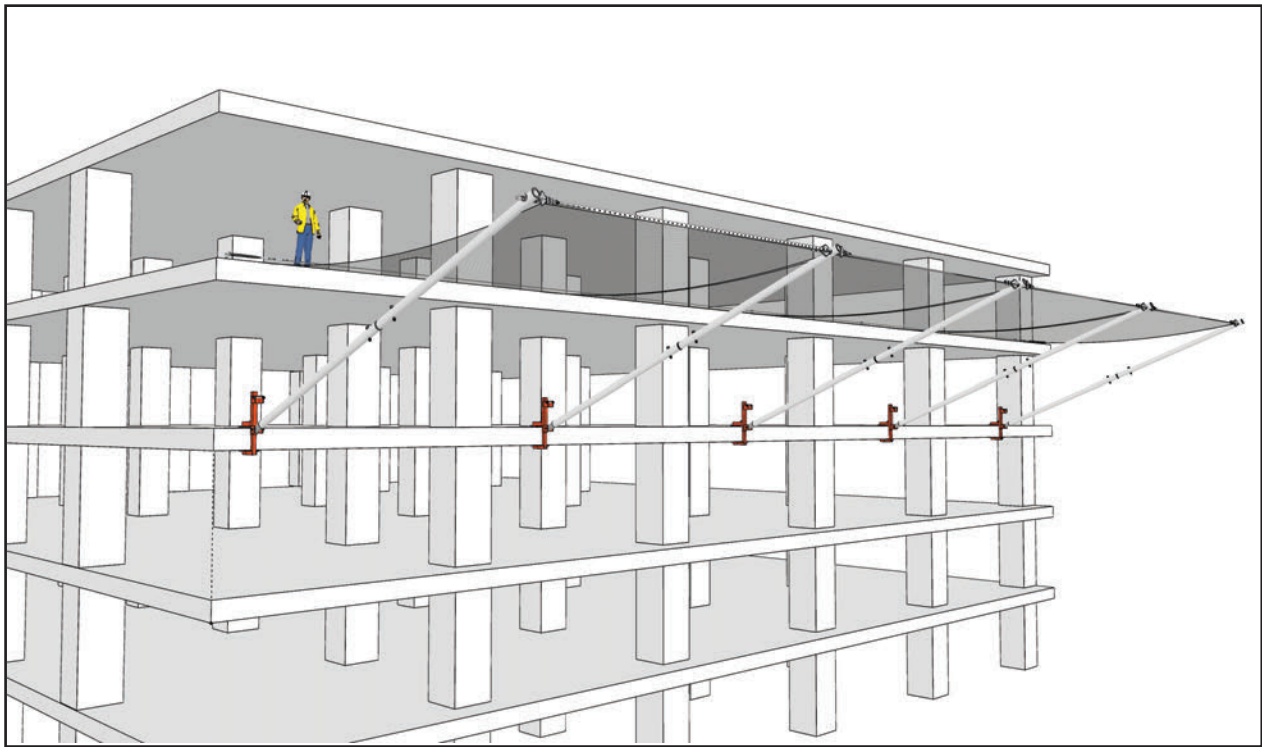


PERSONNEL SAFETY NETTING INSTALLATION



Compliant with OSHA 1926.502 and ANSI A10.11-2016

Warning: The user must follow the manufacturer's instructions for each component of the system. These instructions must be provided to the user of this equipment. The user must read and understand these instructions before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this product. Alterations or misuse of this product, or failure to follow instructions may result in serious injury and/or death.

Important: Before using this equipment, record the Date of Purchase and Type of System (PSN/Debris) in the inspection and maintenance log section of this manual.

