

Netting Systems

Oil Pit Netting System

Installation Manual: Oil Pit Netting Safety Solutions

This Installation Manual is intended to meet the manufacturer's instructions requirements and should be used as part of an employee training program.

#### WARNINGS AND CONDITIONS

These instructions must be provided to the installer of this system. The installer must read and understand these instructions and follow.

Failure to follow these instructions and the details of the unique layout drawing provided may result in serious injury or death.

If you have any questions about this system's use or care, please contact the manufacturer:

Factory Supply Toll Free: 1 (888) 242-3045

Liftsafe Fall Protection Toll Free: 1 (800) 977-2005

# **WARNING** IMPROPER USE OR INSTALLATION OF THIS EQUIPMENT MAY CAUSE INJURY OR DEATH

DO NOT LEAN ON THE NETTING. DO NOT STAND OR CLIMB ON THE NETTING. DO NOT USE NETTING AS A TIE-OFF POINT. DO NOT USE IF ANY COMPONENT IS FOUND DEFECTIVE OR DAMAGED.

DO read and follow this document (installation manual).

Oil Pit Netting Safety Solutions are designed and are to be used only for their intended purpose. The use of the Oil Pit Netting Systems or their components for any other purpose may cause injury or death.

Oil Pit Netting Safety Solutions by Liftsafe Fall Protection Inc. & Factory Supply Inc. are designed and engineered to prevent same-level falls while working on or around open pits. Liftsafe Fall Protection Inc. & Factory Supply Inc. does not accept any responsibility for systems that do not follow the enclosed instructions or those that do not use the hardware provided.

These instructions comprise a general installation procedure for the erection of a Oil Pit Netting Safety System. It is the position of Liftsafe Fall Protection Inc. & Factory Supply Inc. that these types of systems should be installed by a certified, trained installation team. In the event that the customer installs the system themselves, the entire system (nets, cables, etc.) must be inspected regularly by a supervisor to ensure that:

- Netting panels DO NOT exhibit any damage whatsoever.
- System components are NOT damaged in any way.

Liftsafe Fall Protection Inc. & Factory Supply Inc. are not responsible for the quality of install preformed by a client after delivery. All Oil Pit Netting Systems must be inspected regularly.

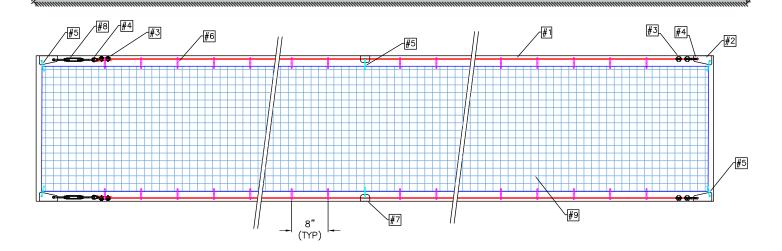
Note: Net panels should be inspected yearly for any damage, and replaced after 7 years when indoors and not exposed to the elements. Net panels that are outdoor and exposed to the elements should be replaced after 2-3 years.

Net hadware including wire ropes, clips or support columns should be inspected yearly for any damage.

Hardware Included				
Item #	Quantity	Description		
1.	-	3/8" GALVANIZED AIRCRAFT CABLE		
2.	4	CORNER BRACKETS		
3.	8	3/8" HEAVY DUTY WIRE ROPE CLIPS		
4.	4	3/8" WIRE ROPE THIMBLES		
5.	6	3/8" SNAPHOOKS		
6.	-	3/8" QUICK LINKS (SPACED EVERY 8" ALONG NET)		
7.	2	INTERMEDIATE BRACKETS		
8.	2	1/2" X 6" JAW JAW TURNBUCKLE		
9.	1	NET PANEL - SIZES NEEDED (2" SQ. 3000# RATED)		
10.	-	1/2"X6" CONCRETE ANCHORS (SCREENS NEEDED/1 PER ANCHOR)		
11.	-	1/2" THREADED EYENUTS		
12.	-	PADEYE (EACH CORNER)(IF WELDING)		
13.	-	EPOXY		

#### Tools Needed

- Tape measure, marker, hammer, drill, electrical tape, Hilti epoxy, cable cutters, cutting disc grinder, pliers to close thimbles and gloves.
- 3/4" socket and impact driver to tighten 3/8" wire clip nuts.
- Epoxy applicator, to suit epoxy used.
- Personal Protection Equipment, lifts and material handling equipment as required to complete the install safely.





Failure to read, understand, and follow the Installation Manual may result in injury or death.

