

**Arrival Instructions**  
**UNOLS East Coast Van Pool**  
**Isotope Lab #2**  
**Silhouette Steel Ltd. 2408-04**

The following list is intended to aid in placing the lab on the ship and making it ready for use. Any questions, concerns, or discrepancies noted should be referred to the UECVP Manager (Timothy W. Deering 302-645-4338 or [deering@udel.edu](mailto:deering@udel.edu)).

- During the course of installation, check the departure check off sheet and inventory. The lab left the UECVP complete and fully operational unless noted otherwise on these sheets.
- The lab may be moved with a large forklift (either using the slots provided or not) or by lifting with a crane. The estimated weight is **9,000** pounds with the center of gravity slightly aft of the center of the lab (toward the double doors) due to the LSC.
- Once the lab is placed on the ship it should be secured by standard “Peck & Hale” fittings, tie down chains, etc. In no case shall anything be welded to the lab nor shall holes be drilled in the lab's structure. Insert the rubber isolation pads on all four bottom corners of the lab to isolate aluminum lab from steel ship's structure and help reduce corrosion.
- The lab's electrical system must be set up for the correct ship's voltage before the lab is powered. Refer to the Lab Check-Off Sheet to see what input power the lab was set up for when shipped. The lab may be set up for 208, 240, or 460Vac by following the “Lab Electrical Procedure” placard posted in the lab. The ship power cord is provided. The cord plugs into the “Ship” receptacle on the utility end of the lab (opposite end from the heat pump recess) – remove the waterproof cap from the receptacle. The ship end of the cable will need to be terminated by the ship's engineers to mate with the ship source of power. The green conductor is the grounding conductor and should be bonded to the ship's structure. The other two conductors are the “hot” legs. If the lab is to be operated off a voltage other than 480 Vac (i.e., 240 or 208 Vac) the selector switch (inside the lab with the electrical distribution equipment) and the fuses in the ship power disconnect with need to be changed.

Additional information is in the lab manual and shown on the placard on the switch gear.

**In no case shall any modifications be made to the lab's electrical system since they may result in unsafe conditions and/or damage to the lab's installed equipment.**

- Once power is available, put the switch on the emergency light to “ON”. Test the light by either unplugging the light, or securing the appropriate receptacle.
- Connect fresh water, salt water, and the sink drain hoses as needed. Stow the cam-lock fitting covers in the supply box provided.
- Due to requirements on some vessels to fully contain isotope spills, **this lab is not equipped with deck drains**. Cleaning of the deck should be done with a mop and limited amounts of water.
- Remove the window covers and stow inside the lab on the rack provided.
- Remove the fume hood vent cover and install the gooseneck. Ensure a completely open gasket is used and the flame screen is installed. To provide make-up air for the **36”** fume hood, remove the cable pass cover directly over the LSC, plus one additional cable pass cover **for a total of two (2)**, and install the cowls. This will minimize the passage of unconditioned air throughout the lab. Stow all wire pass covers on the rack provided in the lab.
- **Advise the scientific party to use the fume hood only when needed.** It should not be left running as is sometimes the normal practice in shore-based labs. The HVAC unit will not be able to keep up on extreme days if the hood is operated continuously. For routine use, the switch should be placed in the “NORMAL” position.
- Advise the science party to place the sash at the height indicated on the certification sticker to ensure proper face velocity and flow.

- Only in the event of a chemical spill should the fume hood be left on and the lab evacuated. The switch for the hood should be placed in the "PURGE" position in the event of a spill for provide greater exchange of air.
- It is desirable (for safety reasons) that some sort of shipboard communication and/or general alarm bell be included in the lab. This can be accomplished by running the connecting cable through one of the open cable passes. General alarm and phone can be attached to the Uni-Strut where desired.
- Open the hot water valve in the sink and make sure the hot water tank is full. Plug in the water heater and verify operation.
- **TURN ON** the refrigerator, freezer, fixed HVAC unit, and fume hood and verify operation.
- **TURN ON** the power strip located on the LSC shelf which will energize the monitor, printer, and LSC.
- **TURN ON** the LSC (switch located on the lower right side).