



AIR FLOW SPOILER

INSTALLATION INSTRUCTIONS

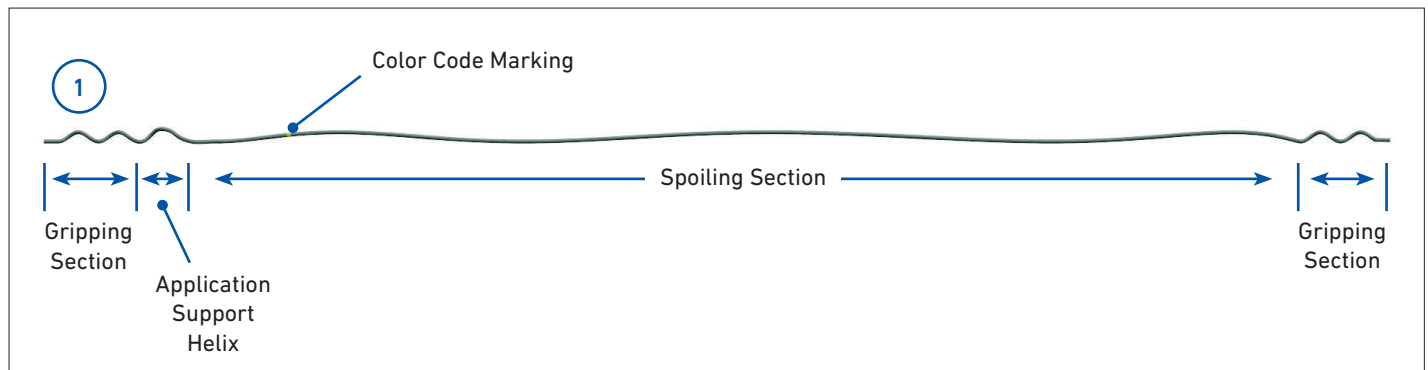


IMPORTANT SAFETY INFORMATION

READ AND COMPLETELY UNDERSTAND ALL INSTRUCTIONS BEFORE INSTALLING PRODUCT. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY OR DEATH.

This product is intended for use by trained technicians only. This product should not be used by anyone who is not familiar with and not trained to use it. When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact. Be sure to wear proper safety equipment per your company protocol. These instructions are not intended to supersede any company construction or safety standards. These instructions are offered only to illustrate safe installation for the individual. PLP products are intended for the specified application only. Do not modify this product under any circumstances. Do not reuse or reinstall any PLP product unless that capability is expressly indicated in the product's Installation Instructions. For proper performance and personal safety, be sure to select the proper PLP product before installation. PLP products are precision devices. To ensure proper performance, they should be stored in cartons under cover and handled carefully.

PACKAGE COMPONENTS



1. Air Flow Spoiler

No Tools Required

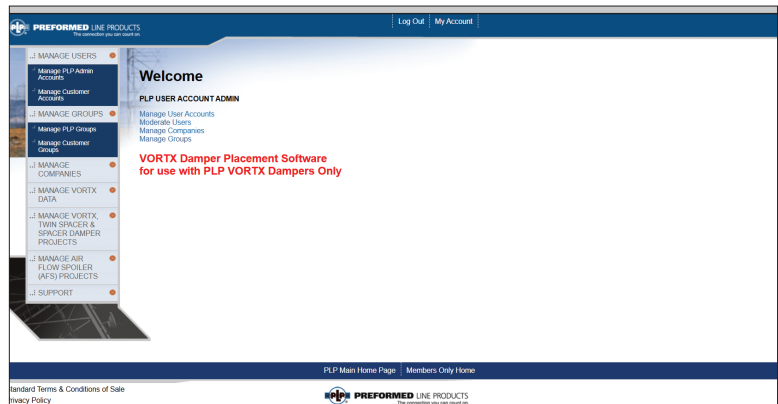
Characteristic	Specification
Gripping Sections	Grips cable. Consists of several pitches (360° wraps around the cable) and holds the Air Flow Spoiler firmly in position.
Spoiling Section	Disturbs aerodynamic lift. The spoiling section is wrapped around the cable in a manner which presents a constantly changing profile to wind flow and helps reduce lift forces which can cause galloping. The spoiling section should be wrapped around the cable as tightly as possible.
Application Support Helix	Supports the Air Flow Spoiler. The Application Support Helix on one end keeps the Air Flow Spoiler from hanging down, while the gripping section on the other end is applied.
Color Code Marking	Identifies the product's cable diameter range

BEFORE INSTALLATION

The number and placement of Air Flow Spoilers (AFS) in each span are determined by a calculator that considers the results of ongoing field and laboratory research. Several Air Flow Spoilers are required in each span to offset the aerodynamic lift forces that cause galloping.