Rev1-0122PSN



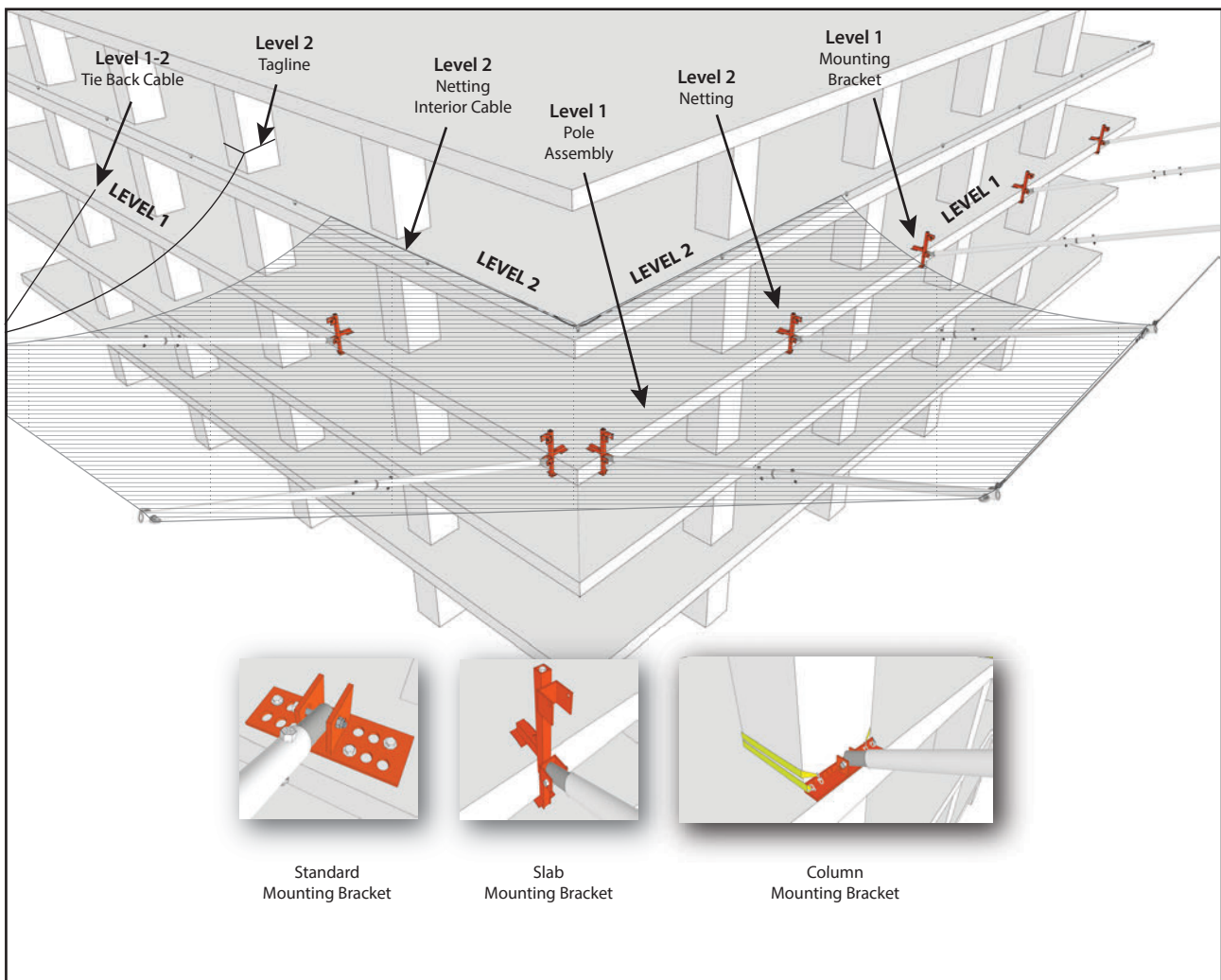
System Mounting Overview

There are different types of brackets that can be used on the PSN Netting System (Standard Mounting Bracket, Slab Bracket, Column Mount Bracket). After you install any one of the bracket options, the directions are the same.

In a typical installation, the brackets and poles will be placed on Level 1, and cables (interior cable, hardware and netting) will be placed on Level 2. It is recommended that you stage all the necessary hardware on each respective floor and do an inventory of pieces before you begin installation.

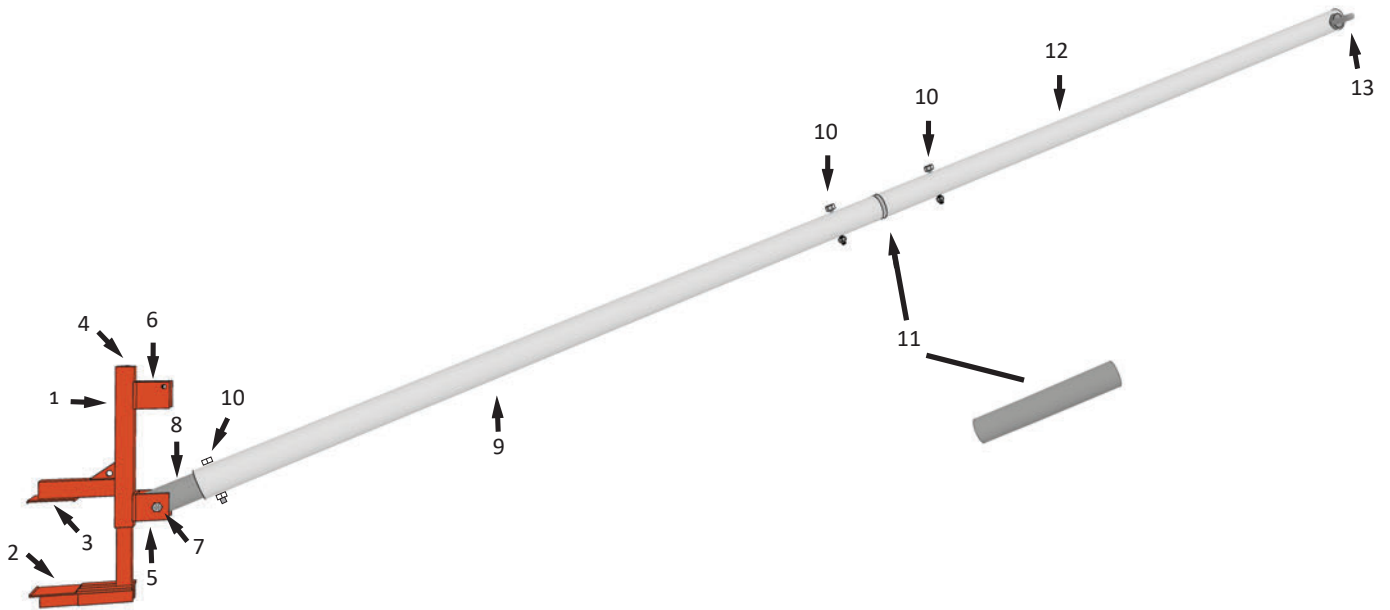
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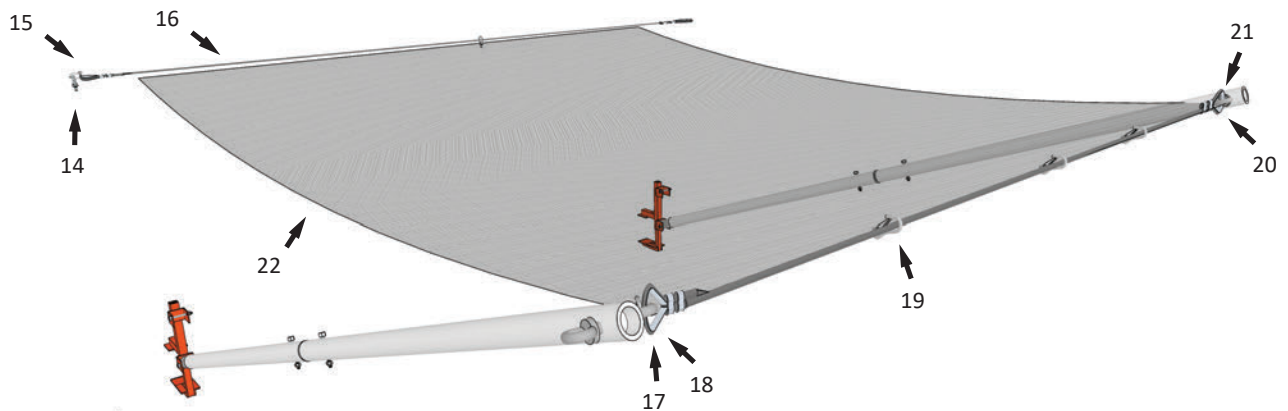
PERSONNEL SAFETY NETTING SYSTEM



