

## **INITIAL SURVEY**



# INSTRUCTIONAL INFORMATION ON DETERMINING INTEGRATION OF ELEVATOR AIR STERILIZING SYSTEM TO EXISTING ELEVATORS

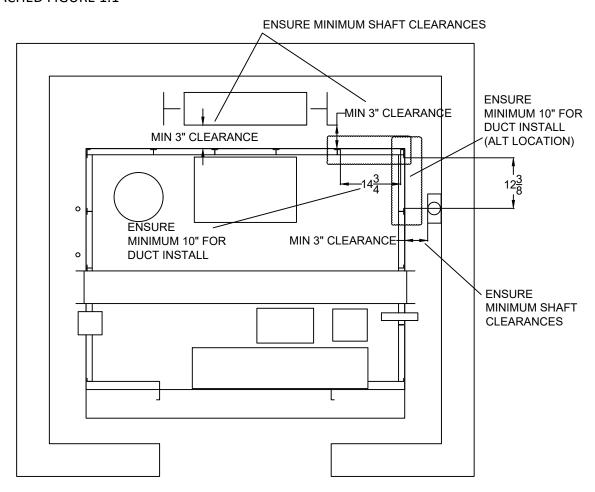


#### SURVEY CONSIDERATIONS

1 - Visually inspect determine rear corner location most applicable for duct work stack. Take note and survey clearance conditions to shaftway obstructions and equipment that may come in contact with duct for proper clearance. Sterilyft duct is 1 ½" diameter and is intended to divert air to base of elevator by installation from top of car. An inspection should include travel of shaft to any equipment and obstructions to ensure minimum 3" clearance is verified at duct location from car canopy and any equipment on car that may project duct into shaft. Most notable areas / items to consider are: Counterweights, counterweight rails, rail clips and fishplates, troughing, piping, junction boxes, pit ladders, limit switch assemblies, leveling devices, shaftway projections, traveling cables, compensating cables, shaftway divider beams, entrance door equipment and struts (in the case of rear or side openings).

Standard ducting consists of 4 - 1 %" diameter semi flexible air hoses intended to be run to 1 base location. With some movement after installation during travel of elevator, a clearance of 3" x 8" for each of 4 drops should be accounted for. Sterilyft has included steel straps to secure hoses to car shell structure after installation to help hold air hoses in place of installation.

FIG 1.1 SEE ATTACHED FIGURE 1.1

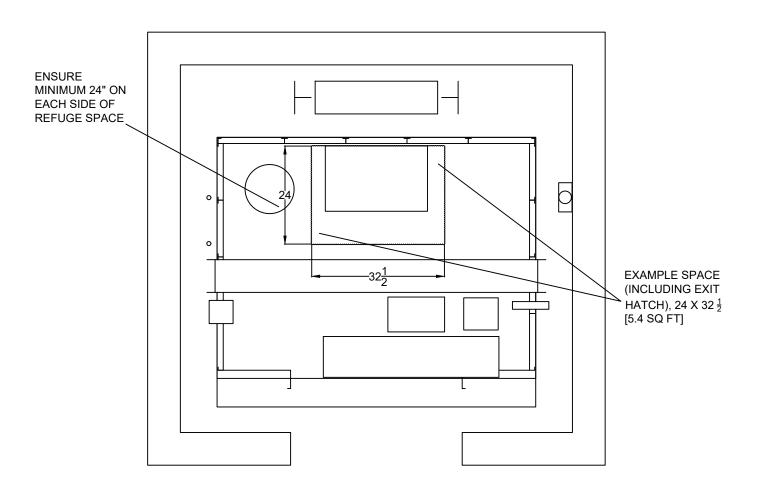


CAB DUCT SURVEY CONSIDERATIONS

2 - Once safe car duct drop location have been established, review top of car clearances for unit installation. Sterilyft UVC chamber will require a clear foot print of approximately 30" x 12" to allow for proper installation, orientation and servicing of equipment. Special note needs to be taken so as not to encroach upon the required 400 sq inches of top exit space, any clearances required to properly operate the exits hatch (note if attached hinged access door, swing clearance will be required at the hinge side of exit when in open position) as well as to maintain proper refuge space on top of the car. Current ASME Code defines refuge space as "An unobstructed horizontal area of not less than 5.4 square feet" on the top of the car enclosure. This area "shall not measure less than 24 inches on any side". Take measurement to ensure compliance with respect to your planned location for Sterilyft ensuring that the unit or ducting will not encroach. When measuring, keep in mind that refuge space "shall be permitted to include the space utilized for the top emergency exit" so of the 5.4 square feet, about 2.8 square feet may include the exit hatch with verification that no side of the refuge space is less than 24 inches.

