

# LIGHTNING DIVERTER SPECIFICATIONS





PRI Registrar Performance review institute

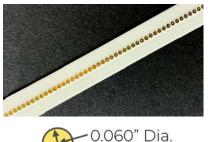


# **BUTTON & TERMINATION TYPES:** TWO STYLES TO CHOOSE

#### **BUTTON TYPES**

We offer two button types for wind turbine applications:

#### SMALL ROUND (SR)

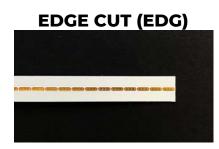


#### LARGE ROUND (LR)



#### **TERMINATION TYPE**

For installation on a wind turbine blade, only an edge-cut termination is required in our installation process.

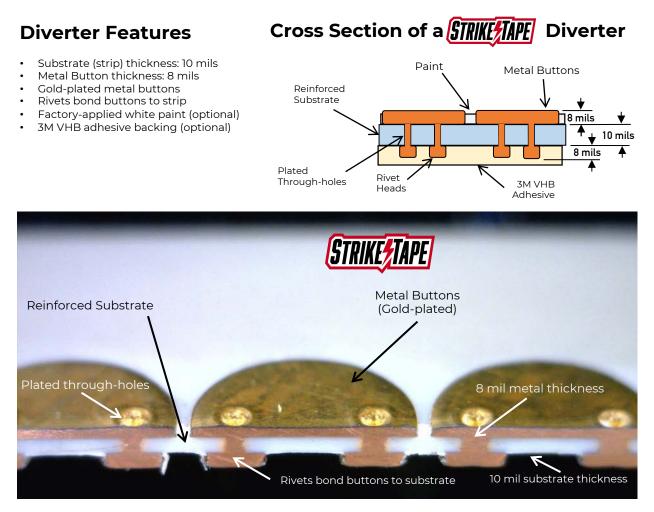






# DIVERTER CROSS-SECTION AND FEATURES

Weather Guard Lightning Tech is a certified ISO9001:2015 & AS9100D company, adhering to the strictest quality assurance standards.

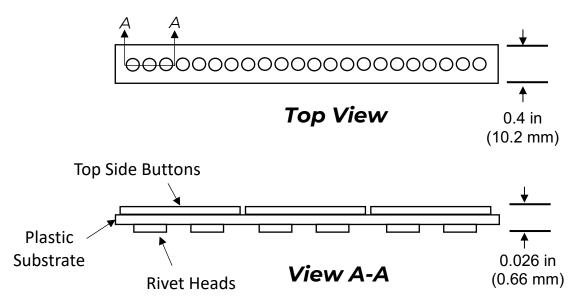






# **STRIKETAPE DIMENSIONS**

#### **TOP AND SIDE VIEW DRAWINGS**



#### STRIKETAPE DIVERTER PART SPECIFICATIONS

Diverter Type	Substrate Width	Top Side Button Size	Button Thickness	Substrate Thickness	Overall Thickness	Diverter Weight
Large Round	0.40"	0.125"	0.008"	0.010"	0.026"	0.13oz/ft
(LR)	(10mm)	(3.17mm) Dia.	(0.2mm)	(0.25mm)	(0.66mm)	(12.21g/m)
Small Round	0.40″	0.060"	0.008"	0.010"	0.026"	0.12oz/ft
(SR)	(10mm)	(1.52mm) Dia.	(0.2mm)	(0.25mm)	(0.66mm)	(11.02g/m)





### **SPECIFICATIONS & PART NUMBERS**

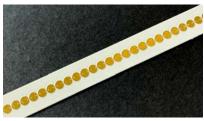
#### **STRIKETAPE PART NUMBERS**

Diverter Type	Part Code	Adhesive Tape	Button Style	Termination	Paint	Length* (inches)
Large Round (LR)	100- 100620	1 = Yes 0 = No	LR	EDG	NC	Up to 330
Small Round (SR)	100- 100620	1 = Yes 0 = No	SR	EDG	NC	Up to 330

SMALL ROUND (SR)



#### LARGE ROUND (LR)



#### PART # KEY: 100-100620-(Tape)-(Button)-(Termination)-(Color)-(Length).

*Ex:* 100-100620-0-SR-EDG-NC-330 = No adhesive tape, Small Round Button, Edge Cut termination, no paint, 33.0 inches

#### \*Length is expressed in inches; final digit is a decimal.

*Ex:* 270 = 27.0 inches. Note: Full diverter strips are 33 inches; can be cut to custom lengths or butted together with EDG termination for longer than 33" strips.

### ALL PARTS ARE TESTED TO AEROSPACE AND WIND ENERGY STANDARDS:

- RTCA/DO-160G Section 23
- SAE ARP5416A
- IEC 61400-24 LPL1



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Call Us Today – 413.217.1139 Email us - info@wglightning.com

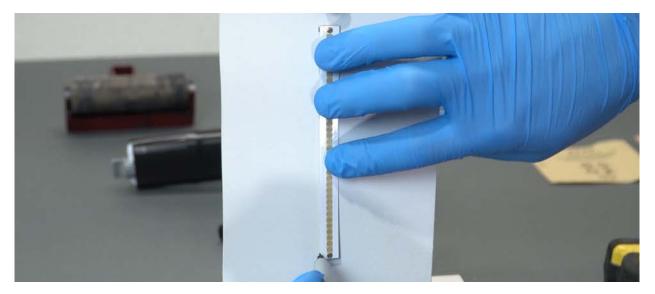


# **INSTALLATION PROCESS**

Installation is an easy, 30-minute process that utilizes our peel-and-stick backing with proprietary epoxy edge sealants.