- 1. Slab Bracket
- 2. Bottom Plate
- 3. Top Plate
- 4. Bracket Adjustment Bolt
- 5. Bottom Bracket Ears

- 6. Top Bracket Ears
- 7. Bottom Ear 6" Bolt and Nut
- 8. Swivel Coupler
- 9. Bottom Pole

- 10. Bolt & Lock Nut (attach coupler and pole)
- 11. Mid Coupler (inside of poles)
- 12. Top Pole
- 13. B7 Stud and Eyenuts



- 14. Interior Cable Eyebolt
- 15. Shackle
- 16. Interior Net Cable

- 17. Shackle
- 18. Closed end of Exterior Cable
- 19. Snap Hook on net

- 20. Closed end of Exterior Cable
- 21. Shackle
- 22. Net



1.0 Applications:

The PSN Perimeter Net System is designed for, but not limited to, the following applications:

- Perimeter netting around the outside of a building
- Areas left undecked during construction, within the perimeter of the building
- Bridges, towers, drilling rigs, power and chemical plants, oil refineries, dams, etc.

1.1 Limitations

The following application limitations must be recognized and considered before using this product. Failure to observe the product limitations could result in serious injury and/or death.

1. **Wind loads:** The PSN Net System may add wind loads to your structure. An engineer should evaluate any effect on the safety of the supporting structure. Small mesh debris liners increase the likelihood of wind damage to the net. When using a debris liner, additional cable ties (one foot on center) may need to be installed on each border of the netting. Do not rely solely on hooks, as hooks may be damaged.
2. **Sharp edges and abrasive surfaces:** Avoid installing nets over sharp edges or abrasive surfaces where movement by wind may cause chafing. If necessary, protect the net by covering the sharp or abrasive surface with a light pad. Do not drag nets over abrasive surfaces.
3. **Ultraviolet exposure:** The strength of the nets will be reduced in time by exposure to ultraviolet light (sunlight, welding). Always store nets in a clean, dry area away from sunlight when not in use.
4. **Heat:** Protect nets from heat such as; welding, metal cutting, burning, etc. Weld slag may burn or melt the netting.
5. **Debris:** Keep nets free of rubbish and debris (particularly very heavy or abrasive objects). The net should be installed so that a daily plan to remove debris can be performed.
6. **Snow and Ice:** Keep nets cleared of snow and ice. Light accumulations may damage the net system and impose unsafe loads on the system. The net system should be installed so that a plan to remove snow and ice can be performed.

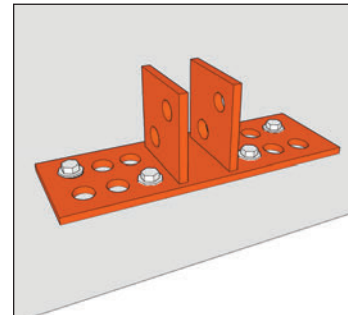
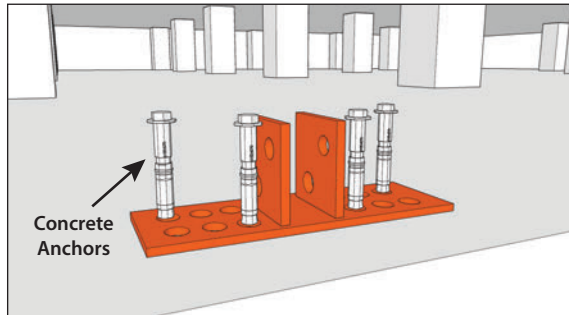
VERY IMPORTANT NOTE: Pull the nets to a vertical position when weather reports indicate heavy winds (30 mph or greater), rain, snow and/or ice is eminent. Failure to do could cause system failure and injury.

7. **Corrosive environments:** Do not use or store nets in corrosive environments where contaminants, such as corrosive vapors exist. Contact us if using this equipment in corrosive environments.
8. **Installation:** The perimeter net must be properly installed in accordance with the requirements found in the manual. Please contact us if you have any questions about installation or usage.
9. **Training:** The equipment is intended to be installed and used by persons who have been properly trained in the correct application and use.

It is the responsibility of the user and the purchaser of the equipment to assure that they are familiar with the instructions contained herein, trained in the correct care and use of the system and are aware of the operating characteristics, application limits and the consequences of improper use of the equipment.

System Mounting Overview for Standard/Floor Bracket

When working on non-post tension decks, you can use a Standard/Floor Mounting Bracket. Using this type of bracket requires drilling into the deck itself. Place brackets at desired locations according to layout diagram and secure bracket to deck using 4" concrete anchors.