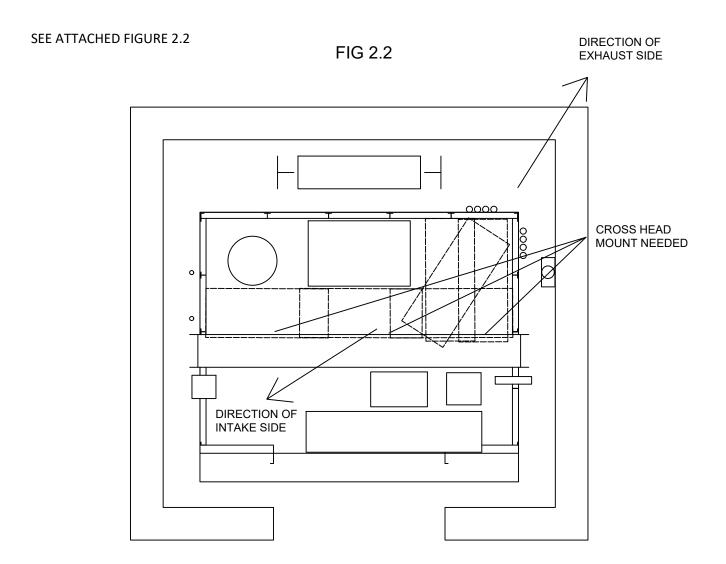
#### **SEE ATTACHED FIGURE 2.1**

FIG 2.1



REFUGE SPACE CONSIDERATIONS

When planning on orientation of Sterilyft, please keep in mind that though flexible duct has been included with the system, the direction of the back of the unit (part of unit with multi port plenum for exhaust hoses) should be facing the car duct drop location and the intake side (side with fan unit and 6" duct attachment) should be facing toward a safe location for the intake to be cut into the car canopy. Additionally, when laying out, be aware of where you will plan on running duct components and power cord for unit so as not to create a hazardous condition or tripping hazard on top of car.



## STERILYFT ORIENTATION CONSIDERATIONS

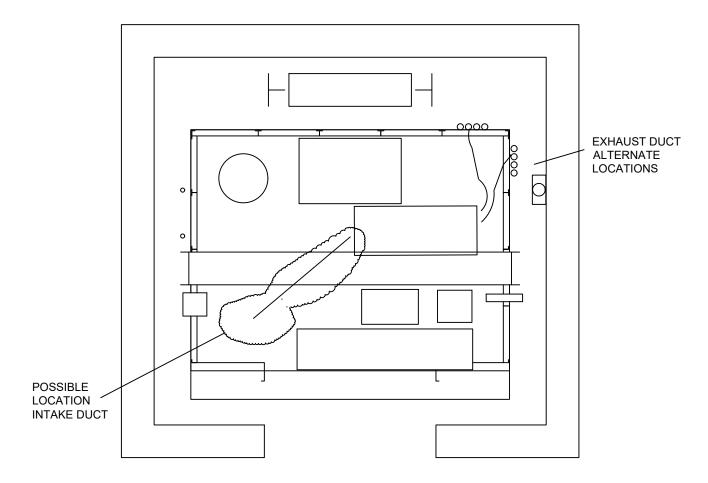
### **ALTERNATE INSTALLATION METHODS**

Should top of car equipment, car enclosure orientation, or limited working area pose an impossibility of direct mounting of Sterilyft safely on top of the car enclosure, we include with each unit a set of crosshead mounting brackets o mount hung off the front or back of crosshead IF CROSSHEAD BRACKET IS TO BE USED, NOTE BRACKET IS ADJUSTABLE FROM 2" TO 4" IN WIDTH AND 10" TO 12" IN HEIGHT TO FIT MOST CROSSHEAD ARRANGEMENTS. Direct attach to the car sling crosshead is also possible (unit set on top of crosshead and through bolted) IF TOP OF CROSSHEAD INSTALLATION IS TO BE DONE, ENSURE PROPER OVERHEAD CLEARANCE FIRST TO BE WITHIN COMPLIANCE TO CODE REQUIREMENTS WITH RESPECT TO TOP OF STERILYFT UNIT TO LOWEST POINT ABOVE WITH CAR IN FURTHEST POISTION AT TOP OF SHAFT.

3 - With car duct location, Sterilyft location and a plan on ducting / wiring routes, you will now plan on a location for the cab intake duct mounting. Visually plan out an area on top of car where the 6" duct can safely reach without creating any hazards or risking accidental damage to the duct during normal servicing on top of car, to a location as much as possible opposite to the car duct location. For circulation purposes, the most efficient processing of in cab air for santization would be as close as possible to the opposite corner of the car, as close to the front as possible and as close to the opposite side wall that the car duct is located. As duct can pass under most crossheads, the location should be on the enclosure. Visual inspection should be made and note of location of car equipment such as car door operator, top of car operating device access, leveling devices and limit switch brackets as servicing may be impeded due to duct location. Special consideration should also be made to maintain a safe area to enter top of car for servicing so as to protect the duct, and prevent tripping hazards, upon walk on to top of car from a shaft opening. A clear unobstructed safe passage should be maintained from landing opening, to on top of car, and visual / physical access to top of car operating device.

SEE ATTACHED FIGURE 3.1

FIG 3.1



STERILYFT ORIENTATION CONSIDERATIONS