Specification Sheet:

Single Man Tie-Off Anchor System

SwitchRail®
Modular Safety Rail System

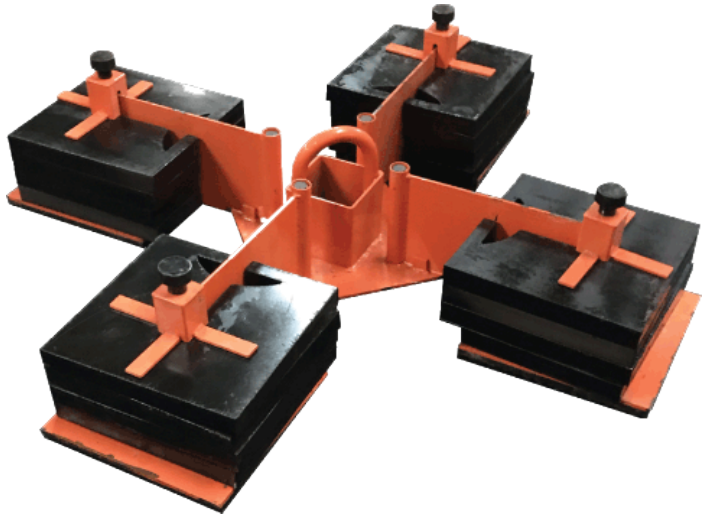
Description and Intended Use

The Non-Penetrating Single-Person Tie-Off Anchor is designed to provide a secure fall-arrest anchorage point for one worker with a maximum combined weight of 310lb, including tools and equipment.

This system is a critical component of a complete Personal Fall Arrest System (PFAS) and must be used in accordance with applicable OSHA requirements.

The anchor is intended for use in conjunction with OSHA-compliant Personal Protective Equipment (PPE), including full-body harnesses and approved energy-absorbing deceleration devices (such as self-retracting lifelines or shock-absorbing lanyards, sold separately), to provide proper fall protection and controlled deceleration forces.

(Final Configuration to be determined by Safety Manager.)



System Configuration

The system consists of a heavy-duty, steel center anchor plate with four radial arms extending to individual base plates. Each base plate supports a stack of counterweights.

The anchor system requires a total of sixteen (16) counterweights, with four (4) counterweights installed on each arm, providing a total counterweight mass of approximately 800lb.

Weight support plates may vary in size to accommodate the counterweight of 50lbs net weight, High-friction rubber pads are permanently affixed to the underside of all five bearing surfaces (one center plate and four base plates) to help prevent movement during use.

The center anchor ring serves as the sole approved tie-off connection point for the user.

System Ratings

- Anchor ring minimum tensile strength: 5,000 lb
- Maximum worker capacity (including tools and equipment): 310 lb
- Approximate total assembled system weight: 900 lb

System Requirements and Limitations

1. Single-user system only. Maximum combined worker, tool, and equipment weight shall not exceed 310lb.
2. Must be used as part of a complete OSHA-compliant Personal Fall Arrest System (PFAS), including an approved full-body harness and deceleration device. Determined by Safety Manager
3. The system shall be positioned a minimum of 15 ft from any unprotected fall hazard or roof edge, unless incorporated into an engineered fall-restraint system designed by a qualified professional.
4. The supporting surface must have adequate structural capacity to support the fully loaded system. The anchor must be placed on a stable, non-moving surface such as:
    - o Concrete
    - o Asphalt
    - o Coarse gravel
    - o Rubberized roofing surfaces
    - o Dry wood decking

   The system shall not be used in standing water or on unstable, slippery, or compromised surfaces.
5. A qualified competent person shall evaluate site conditions to verify adequate surface friction and structural suitability before installation and use. All SwitchRail® system components shall be installed and inspected by a designated competent person in accordance with manufacturer requirements.

Standard Unit Includes

- **1** Center Anchor Plate with Anchor Ring
- **4** Radial Support Arms with Base Plates
- **16** Counterweights
- **4** Counterweight Locking Devices