System Mounting Overview for Column Mount Bracket

In instances where a standard floor mount or Slab bracket mounting bracket can't be used, a column mount bracket may be a good alternative. There are 2 options for using a column mount bracket:

Installed at deck level

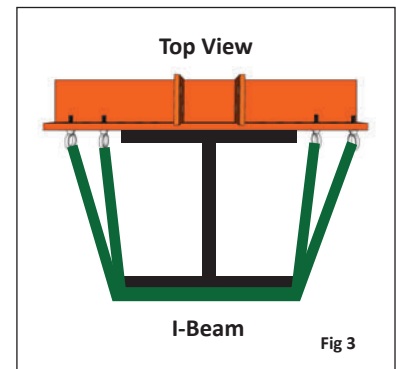
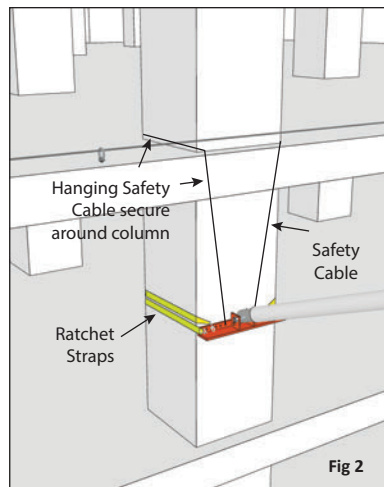
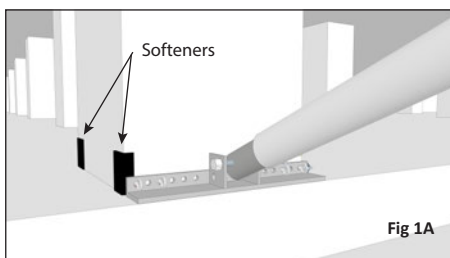
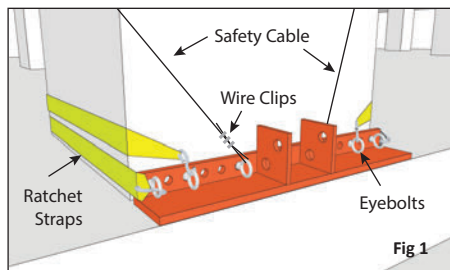
Lay Column Mount Bracket on edge of deck and secure around column using ratchet straps. (See Fig 1).

NOTE: Softeners must be used to prevent damage to ratchet straps. Failure to do so could result in strap failure. Wire Rope Safety Cable must be used on all column brackets. (See Fig 1A)

Hanging on Column

Wrap wire rope around column on floor above bracket and attach to bracket using wire rope clamps. Use 3/8" wire rope (minimum). Lower bracket to desired position and use ratchet straps to secure to column. (See Fig 2)

Can be used on I-Beams as well. (See Fig 3)



Installation of Brackets

1. Based on the netting layout, determine where slab brackets will be placed on existing deck. Layout and mark the first bracket and use that as the starting point to determine where the next bracket is to be placed. If there is a corner net, position the corner brackets as close together as possible. If a building column is located at the corner, additional hardware and netting may be required. (see figure 1)
2. Measure width of slab and adjust the jaws of slab bracket to accommodate slab depth (use impact drill). Slide bracket into position so that the vertical tube sits against the face of the slab. Attach tagline to hole in upper ear. Secure the opposite end to prevent bracket from falling to lower level in the event the bracket were to become dislodged from slab edge. (see figure 2)
3. Use impact drill with proper socket size and screw closed so that the plates (upper and lower) are in contact with concrete slab. (see figure 3)

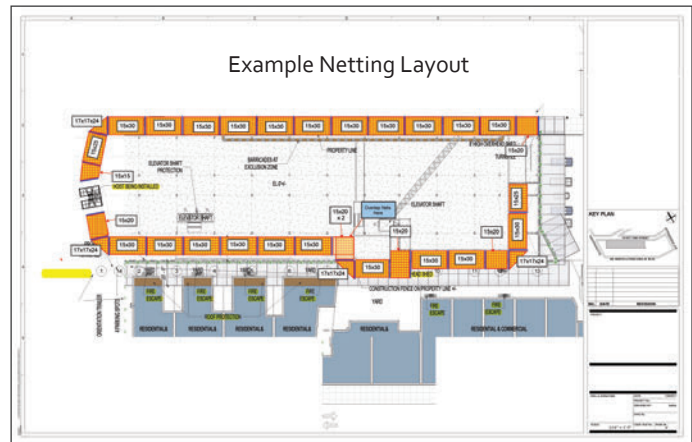


Fig 1

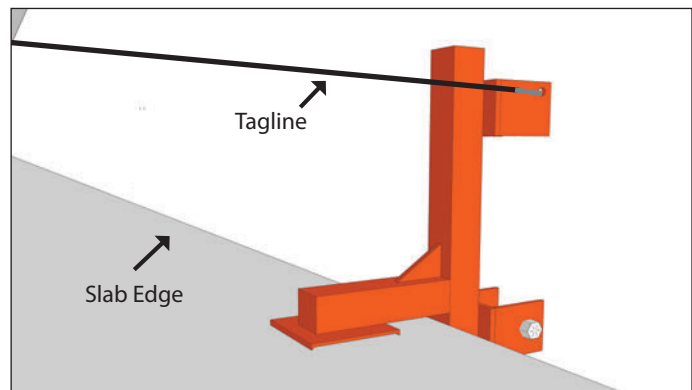


Fig 2

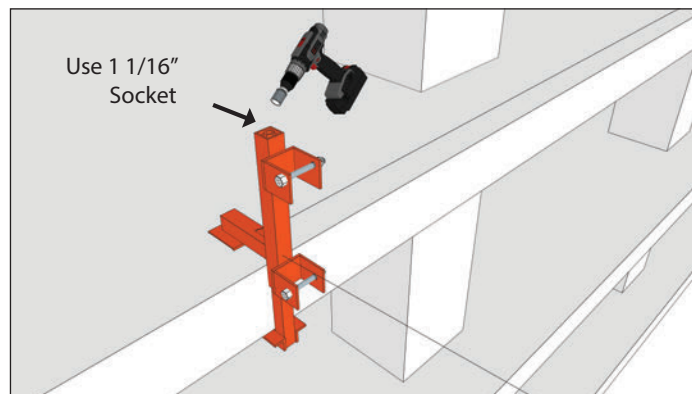
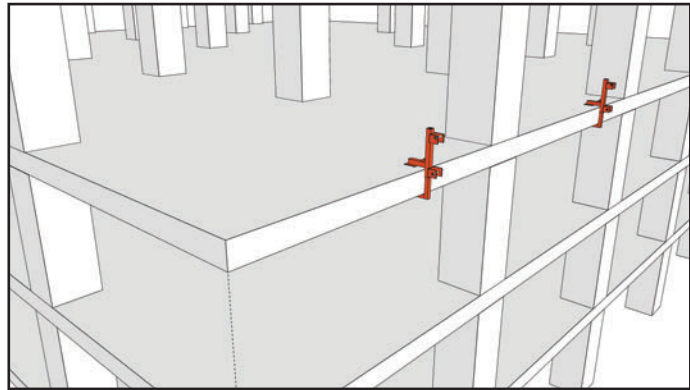


