

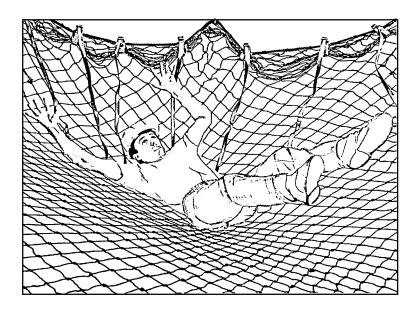
## User Instruction Manual Adjust-A-Net<sup>™</sup> Personnel Net System

This manual is provided as the Manufacturer's Instructions, and should be used as part of an employee training program as required by OSHA.

**WARNING:** This product is part of a personal fall protection system. 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 or death.

**IMPORTANT:** If you have any questions on the use, care, application, or suitability for use of this safety equipment, contact DBI/SALA.

**IMPORTANT:** Before using this equipment, record the product identification information, found on the ID label, in the inspection and maintenance log in section 9.0 of this manual.



#### DESCRIPTION

The DBI/SALA Adjust-A-Net is a personnel safety net designed for fall protection or debris capturing. The Adjust-A-Net is easily adjusted to fit most work spaces. The Adjust-A-Net is available with a debris liner for debris capturing. The Adjust-A-Net meets the requirements of OSHA 1926.105, OSHA 1926.502, ANSI A10.11-1989, and U.S. Army Corps of Engineers General Safety Requirements 07.D.

## 1.0 APPLICATION

**1.1 PURPOSE:** The Adjust-A-Net is designed for, but not limited to, the following applications:

- Areas left undecked during construction, within the perimeter of the building.
- Perimeter netting around the outside of a building.
- Elevator shafts, service chases, tower cranes, skylights.
- Bridges, towers, drilling rigs, power and chemical plants, oil refineries, silos, dams, ship's hold.

#### 1.2 LIMITATIONS:

- A. WIND LOADS: The Adjust-A-Net 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 connections (one foot on center) on each border should be installed. Do not rely solely on hooks, as hooks may be damaged.
- **B.** SHARP EDGES AND ABRASIVE SURFACES: Avoid installing nets over sharp edges or abrasive surfaces, where movement by wind may cause chafing. If necessary, protect net by covering the sharp or abrasive surface with a heavy pad. Do not drag nets over abrasive surfaces.
- **C. ULTRAVIOLET EXPOSURE:** The strength of nylon nets will be reduced in time by exposure to ultraviolet light (sunlight, welding). Always store nets in a clean, dry area, away from sunlight.
- D. HEAT: Protect nets from heat, such as; welding, metal cutting, burning, etc. Weld slag will burn or melt the nylon cord.
- E. DEBRIS: Keep nets free of rubbish and debris, particularly abrasives, which may become embedded and cut fibers. The net should be installed with a plan for removal of debris.
- F. SNOW AND ICE: Keep nets cleared of snow and ice. Heavy accumulations may damage the net system and impose unsafe loads on the supports and structure. The net should be installed with a plan for removal of snow and ice.
- **G.** CORROSIVE ENVIRONMENTS: Do not use or store nets in corrosive environments where contaminants, such as corrosive vapors, exist. Contact DBI/SALA if using this equipment in corrosive environments.
- 1.3 APPLICABLE STANDARDS: See ANSI, OSHA, state, and local requirements for more information on use of this system.

## 2.0 SYSTEM REQUIREMENTS

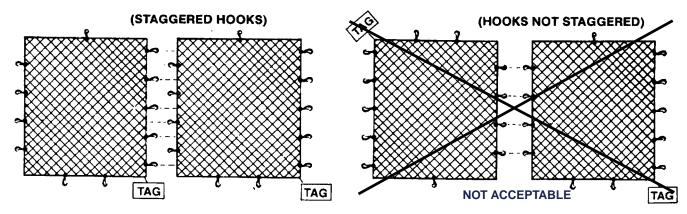
#### 2.1 INSTALLATION REQUIREMENTS:

- A. INSTALLATION HEIGHT: The Adjust-A-Net must be installed as close to the work area as possible, and should never be more than 30 feet below the highest working surface from which a person could fall. Nets must be installed with sufficient clearance to prevent the user from striking a surface or structure below when subjected to an impact force equal to the drop test specified in OSHA 1926.502-1996, or be certified to be compliant with the standard by a competent person. See OSHA 1926.502-1996 for more information.
- **B. ANCHORING STRENGTH:** Safety nets and their installations must be installed according to the requirements stated in OSHA 1926.502, and must be capable of absorbing an impact force equal to the drop test specified by OSHA. If the employer can demonstrate it is unreasonable to perform the drop test specified by OSHA, the employer or a designated competent person must certify the net and net installation is in compliance with OSHA requirements.
- **C. OUTWARD EXTENSION:** The Adjust-A-Net must extend outward from the outermost projection of the work surface as follows:

| Vertical distance<br>from working level to horizontal plane of net |         |  |
|--------------------------------------------------------------------|---------|--|
| Up to 5 feet                                                       | 8 feet  |  |
| More than 5 feet up to 10 feet                                     | 10 feet |  |
| More than 10 feet                                                  | 13 feet |  |

D. MULTIPLE NET SYSTEMS: Adjust-A-Net systems are equipped with snap hooks attached to the border rope at four feet intervals staggered on opposite sides and ends. Nets may be connected together to form larger panels by connecting adjacent nets. Always stagger the hook connections between nets as shown below. Multiple net systems must be lashed or otherwise connected together every six inches. When connecting nets to form larger panels, connect adjacent hooks over the border rope. Do not connect hooks to one another. From

OSHA 1926.502: Connections between safety net panels shall be as strong as integral net components and shall not be spaced more than six inches apart. Multiple net systems must be attached along the four outside edges to properly sized and supported cables.