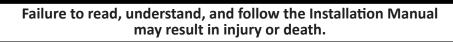
- Installation of Oil Pit Netting System
- **1.1** Weld one (1) Oil Pit System Corner Bracket (has 2 holes) or Padeye in each corner on end wall in a horizontal position. Position bracket as high as possible.
- **1.2** Weld two (2) Mid-Cable Brackets or Padeye to the side walls in line with the Corner Bracket welded on the end wall. Bracket should be welded in a horizontal position as well. Space these evenly with no more than a 20 ft space between these brackets. Note: Oil pits shorter than 20 ft do not require a middle support bracket.
- **1.3** Attach a 3/8" snap hook to each mid-cable bracket.
- **1.4** Open Turnbuckles up to their limits (approx. 1" of thread showing inside turnbuckle body for each jaw). Attach turnbuckles to Corner Bracket in each corner of one end only. (2 turnbuckles required per system)
- **1.5** Create thimble eye on one end of cable with 2 wire rope clips. Attach this thimble eye to Jaw end of turnbuckle.
- **1.6** Run the cut end of this cable through the snap hooks on the mid-cable bracket. Do NOT run the cable directly through the mid-cable bracket.
- **1.7** Create thimble eye on end of cable at opposite end of the pit by opening the thimble and inserting it through the first hole in the bracket. Bend the thimble back into its original pear-shape. Pull cable through the hole in the bracket so it seats itself in the groove in the thimble. Pull up cable tension by hand and install 2 wire rope clips to complete the termination on that end of the cable. Tape the exposed cut end of the cable on each end with black electrical tape.
- **1.8** Repeat entire process for opposite side of pit.
- **1.9** Tighten each cable by turning the turnbuckles. Make sure the Jaw on the cable end does not turn while turning the turnbuckle body. This ensures that the cable does not twist during the tensioning process. Cable is tight enough when the cable cannot be moved more than 2" vertically at the midpoint of the netting system.
- **1.10** Attach nets to cables using quick links spaced every 8" along perimeter of net. Each corner of net has a snap hook attached to the second hole in the corner bracket. This keeps the net from pulling inwards when in place. NOTE: to slide nets past mid-cable bracket, simply remove cable from snap hook to provide free access along cable.
- **1.11** For netting systems that are split up into two (2) or more net panels, the nets must be joined together with snap hooks spaced at 6" intervals (maximum) to be in compliance.

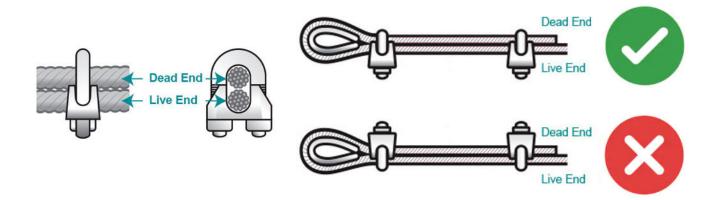
#### Installation of Oil Pit Netting System - Concrete

- **1.12** If drilling, into concrete, concrete anchors and epoxy are required. Anchor screens are also required if drilling into block. If drilling through steel to access concrete, the 'steel hole' would be required to be 1/8" larger.
- **1.13** Concrete anchors will be 1/2"x 6". Therefore, 1/2" threaded eyenuts are required.
- **1.14** Example: A concrete hole, 11/16" using screens and 1/2" threaded anchors. The steel access hole is 13/16 or 7/8".

#### Installation of Oil Pit Netting System - Welding

- **1.15** If welding, pad eyes will be used at the 4 corners of the space. If the net exceeds 20', add two more for mid support. The mid support pad eye should be welded 1" higher than corners.
- **1.16** Install snap hook into pad eye and run cable through the snap hook.





Rope Size	Number of Clips	Torque (ft-lbs)	Amount of Rope Turnback
1/4"	2	15	3-3/4"
3/8"	2	45	6-1/2"

#### Instructions

- **2.1** Turn back the specified length of wire rope from the thimble (see above). Put first clip one saddle width from "dead end." Position the U-Bolt portion of the clip over the dead end (cut end portion of rope). The saddle of the wire rope clip is to be against the live end (load carrying part of the rope).
- **2.2** Tighten nuts to recommended torque as per the chart above.
- **2.3** Put the second clip close to the thimble without binding it. Install nuts firmly but do not yet tighten to proper torque.
- **2.4** Apply light tension to wire rope assembly and then tighten all nuts evenly to proper torque.
- **2.5** Inspect wire rope clip nuts before and after install. In the event of a product falling into the net system, re-inspect the wire rope clips and re-torque as needed.
- **2.6** When loads are applied, the wire rope stretches slightly, so the clips may need to be re-torqued.



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### **Fall Protection Warranty**

Please refer to website for product warranty information.

fallsafetysolutions.com/terms-conditions/

factorysupply.com/terms-conditions/



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