

Product Specification: SAP42DEX PT Cable Safe

System: Post-Tension (PT) Cable Integrated Anchor System

1. Overview

The SAP42DEX PT Cable Safe is an engineered, high-capacity anchor system designed for use in Post-Tensioned concrete slabs. By leveraging the slab's structural integrity while maintaining specific clearance from PT cables, this system establishes a certified, strictly controlled active travel restraint domain.

2. Technical Specifications

Parameter	Specification
Anchor Model	SAP42DEX PT Cable Safe
Substrate	Post-Tensioned Concrete Slab
Installation	Removable Coil-Rod or Anchor Bolt
D-Ring Articulation	360° Mechanical Governor
Trajectory Control® Geometry	8-0-8® Standard
Baseline AAF	214 Lbs
System Capacity	5,000 lbs (Any Direction)
Minimum Substrate Strength	2,500 PSI
Occupancy	One User Only

3. Installation & Preparation Protocol

- **Spider Anchor Placement:** Spider anchors must never be wet-set. They must be affixed to shoring/decking via pneumatic staples or wire-tied to structural elements like rebar.
- **PT Cable Protection:** Perform a full anchor count and verification prior to concrete placement to eliminate the risk of drilling into PT cables.
- **Grease Requirement:** All Whisker Set Plugs must be coated with a generous amount of Lithium White Grease prior to installation into the anchor coils to ensure ease of extraction.

- **Substrate Verification:** A minimum substrate strength of **2,500 PSI** must be verified before the anchor is utilized.
- **Removal & Restoration:** After the system is removed, the void must be patched with non-shrink liquid grout to restore the slab's integrity.

4. Trajectory Control® Standards (The 8-0-8® Standard)

- **8' Inbound Setback:** The anchor point must be located exactly 8 feet from the leading edge.
- **8' Class 2 SRL:** Operation requires a specifically rated 8-foot Class 2 Self-Retracting Lifeline.
- **Performance:** Validated at an AAF of **214 Lbs.**
- **Mechanical Governor:** The 360° D-ring articulation eliminates lateral side-loading, protecting the structural integrity of the slab and preventing stress on the PT cable zones.

5. Usage & Limitations

- **Primary Function:** Active fall restraint and perimeter guardrail stanchion.
- **Occupancy Restriction:** This system is strictly limited to **one user only**. Simultaneous use exceeds engineering specifications and invalidates certification.
- **Prohibited Actions:** Unauthorized substitutions of components, failure to use the required grease protocol, or deviation from the 8-0-8® Trajectory Control® radius.
- **Operational Environment:** For use in approved PT slab construction; consult structural plans to ensure anchor placement maintains required clearance from active PT cables.

Note: This system is engineered as a site-specific safety device. All applications must be verified by a Competent Person to ensure site-specific compliance with ANSI Z359.18-2017.