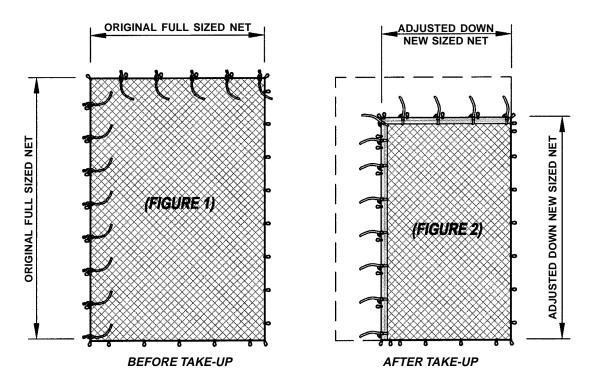


### 3.0 INSTALLATION AND USE

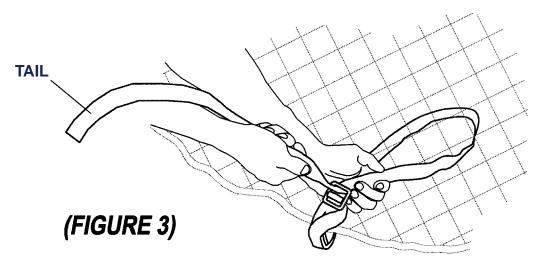
**WARNING:** Do not alter or intentionally misuse this equipment. Contact DBI/SALA if using this equipment in combination with other components or subsystems other than those described in this manual. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, and sharp edges.

**WARNING:** Age and fitness seriously affect a person's ability to withstand a fall. Consult a doctor if there is reason to doubt your ability to withstand a fall. Pregnant women and minors must not use this system.

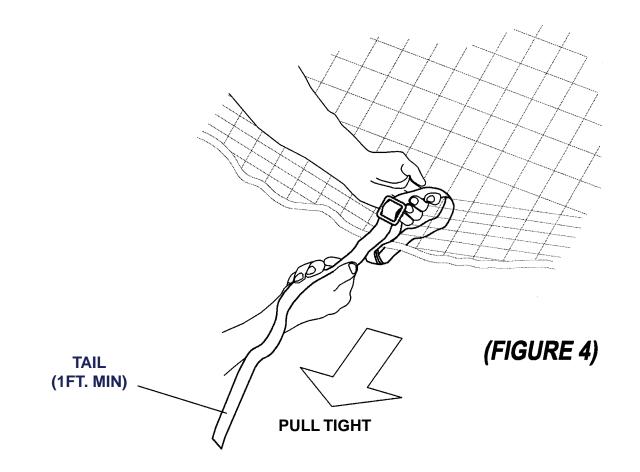
- **3.1 BEFORE EACH USE:** Carefully inspect this equipment according section 5.0 of this manual. Do not use if inspection reveals an unsafe condition. Plan the use of the fall protection system before exposing employees to dangerous situations. Consider all factors affecting employee's safety before using this system.
- **3.2 INSTALLATION:** The Adjust-A-Net must be attached along the four outside edges to properly sized and supported cables. Always erect nets with hook openings facing down. See section 2.1(C) if using a multiple net system.
- **3.3 ADJUSTING NET SIZE:** The Adjust-A-Net is adjustable on the ground before installation, or in place to reduce sag or re-size to fit your work space. See Figures 1 and 2.



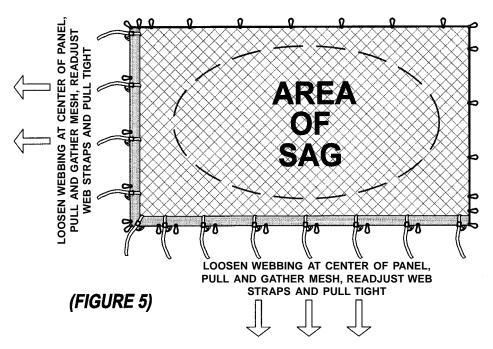
Step 1. To adjust the net size, start by threading the webbing tail through the desired amount of net you wish to reduce. After looping the webbing strap assembly tail around the desired quantity of meshes, feed the tail under the top bar of the buckle as shown. Pull web strap tight. Web strap assemblies on two edges of the Adjust-A-Net allow for infinite length adjustment. See Figure 3. Note: Do not adjust debris net size. Allow debris net to lay on top of the personnel net.