Fig 3



PERSONNEL SAFETY NETTING SYSTEM

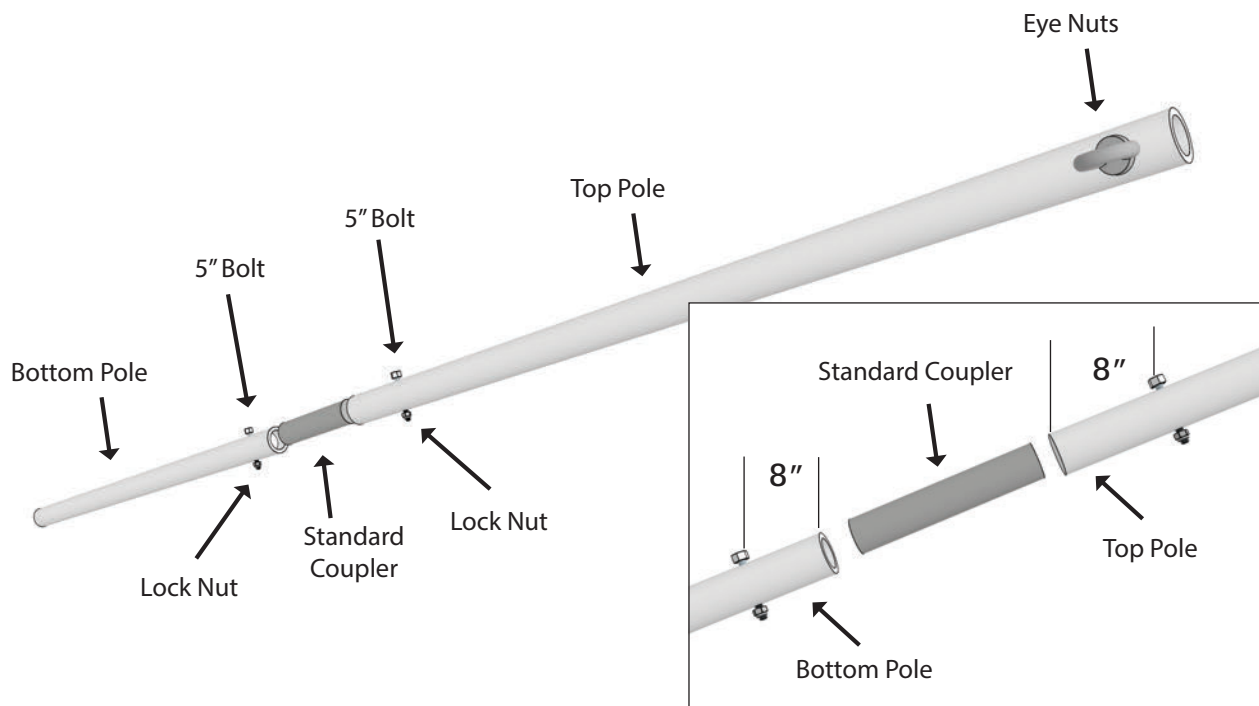
- Using the netting layout diagram, install the rest of the brackets on that particular run/side of building. Make sure you tighten to proper torque setting.



Preparing Arms

An arm is made up of 3 parts: Bottom Pole, Top Pole and Standard Coupler. Assemble entire arm on the deck before lifting in place to attach to the slab bracket.

- Lay pieces on deck surface
- Slide Standard Coupler into Bottom Pole till the holes in Pole and Coupler align.
- Attach Bottom Pole and Standard Coupler with 5" bolt and Lock nut. **NOTE: Make sure bolt is on top of pole facing down and lock nut is on bottom.**
- Slide Top Pole onto Standard Coupler until the holes align and secure with 5" bolt and lock nut.
- Assemble the rest of the arms and lay them close to each corresponding slab bracket.



Setting Up the Interior Cable

NOTE: All interior cables are installed on floor above bracket level.

There are multiple options for setting up the netting interior cable. Chose the option that best fits your environment.

OPTION A:

When column is close to leading edge of deck.
(see figure 4)

1. Start installation of interior cable on the floor above the system mounting bracket. [Net Level]
2. Wrap the cable around the first column. [i.e. Concrete/Steel column]
3. Start by placing the eye end of the cable around the column inserting the open end through the eye.
4. Do the same with the remaining columns.

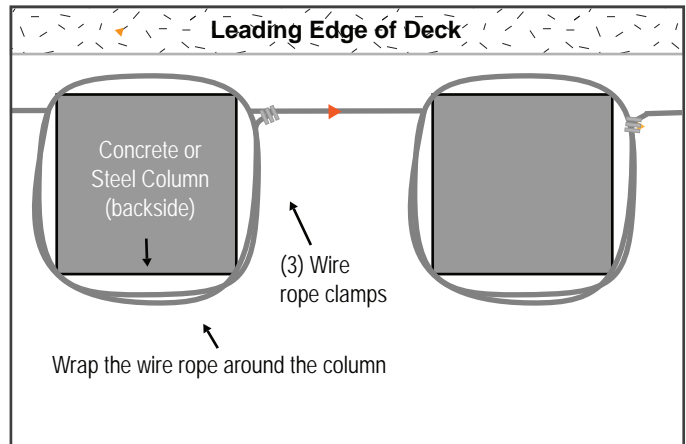


Fig. 4

OPTION B:

When column is back from leading edge of deck. (see figure 5)

1. At the beginning of the run, embed eyebolt into deck, making sure cable is back far enough from edge to ensure that there are no gaps between net and slab edge. NOTE: Depending on distance between columns, you may have to insert additional eyebolts to keep interior wire rope back from leading edge. Before you get to the last eyebolt, insert a turnbuckle (see figure 6). This will allow you to put tension on the cable.
2. Before you get to the last eyebolt, insert a turnbuckle (see figure 6). This will allow you to put tension on the cable.

