaged vinyl or metal components can be replaced individually to avoid purchasing a full shelter replacement.

SHELTER FRAME:

- Components require no lubrication or special tools but should be cleaned after each use.
- Ensure frame components are dry prior to storage.

NOTE: With proper care and maintenance, shelter vinyl and frame have an estimated lifespan of 10 years.

CLIMATE CONTROL EQUIPMENT:

- HVACs and cold weather heaters require annual service.
- Filters on HVACs and heaters should be changed after every deployment or as needed.
- Long deployments may require that filters be changed more frequently depending on the environment.

WATER LOGIX:

- Replace potable water bladder each time you redeploy a water handling or distribution kit.
- Gray water bladder may be used multiple times.
- Purge remaining water from all Water Logix Systems prior to storage.

CARGO TRAILERS:

- The trailer should be put on an annual service schedule to inspect wheel axle bearings, tires, wiring, and lights.
- Always perform an overall inspection prior to trailer use.

PRODUCT LIFECYCLE MANAGEMENT (CONT'D)

GENERATORS:

Generators require a minimum annual service (more often depending on operation hours) which should include an oil change. A load banking service may also be necessary to keep the generator operating at full capacity if run below 50% load for an extended period of time.

WARNING – Never let your diesel generator run out of fuel, as it may result in damage to the injection pump. This can be fixed but it creates unnecessary work.

WARNING – Do not leave your diesel generator in storage with more than a ¼ tank of fuel for a period of more than 1 month. Diesel fuel will go bad and result in maintenance issues and the need to empty and dissolve bad fuel. Fresh fuel can be mixed with old fuel at a 3:1 ratio.

Diesel Exhaust Fluid (DEF): DEF is a mixture of urea and deionized water that's stored in a separate tank from the generator's fuel. The DEF is automatically injected into the exhaust system with a consumption rate between 2-4 gallons for every 100 gallons of diesel fuel consumed. It is recommended to have a minimum of 5 gallons available per generator.

Diesel Fuel: Recommended Fuel: ASTM-D975-No.1 & No.2-D
All new US generators are manufactured to EPA Tier 4 standards and specifications which limits the sulfur ppm (parts per million) to 50 ppm. The ppm is a measurement of the amount of sulfur in the diesel fuel and the particulate matter in emissions. Most countries have local providers who can support fuel delivery with lower levels of ppm.

Diesel Requirements: Recommended minimum of 5 gallons for testing and training, etc.

Partial Fill: Partially fill the generator based on the amount of time that you plan to operate it and at what load. It is not recommended that generators be filled with less than 5 gallons of fuel for a short duration.

Full Fill: Only fill the generator completely if you plan to operate the generator for extended periods. Remember not to leave more than ¼ tank while in storage.

Fuel Consumption: Generator fuel tank capacity varies by model and size. The fuel consumption rate is calculated by the load (¼, ½, ¾, full load). Most models have a storage tank size that will allow the generator to operate at full load for 24 hours.

Fuel Delivery: Contract in advance with a local supplier (remember 50 ppm or lower if available).
Set up a contract with a local fuel delivery service in advance for fueling the generators. If the units are in full operation for an extended period of time, then arrange for daily delivery service.

Oil & Filter Change: First oil and filter change is recommended at 100 hours or a maximum of 250 hours. Fresh filters are recommended every 250 hours after your first change.

SHELTER CARE

Deployed Logix provides protective bags for shipping and storage. Do not drag these bags on the ground.

Replacing the components in their proper bags or molded cases for storage ensures all parts are accounted for and ready for the next deployment.

Cleaning and drying of your shelter system will extend the life of the equipment and eliminate health issues associated with particulate buildup. Maintenance is best performed during shelter teardown. If the shelter must be packed when wet or dusty, it's **very** important to clean and dry it as soon as possible.

☐ SHELTER VINYL COMPONENTS (ROOF, WALLS, FLOOR) AND INSULATION

- Perform maintenance on a clean surface such as the shelter floor. Sweep off loose debris with a broom or soft bristle brush. Remove debris from hook & loop fasteners using a rigid bristle brush.
- Clean vinyl components with soap and water or a mild detergent such as Simple Green™. Spray detergent onto a towel, not directly on the vinyl.
- Dry thoroughly using towels, leaf blowers, or sunlight.
- Store in a cool, dry location.
- **Do not** use chlorine bleach or solvents as this can damage fabric coatings. If disinfection is required, first test a small area with disinfectant to ensure no damage occurs to the frame or fabric.
- **Do not** spray cleaner directly onto vinyl or saturate the material, especially the hook & loop fasteners.
- **Do not** use a pressure washer as this can cause abrasions and tears in the vinyl and stitching.
- **Do not** expose to direct heat or open flame.
- **Do not** store any components of the shelter while wet. Moisture and mildew can cause damage and decrease the lifespan of your equipment.
- **NOTE:** Stains can occur on any part of the shelter, especially on vinyl and fabric components. These stains, once cleaned, are purely cosmetic and do not indicate product failure. Cleaning stains promptly increases the chance of total removal.

