

MATERIAL PROPERTY DATA SHEET

FALCON ANCHORS™

F170-SW-Z SERIES

PATENT PENDING

Specifications

Falcon Percussion Driven Anchors (PDAs) are designed to provide drive efficiency and maximize load capability across a wide range of applications. The F170-SW-Z assembly consists of a top plate that allows for vegetation establishment with one-way wire grip, tethered to a deep-seated earth anchor. Once the anchor is driven into the ground, typically 6 feet (1.8 m), the top plate is secured to the ground and held fast, holding an HPTRM or structure firmly in place. The anchor and cable grip of the F170-SW-Z are cast in the USA. The assembly is fabricated in the USA. The F170-SW-Z assembly allows for re-tensioning, negates the need for time consuming cable crimping and comes fully assembled.



Typical Pullout Resistance*		
Soil Type	Install Depth	
	3 ft	5 ft
Loose (SPT > 4)	550	950
Medium (SPT > 10)	1,250	2,250
Dense (SPT > 30)	2,500	5,500
Very Dense (SPT > 50)	3,500	8,000

System Performance	
Typical Anchor Load*	3,000 lbs
Maximum Working Load	3,500 lbs
Ultimate Assembly Strength	3,800 lbs
Ultimate Cable Strength	7,000 lbs

Components†		Physical Properties
Top Plate	Zinc-aluminum alloy inert with plastisol coated steel plate	Diameter: 6.0" (150 mm) Thickness: 0.13" (3.0 mm) Open Area: 55%
Grip	Spring-loaded crush roller	Ceramic
Cable	Zinc-aluminum coated steel	Diameter: 1/4" (6.35 mm)
Anchor	Zinc-aluminum alloy	6.7 L x 2.2 W x 1.5 H inches (170 L x 55 W x 39 H mm) Bearing Area: 12.2 in ² (79 cm ²)
Length	Varies	F170-SW-Z3: 3 ft (0.9 m) F170-SW-Z6: 6 ft (1.8 m) Additional Lengths Available

Typical Use
Heavy duty assembly for soft soils in standard ARVS systems

* Soil dependent value.

† Assembly is shown as standard configuration. Cable lengths and other components may be customized as required.

Disclaimer: The information contained herein may represent product index data, performance ratings, bench scale testing or other material utility quantifications. Each representation may have unique utility and limitations. Every effort has been made to ensure accuracy; however, no warranty is claimed and no liability shall be assumed by Western Green or its affiliates regarding the completeness, accuracy or fitness of these values for any particular application or interpretation. While testing methods are provided for reference, values shown may be derived from interpolation or adjustment to be representative of intended use. For further information, please feel free to contact Western Green.

©2021, Falcon Anchors is a registered trademark from Western Green. Certain products and/or applications described or illustrated herein are protected under one or more U.S. patents. Other U.S. patents are pending, and certain foreign patents and patent applications may also exist. Trademark rights also apply as indicated herein. Final determination of the suitability of any information or material for the use contemplated, and its manner of use, is the sole responsibility of the user. Printed in the U.S.A.