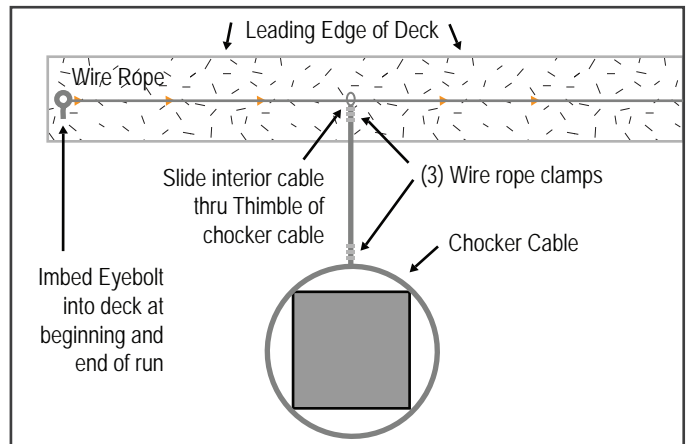


Fig. 5

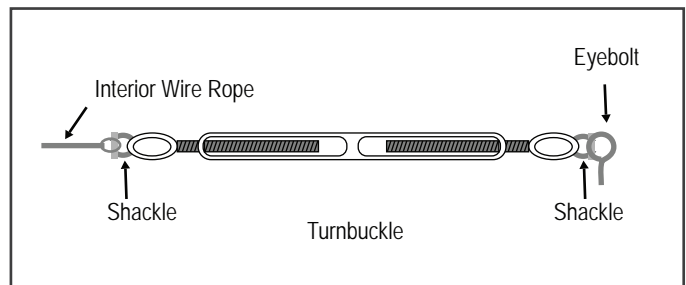


Fig. 6

OPTION C:

Using Slab Bracket if you can't drill into deck. (see figure 7)

1. Place Slab Bracket around the corner, making sure that the interior cable is back far enough from edge to ensure that there are no gaps between net and slab edge. Attach interior wire rope cable to slab bracket and thread wire rope through eyebolt and/or choker cables. NOTE: Depending on distance between columns, you may have to insert additional eyebolts to keep interior wire rope back from leading edge.
2. Before you get to the last eyebolt, insert a turnbuckle (see figure 6). This will allow you to put tension on the cable.

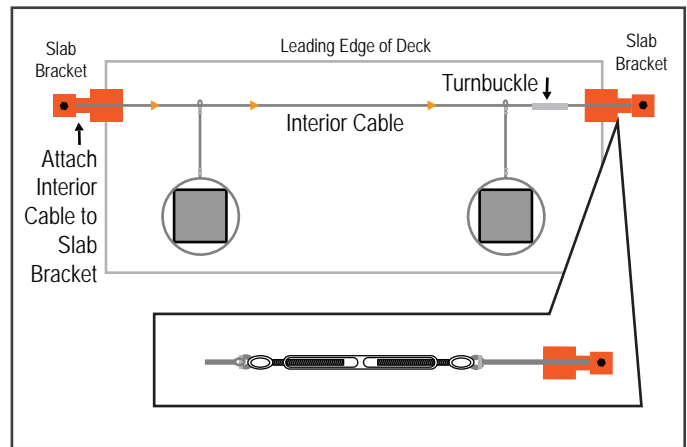


Fig. 7

Getting Ready to Attach Arms

1. Take Swivel Coupler and attach it between bottom ears on Slab Bracket using 6" bolt and lock nut.
2. Attach all other Swivel Couplers to remaining Slab Brackets. (see figure 8)

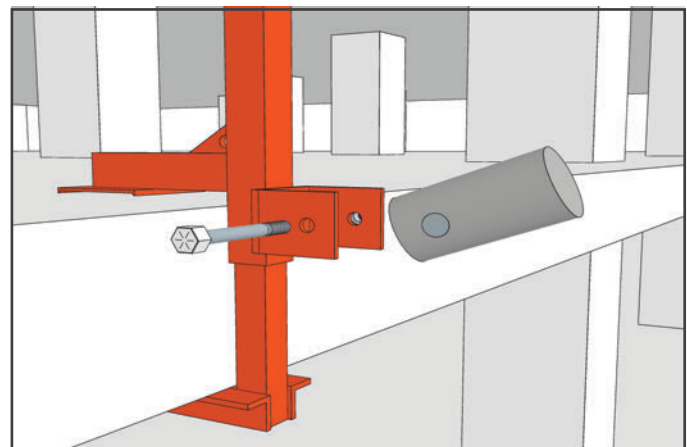


Fig. 8

Lifting Arms onto Slab Brackets

1. From 2 floor above bracket level, lower 2 tag lines and attach to eye nuts on top of pole.
2. Slowly lift pole into vertical position about bracket and swivel coupler. (see figure 9)

