



Pole-Safe® Breakaway Light Pole Support System

Saving Lives Breakaway Light Pole Support System



Transpo's "Double-Neck" Pole-Safe[®] is an omni-directional breakaway support system for light poles located within roadside clear zones or other locations vulnerable to vehicular impacts. The primary component of the system is a high strength coupling, designed to breakaway quickly and cleanly upon

impact, thus saving lives and reducing property damage costs. "Double-Neck" Pole-Safe is omni-directional, meaning the system breaks away with consistent, predictable behavior regardless of the vehicle's angle of impact. Pole-Safe has been vehicle crashtested in accordance with NCHRP report 350, and is approved for use on all FHWA funded projects.

In addition to superior safety performance, Pole-Safe provides high structural load-carrying capacity. Extensive finite element analysis and simulated wind-load testing has been used to optimize the system for maximum loading conditions.

Pole-Safe is designed for use with the heaviest pole mass allowed for use on any breakaway system as specified by AASHTO. This allows Pole-Safe to be used on the largest possible range of light pole sizes and configurations for increased safety and efficiency.

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Pole-Safe[®]

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Features and Advantages

Superior Breakaway Performance: The precisely machined geometry of the Pole-Safe coupling design causes the system to fracture safely at relatively low force and energy levels. This unique capacity is better than AASHTO's requirements for impact velocity change. The low stub projection after impact eliminates under carriage damage to vehicle, thus reducing the risk of fire.

High Structural Capacity: Pole-Safe is available in a variety of models, designed to support many different pole configurations subjected to various loading conditions. The high strength coupling design offers exceptional resistance to forces created by wind and dead loads. All Pole-Safe crash tests were conducted using a 55' high, 930 lb. Pole, which is the maximum allowable pole mass as specified by AASHTO. The unique physical properties and breakaway performance of "Double-Neck" Pole-Safe gives designers the greatest flexibility in sizing poles for specific lighting requirements.

High Durability: All Pole-Safe couplings and hardware are hot-dip galvanized in accordance with ASTM A153 to provide proven corrosion protection in harsh roadside environments. Additionally, independent fatigue testing has demonstrated that Pole-Safe couplings are capable of withstanding more than 2 million loading cycles with no reduction in structural capacity.



Easy to Install and Maintain: No special tools or equipment are required to properly install and maintain Pole-Safe. All components are easily secured using the American Institute of Steel Construction (AISC) Turn-of-

Model Selection:

Pole-Safe Model 4000 Series:

For use with externally threaded anchor bolts.

| Pole-Safe Model No. | Anchor Bolt Diameter |
|---------------------|----------------------|
| 4062 | 5/8 in (16 mm) |
| 4075 | 3/4 in (19 mm) |
| 4100 | 1 in (25 mm) |
| 4125 | 1-1/4 in (32 mm) |

Pole-Safe Model 5000 Series:

For use with Transpo foundation anchor inserts.

| Pole-Safe Model No. | Anchor Socket Diameter |
|---------------------|------------------------|
| 5062 | 5/8 in (16 mm) |
| 5075 | 3/4 in (19 mm) |
| 5100 | 1 in (25 mm) |
| 5125* | 1-1/4 in (32 mm) |
| * Special order. | |

Nut Tightening method, which eliminates the need for precise torque levels on bolts.

Low Cost: Pole-Safe is the lowest cost breakaway system for light poles. Low initial cost coupled with high structural capacity and zero maintenance makes Pole-Safe the most cost-effective solution for all breakaway light poles.

TESTED AND APPROVED TO NCHRP 350



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