MADE IN USA

SwitchRail®
Modular Safety Rail System

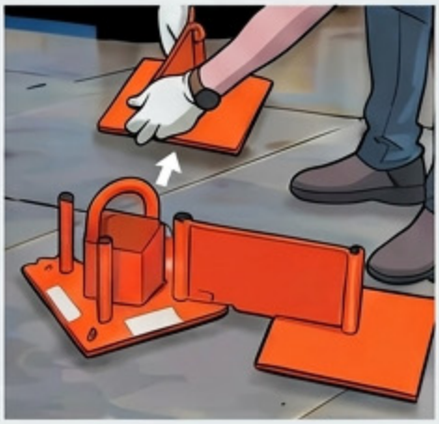
TECHNICAL SPECIFICATION SHEET: SWITCHRAIL NON-PENETRATING TIE-OFF ANCHOR

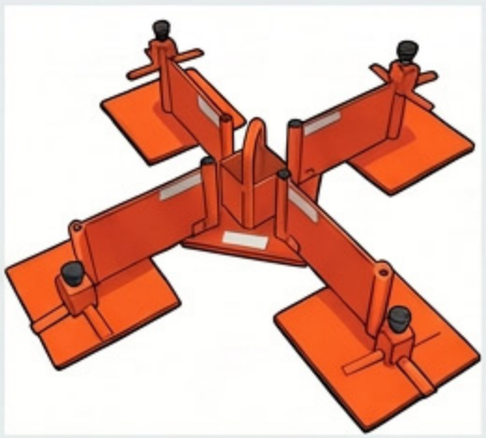
INSTALLATION INSTRUCTIONS FOR 310-LB STATIC LOAD CAPACITY (SINGLE-USER)

STEP 1: BASE ASSEMBLY

Position the center dorsal anchor point at the chosen tie-off location, typically 15 feet back from the roof edge for safe assembly.

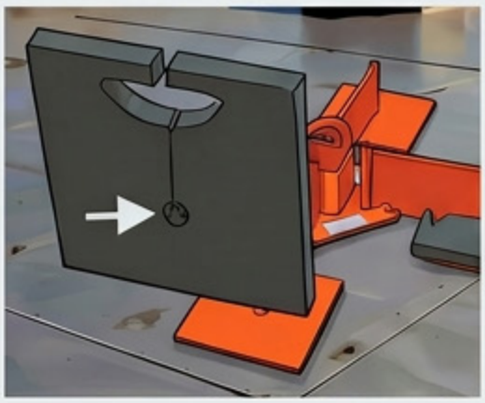
Attach the four orange wings to the center unit, installing one corner at a time until the full cross-shaped base is formed.

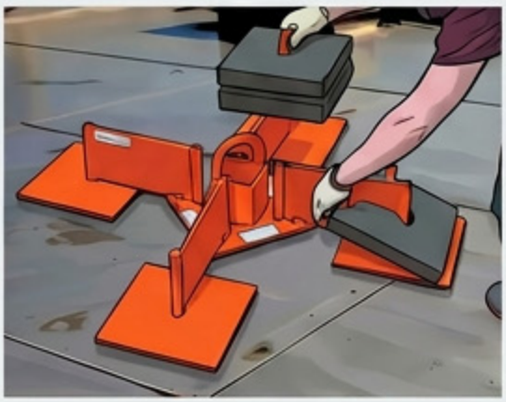


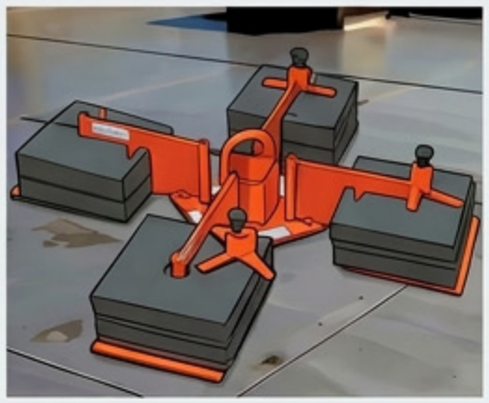


STEP 2: COUNTERWEIGHT INSTALLATION

Place four 50-lb dark grey counterweights on each of the four comers, totaling sixteen weights. Stack each weight individually, ensuring it sits flat with no pinch points. The center cutout on each weight aligns with the post on the anchor plate.







STEP 3: FINAL SECUREMENT AND LIFELINE CONNECTION

After all weights are installed, secure every stack with its respective orange locking plate and tighten each black knob to prevent movement or removal.

Once all locks are confirmed tight and the system is fully weighted, connect your red retractable lifeline to the center dorsal attachment point.

COMPLIANCE STATEMENT

This anchor shall be used as part of a complete OSHA-compliant fall protection system, including a full-body harness and approved energy-absorbing deceleration device, to provide effective fall arrest and controlled deceleration during a fall event. Final selection, configuration, and compatibility of all fall protection components shall be determined by the designated Safety Manager or Competent Person.