#### We provide:

- 1. Detailed PDF Installation guide with photos
- 2. Installation video available in six languages English, Portuguese, Japanese, Spanish, French and German
- 3. Customer support throughout the process





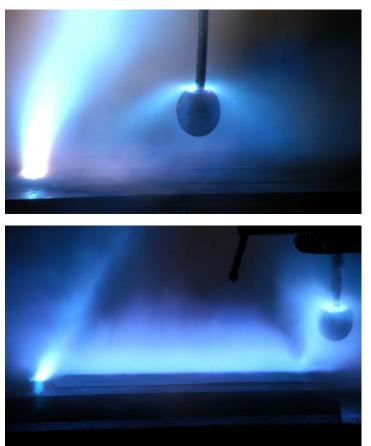


# **KEEPS PERFORMING AFTER REPEATED STRIKES**

At Weather Guard Lightning Tech, we brutally test our lightning diverters to ensure they'll exceed the highest standards of quality and durability.

StrikeTape survived 16 strikes in lab testing--5x more than competitors.

Test Number	Peak Current (amps)	Specific Energy (MJ/ohm)
1	130,000	2.3
2	130,000	2.3
3	125,000	2.0
4	123,000	2.0
5	180,000	4.7
6	235,000	6.3
7	227,000	3.9
8	226,000	3.6
9	218,000	3.3
10	214,000	3.5
11	213,000	5.8
12	206,000	5.8
13	212,000	5.9
14	215,000	6.1
15	219,000	6.2
16	225,000	8.5







### COMPETING DIVERTERS FAIL & CAUSE DAMAGE

We tested our competitor's diverter in the lab—it fails quickly.

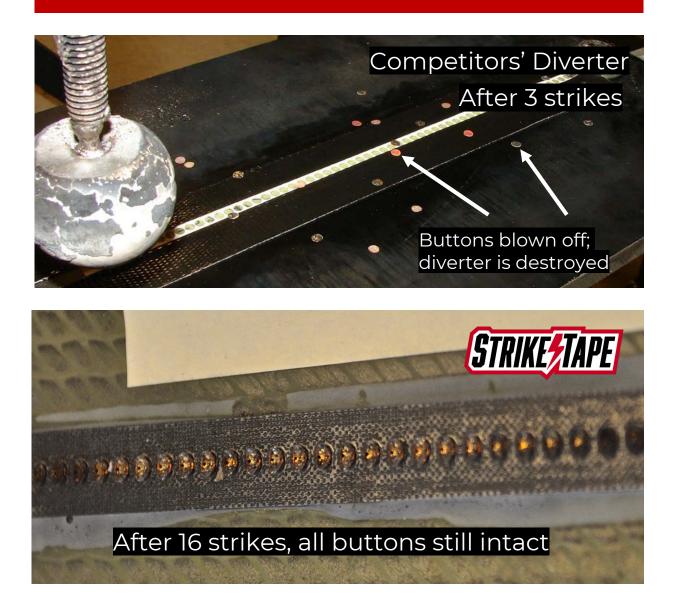
The results were the same in the field—just a few lighting strikes destroyed the diverter, causing major blade damage.







### LAB STRIKES: A COMPARISON







# EXTREME DURABILITY IN RAIN EROSION TESTS

A lightning diverter needs to be able to withstand extreme abrasion from rain, sleet and snow at 300km/h blade tip speeds.

The photo below shows our lightning diverters intact after being blasted by a 480km/h water jet for five minutes.



Standard diverter erodes away in just 5 minutes

StrikeTape is intact, still going strong

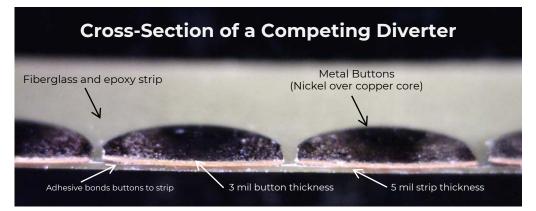




### ADVANCED ENGINEERING QUALITY MANUFACTURING

Superior engineering, materials, and ISO quality assurance means the world's best lighting protection.









# ADVANCED ENGINEERING ADVANCED FEATURES

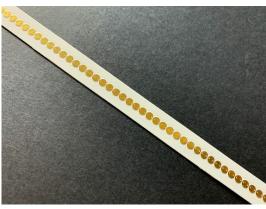
With no standard specs in the wind industry, StrikeTape was designed by electrical engineers to set its own, unbeatable durability standard.

Feature	<b>STRIKE TAPE</b>	Competitor
Strip thickness	10 mils	5 mils
Copper metal core	$\checkmark$	V
No effect on blade aerodynamics	V	
Button thickness	8 mils	5 mils
High-tech thermoplastic strip	V	×
Gold plated for conductivity	V	×
Through-fastened with rivets		×
3M VHB sticky-back tape		
Lasts 16 strikes in lab tests	V	×



### A HISTORY OF PROTECTION WEATHER GUARD LIGHTNING TECH







PERFORMANCE REVIEW INSTITUTE

### ABOUT THE COMPANY

- CEO Allen Hall is an FAA Designated Engineering Representative (DER) for Lightning Direct Effects
- In 2006, Weather Guard Lightning Tech was incorporated.
- StrikeTape lightning diverters were developed in 2011 and are in use all over the world.
- In 2020, Weather Guard
  Lightning Tech earned AS9100D
  & ISO9001:2015 quality
  certification.
- Weather Guard Lightning Tech is the Original Equipment Manufacturer of StrikeTape.
- Give our customer service team a call today!



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# We Make Lightning **Protection Easy**

### **Contact Us Today**

#### **General Inquiries**



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