PLPVORTX.COM

Sign up for an account and create a new AFS project at PLPVORTX.com and input your project's span lengths to generate a recommended placement form that includes per-span air flow spoiler quantities and placements.



Structure Position	Structure Name	SPAN Length (ft)	Double Circuit?	Spoilers Per Cable	Phase Cond. First Spoiler Placement Dist. From STR. (ft)	OHSWOPGW First Spoiler Placement Dist. From STR. (ft)	Distance Between Spoiler Ends (ft)	Percentage Incl. in Wind Area
1	Test	1500	Yes	29	326	N/A	14	15.1%

INSTALLATION

1

Once the location for installation of the Air Flow Spoiler has been chosen, wrap the Application Support Helix around the cable and slide the Air Flow Spoiler away from you until the first gripping section is in its correct location. The Application Support Helix prevents the Air Flow Spoiler from hanging down while the first gripping section is wrapped on.



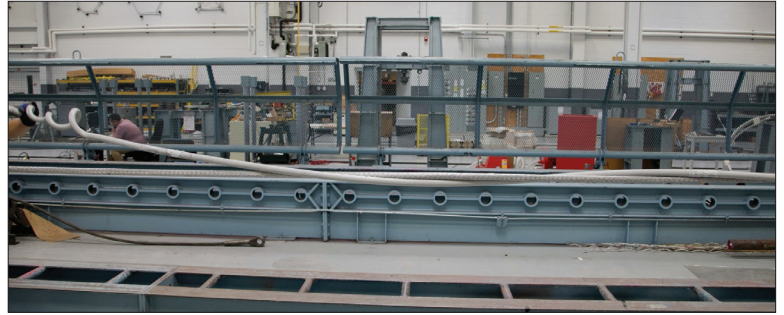
2

Wrap on the first gripping section. The transition area between the gripping section and the spoiling section should be underneath the conductor.



3

Now, move to the opposite end of the Air Flow Spoiler where the Application Support Helix is located. Remove the application support helix and wrap the spoiling section tightly around the cable. A minimum of two full wraps are needed to provide adequate coverage. For some smaller sizes, a third wrap may be required. The gap between the AFS and the conductor should be minimized to ensure the best protection. For large conductors, the AFS may need to be pulled back as it is being applied to tighten the first cabled wrap. The number of wraps necessary to keep the spoiling section tight around the conductor may change with conductor size.



4

Install the second gripping section by wrapping it around the cable and snap the end of the gripping section in place.



5

The Air Flow Spoiler installation is now complete.



IMPORTANT NOTES

Figure 8 and lashed messenger cables are special applications for short-span construction. Air Flow Spoilers should be located per the table as shown.

Please contact the factory for recommendations on longer spans. Figure 8 and lashed messenger cables are more difficult to determine correct Air Flow Spoiler size. Please provide complete dimensions of the cable so the correct size can be established.

Span Length feet	Air Flow Spoilers per Cable	Air Flow Spoiler placements start from the first structure, Distances are measured from the same end of the Air Flow Spoiler, accumulated distances in parenthesis.
100 - 130	2	33.3 (33.3), 28.8 (62.0), 48.0 (110.0)
130 - 160	3	33.9 (33.9), 28.8 (62.6), 28.8 (91.4), 48.6 (140.0)
160 - 190	3	48.9 (48.9), 28.8 (77.6), 28.8 (106.4), 63.6 (170.0)
190 - 220	4	44.5 (44.5), 28.8 (73.3), 28.8 (102.0), 28.8 (130.8)



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