**Step 2.** Complete the operation by feeding the tail of the assembly through the buckle one more time, over the center bar and under the bottom bar as shown, and once again pull tight to secure. Note: Strap must be pulled tight enough so that a minimum of one foot of webbing has been fed through the buckle. Repeat this procedure on every web strap assembly along one or both adjustable sides of the panel. See Figure 4.



**Step 3.** After panel or panels have been installed, removal of additional sag may be desirable for clearance purposes. Sag can be removed by gathering up additional meshes from and near the center of the panel along each side of the unit. See Figure 5.



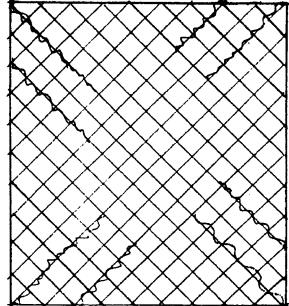
## 4.0 TRAINING

**4.1 TRAINING:** It is the responsibility of all users of this equipment to read and understand these instructions, and are trained in the correct installation, use, and maintenance of this equipment. All users must be aware of the consequences of improper installation or use of this equipment. This user instructions manual is not a substitute for a comprehensive training program. Training should be done on a periodic basis.

## 5.0 INSPECTION

- **5.1** The Adjust-A-Net and the installation must be inspected by a competent person after initial installation, before being used as a fall protection system, whenever relocated, after major repair, after impact loading, and at weekly intervals, according to OSHA 1926.502 and ANSI A10.11-1989. Record inspection results in section 9.0.
  - Inspect mesh ropes, perimeter ropes, hardware, connectors, and suspension systems. Nets that show mildew, wear, damage; including damage to hardware and the suspension system, or deterioration that may substantially affect their strength must be immediately removed from service for repair or replacement.
- **5.2** If inspection reveals an unsafe or defective condition, remove unit from service and destroy, or contact DBI/SALA for repair or replacement.
- 5.3 See Figure 6. The Adjust-A-Net incorporates eight test strands (two in each corner) which may be removed and returned to DBI/SALA for breaking strength tests at no charge. Do not cut the cords which form the net. Include the net serial number and size with the returned test strands. DBI/SALA recommends removing the net from service when the breaking strength of test strands falls below 75 percent of the original breaking strength. DBI/SALA makes no claims nor draws any correlation between test strand strength versus "on the job" results.

(FIGURE 6)



# 6.0 MAINTENANCE, SERVICING, STORAGE

### 6.1 Debris must be removed from the Adjust-A-Net daily as follows:

- **Personnel Net Systems:** Check net systems daily and clean them out whenever debris is in the net. Remove any damaged nets and return to DBI/SALA for repair or replacement. When nets are removed, no work should take place in that area unless another fall protection system is used. Spare nets may be installed to replace damaged nets.
- Combination Systems (Personnel Safety/Debris Containment): Check the net systems daily and clean them out whenever debris is in the net. Remove any damaged nets and return to DBI/SALA for repair or replacement. When nets are removed, no work should take place in that area unless another fall protection system is used. Spare nets may be installed to replace damaged nets.

## 6.2 SUGGESTED METHODS FOR REMOVING DEBRIS:

- Net systems that can be folded in: Fold net systems in and clean from a safe location. Use other fall protection safety equipment (i.e. lifelines, etc.) when cleaning the nets.
- Net systems that don't fold in: Lower nets to the ground or suitable work surface. Remove debris.
- Use Man Lifts, Snoopers, JLG's, Boatswain Chairs, "Spider" Baskets, Swing Stages, and other similar equipment to remove debris.
- Use suitable tools for pulling or lifting debris from net systems.

**WARNING:** Do not walk or climb into a net system to remove debris. If this is unavoidable, the worker who enters the net must be protected with an active fall protection system (i.e. retractable lifeline). The active fall protection system should be anchored to a structurally sound point of the building or structure. The anchoring point should be capable of holding a falling worker. The active fall protection system anchor point will be separate and apart from the net support (see appropriate fall protection standards).

# 7.0 SPECIFICATIONS

## 7.1 Materials:

**Net:** 3 1/2" mesh size, diamond style, nylon polyamide fiber, Weatherkote treated. **Hooks:** Zinc plated steel.

## 7.2 Strength:

Dynamic Drop Test: 17,500 ft-lbs. minimum test force 20,000 ft-lbs. ultimate strength

Patents Pending

# 8.0 LABELING

8.1 This label must be present and fully legible:

MFG. BY SINCO, INC. MIDDLETOWN, CT 1-800-243-6753 PROTOTYPE TEST: 4/24/95 by SINCO, INC. U.S. PATS: 3,129,632; 4,982,813 may apply, other Pats. Pend.

MAT'L: NYLON MFG. DATE: 5-99 SIZE: 15 X 25 SER#915250

# 9.0 INSPECTION AND MAINTENANCE LOG

### DATE OF MANUFACTURE:

### MODEL NUMBER:\_\_\_\_\_

### DATE PURCHASED:

| INSPECTION DATE | INSPECTION ITEMS<br>NOTED | CORRECTIVE ACTION | MAINTENANCE<br>PERFORMED |
|-----------------|---------------------------|-------------------|--------------------------|
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