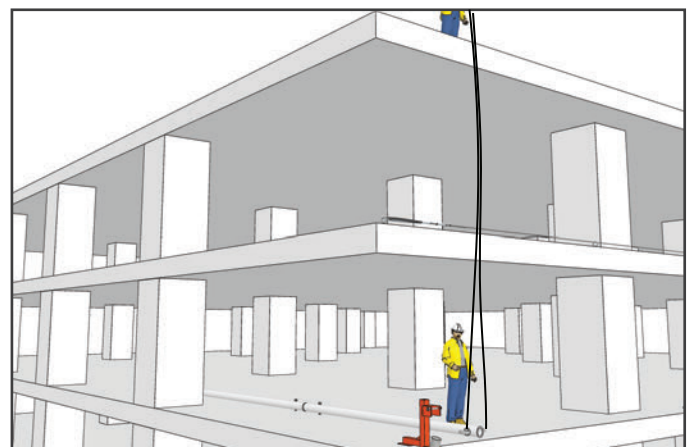


Fig. 9

Lifting Arms onto Slab Brackets

1. From 2 floors above bracket level, lower (2) tag lines and attach to eye nuts on top of pole.
2. Slowly lift pole into vertical position above bracket and swivel coupler. (see figure 10)

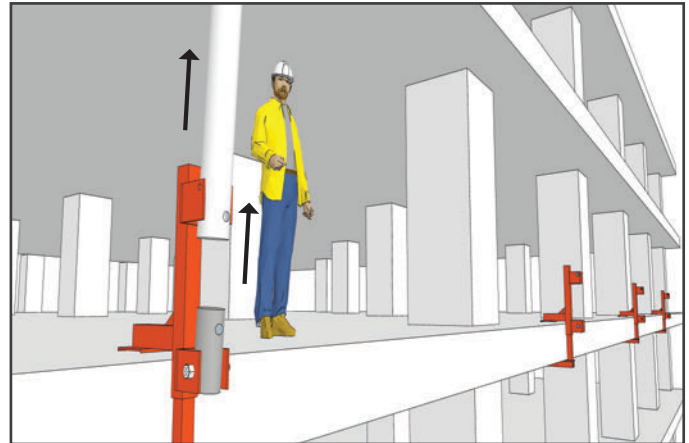


Fig. 10

3. When aligned, slowly lower pole onto swivel coupler and attach pole to coupler using 5" Bolt and Lock nut. (see figure 11)



Fig. 11

4. Make sure the head of bolt is on top side of pole and lock nut is on bottom side. (see figure 12)

Note: Once pole is bolted into bracket, use tagline (at top end of pole) and tie it back to a structural point on building to keep pole secure and upright in a vertical position. Failure to do so at this point could result on system failure and injury.

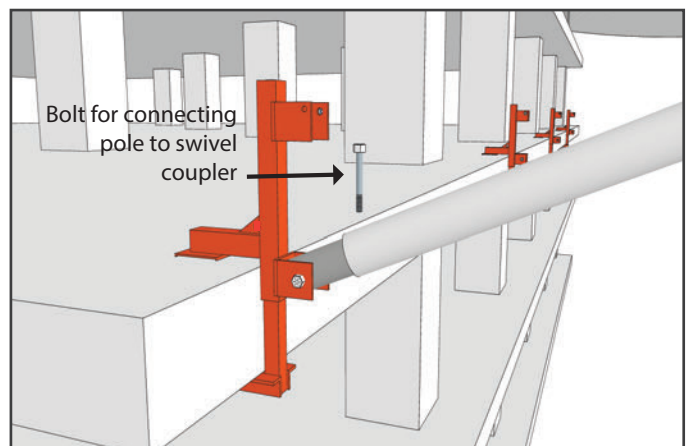


Fig. 12



PERSONNEL SAFETY NETTING SYSTEM

Securing Arms

1. Pull arm up against building (using tagline) and make sure that it's cradled between top ears on bracket. (see figure 13).

IMPORTANT: All poles should have a tagline attached to eyenut at end of arm. The taglines are used for raising and lowering both the arm and net. When arms are in vertical position, the tagline must be tied off to a structural point.

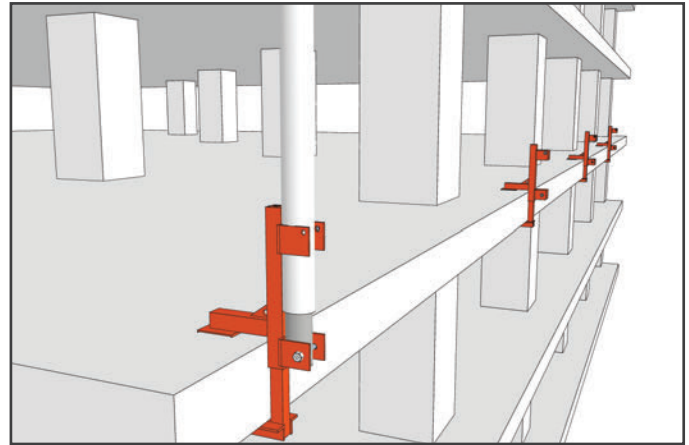
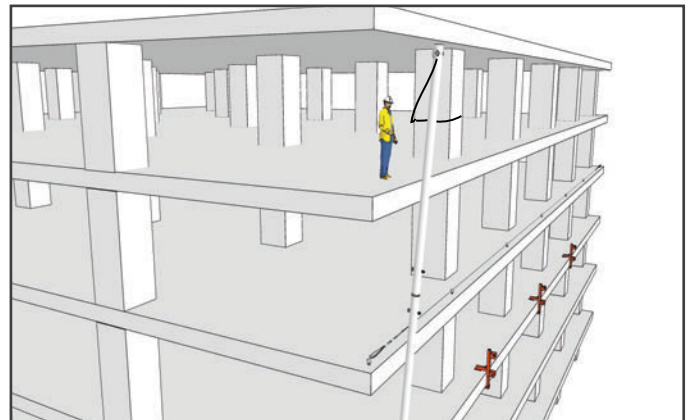


Fig. 13

2. Use tagline (at top end of pole) and tie it back to a structural point on building to keep pole secure and upright in a vertical position. Failure to do so at this point could result on system failure and injury.
3. Continue doing the same process with the remaining brackets and arms.