SHELTER CARE (CONT'D)

☐ SHELTER FRAME COMPONENTS

- Brush off loose debris. Remove dirt from the ends of purlin bars and legs. Clean with soap and water or a mild detergent.
- Dry thoroughly using towels, leaf blowers, or sunlight.
- **Do not** use a pressure washer as this can cause damage to the frame.
- **Do not** expose to open flame.

☐ HINGE POINTS & PULL PINS

- Keep moving parts free of debris and dust. Disassemble and clean if binding occurs.
- **Do not** use liquid lubricant on moving parts, as this will cause fouling.

☐ PRODUCT CASES & LIDS

- Brush off loose debris. Clean with soap and water or a mild detergent.
- Dry thoroughly using towels, leaf blowers, or sunlight, making sure to remove and dry any padded material installed in the bottom of the case.
- **Do not** leave cases in extremely hot environments or direct sunlight for prolonged periods. This may cause cases to warp and become more difficult to close.

☐ HARD FLOOR

- Brush off loose debris. Clean with soap and water or a mild detergent. Use of bleach and other disinfectant is acceptable on hard floors.
- Dry thoroughly using towels, leaf blowers, or sunlight.

VINYL REPAIR

For best results apply to a clean, dry surface. Clean the surface to be repaired with an alcohol prep pad or a 50/50 mixture of rubbing (isopropyl) alcohol and water. ***Before proceeding make sure the surface is dry, and you have the correct patch type for the kind of material you are repairing.***

Surface temperature of the materials to be repaired should be 50°F (10°C) or warmer. Do not put repaired material into a washer or dryer.

CUT: Cut patch to size with scissors allowing for the patch size to extend 1 inch (2.54 centimeter) beyond all edges of the tear. If using more than one patch, allow for patch sizes to overlap at least 1 inch. Trim square corners into rounded corners.

PEEL: Carefully peel back ½ inch (1.27 centimeter) of the paper liner. Tearing the paper liner while stretching the edge of the patch will help to separate the liner from the patch - especially when the patch has been cut into smaller sizes.

STICK: Position and anchor exposed ½ inch edge – allowing the patch to extend 1 inch beyond all edges of the tear. Slowly peel back the liner while carefully applying the patch over the tear – take care to avoid air bubbles. Rub edges to seal. Rub the entire patch aggressively. Follow steps 1-3 on the backside of the repair if you have access to the backside. The repair is complete.

REPLACEMENT PARTS AND ACCESSORIES

Deployed Logix offers a full line of replacement parts, as well as a wide range of optional accessories for all shelters.

To view accessories, visit www.deployedlogix.com

TROUBLESHOOTING

A FRAME CONNECTION WILL NOT INSERT INTO PLACE

- Be sure the connection point is free of debris.
- Gently lift the frame to allow it to find a natural resting position. Lifting to relieve pressure on the connection points allows them to fit more easily.
- Firmly tap the connection point with your palm.
- You should never have to force frame connection points. Instead, use the methods listed above to avoid damaging the shelter.

NOTE: **Do not** use liquid-based lubricants on frame connections, as this will attract more dust and debris, making the connection less functional in the future. Compressed air may be used if necessary to clean connection points.

ROOF PANEL DOES NOT FIT FULLY OVER FRAME

- When attaching the roof, position end grommets first. Then proceed to place middle grommets along the roofline.
- As vinyl ages, it can harden and lose elasticity. Eventually, the vinyl walls of your shelter may need to be replaced if they crack or can no longer stretch enough to complete the shelter.

WALL PANELS WILL NOT FIT

- Vinyl stretches to varying degrees dependent on ambient temperature.
- If the wall sections do not reach the adjacent support bar, re-stretch the vinyl starting from the end. Stretch the vinyl in small sections as you work along the wall.
- Check to see if hook & loop is attached to an unintended area, as this can restrict the stretch of wall panels.

TORN OR WORN-OUT VINYL

- See the vinyl repair section on the previous page for information on how to fix minor tears and holes in your vinyl panels.

SHELTER COMPONENTS WILL NOT FIT IN THEIR CASES

- A tight fold is required to fit components into their cases.
- Push as much air as possible out of the walls, roof, and floor as you are folding them. Start from one end and work towards the other so that air has an escape route.
- Moisture or dirt can add volume to the walls, floor, and roof of the shelter. Be sure all surfaces are as clean as possible under the conditions.
- Try changing the orientation of bulky components.
- Have several people put their weight on the case lid if needed to secure the latches.

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RELEASE OF LIABILITY

I, hereby release, indemnify and agree to hold harmless DLX Enterprises, LLC, their agents and employees for any injury or illness resulting from my involvement in the Deployed Logix Training program. I acknowledge that injury or illness could result from my participation in these activities and that my participation in any portion of the training program is strictly voluntary.

I attest that I do not have significant uncontrolled medical problems such as asthma, severe allergies (anaphylaxis), uncontrolled severe hypertension, heart disease, emphysema, or other conditions that would place me at risk; or that these conditions are sufficiently controlled as to not represent a threat to my health during this training program. If I suffer from any of these conditions that will place me at risk I will notify an instructor immediately. I will not engage in and will report any unsafe acts. If any portion of the training program represents a risk to my health I may elect not to participate.

Name (print): _____

Signature: _____ Date: _____