Attaching Exterior Net Cable

1. After poles are secured in vertical position, you can begin to install exterior netting cable. Adjust the length of the exterior net cable to the corresponding net size. Close the open end of the cable using a thimble and [3] wire rope clips.
2. Place shackle on eyenut at end of arm and hook closed ends of the exterior wire cable into the shackle. Continue same process for remaining arms. (see figure 14)

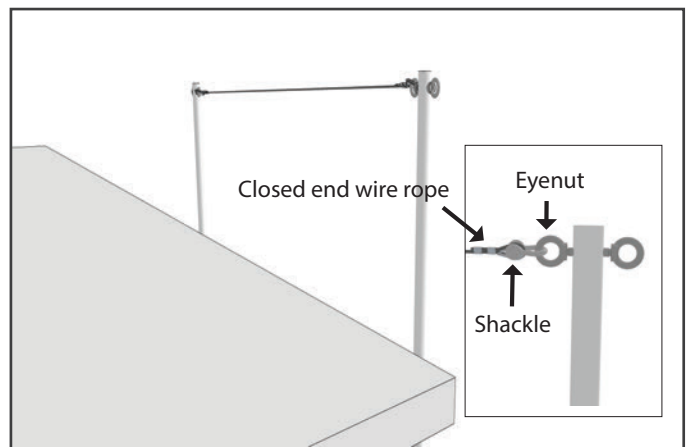


Fig. 14



PERSONNEL SAFETY NETTING SYSTEM

Attaching Net To Arms/Poles and Exterior Cable

1. With poles in vertical position and tied back against deck, clip corner of net into eyenut. Then clip the rest of the snap hooks onto exterior netting cable. Snap hooks are approximately 3' apart. (see figure 15)

Note: snap hooks at corner of net should be snapped into eyenut at the end of the pole.

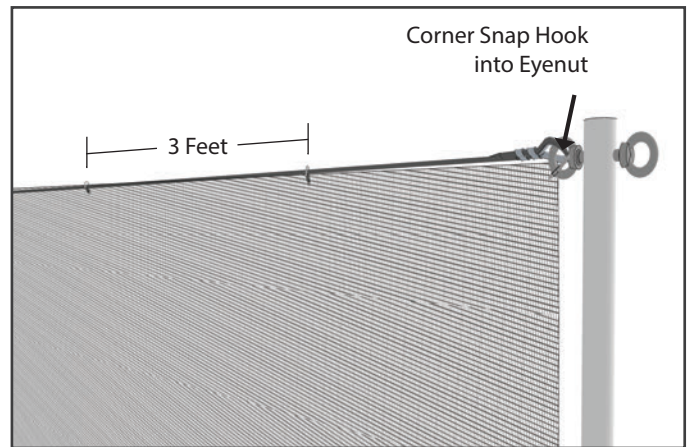


Fig. 15

2. After all the nets have been hooked to poles and exterior cables and nets are hanging down, begin to hook all nets to the interior cable at the floor of the deck. (see figure 16)

Securing Nets Together

1. In order to make sure that the nets are attached to each other, you must connect the sides of the nets together. Working on the left and right side of each net, pull a snap hook and connect it to the net next it. Make sure the snap hooks are snapped to border rope of each net and are staggered evenly all the way from the top to the bottom. (see figure 17)

NOTE: The net and snap hooks should be over the top of the pole, NOT underneath it.

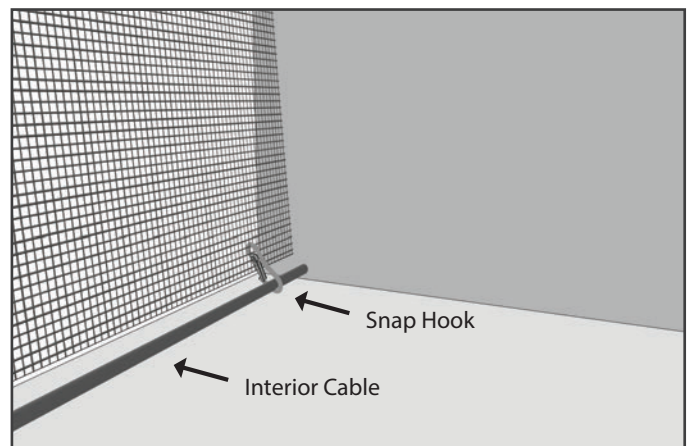


Fig. 16

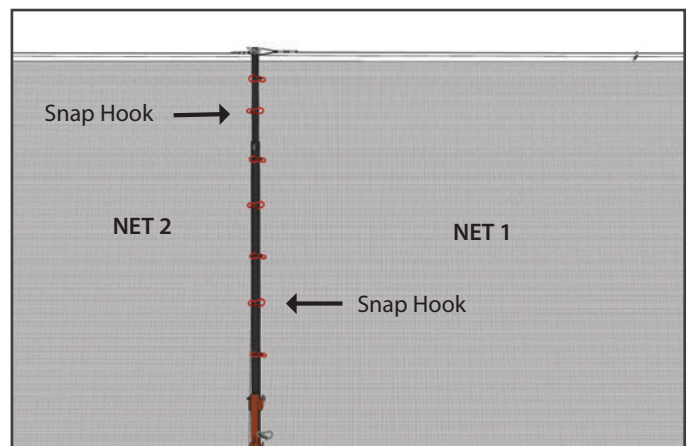


Fig. 17



PERSONNEL SAFETY NETTING SYSTEM

Deploying the System

1. Once all nets (on that particular run) have been connected together (via snap hooks), the system is ready to be deployed.
2. Have the person on the floor above, slowly release each tagline until the net is let out. Once the net is in the proper position, tie the tagline back to building.

IMPORTANT NOTE: Once entire system is deployed, inspect the brackets to make sure that they are tight against deck, aligned correctly and that the nets aren't tangled on anything that keeps them from being deployed. Have a supervisor sign off and remember to do daily inspections.

