

3M Electrical Markets

Scotch® Fire Retardant Electric Arc Proofing Tape 77 Series



Now Made in USA
and Qualifies for Jobs
Requiring BAA & TAA
Compliant Products

Protect Your Valuable Assets

The cost of repairing cables and other assets from fire damage is expensive. The Scotch® Fire Retardant Electric Arc Proofing Tape 77 Series is designed to protect adjacent cables and accessories from fault arc-generated heat and flames. When exposed to excessive heat, the intumescent quality of the tape makes it expand to form a thick char buildup between the flames and the cable, which protects wrapped cables until limiting devices can interrupt the faulted current.





Scotch® Fire Retardant Electric Arc Proofing Tape 77 Series

There is an insatiable need for electricity, and it's up to you to make sure your customers get what they need. This is true whether you're building or maintaining a distribution network, or the electrical system for a commercial or industrial facility.

The need for more electricity means that you often have to put more critical, high-energy cables into existing infrastructure. Crowded manholes and vaults, teeming with expensive energy cables in close proximity, increase the risk of a cable failure destroying multiple phases or circuits. The repair bill can be expensive, and downtime for your customers is even worse.

Protect your critical cables with Scotch® Fire Retardant Electric Arc Proofing Tape 77 and mitigate damage to multiple phases or circuits from a cable failure.

**IT'S
GREAT
FOR:**

- Cables in substations, manholes and vaults
- Critical feeder cables and nearby branch circuits
- Energy cables for hospitals, military bases, server farms, commercial buildings and any manufacturing location where you cannot afford to lose power
- Cables in an existing facility that run in close proximity to each other, e.g., energy cables in cable trays and raceway

Minimize damage to the electrical circuits and downtime for your customers. Use Scotch® Tape 77!

The adhesive-free design of the Scotch® Fire Retardant Electric Arc Proofing Tape 77 Series makes installation easy and enables removal for quick inspection of protected cables or accessories. Secure each end of the Scotch® Tape 77 section to the cable with Scotch® Glass Cloth Tape 69. The tapes are typically used on high-energy cables that are in close proximity (approximately 18 inches) to other cables or valuable assets. The color of the Scotch® Arc Proofing Tape 77 White is quickly seen in contrast to the black or colored cables and darkens when exposed to excessive heat, which makes damage identification easier.



Watch the video!

Cables During and After the Consolidated Edison Flame Test

Unprotected Cable During Test



Unprotected Cable After Test



Cable Protected with Scotch® Tape 77 During Test



Cable Protected with Scotch® Tape 77 After Test



Ordering Information

Product Number	UPC	Color	Size	Thickness	Inner Unit Pack	Case Qty.
77 Black-1-1/2" x 20 ft	051128-60332	Black	1-1/2" x 20' (38 mm x 6,1 m)	30 mil (0,76 mm)	1 roll	10 rolls
77 Black-3" x 20 ft	051128-60333	Black	3" x 20' (76 mm x 6,1 m)	30 mil (0,76 mm)	1 roll	10 rolls
77 White-1-1/2" x 20 ft	051128-60334	White-Gray	1-1/2" x 20' (38 mm x 6,1 m)	30 mil (0,76 mm)	1 roll	10 rolls
77 White-3" x 20 ft	051128-60335	White-Gray	3" x 20' (76 mm x 6,1 m)	30 mil (0,76 mm)	1 roll	10 rolls
69 Tape-1/2" x 66 ft	054007-10083	White	1/2" x 66' (12,7 mm x 20,1 m)	7 mil (0,177 mm)	1 roll	10 rolls

Scotch® Fire Retardant Electric Arc Proofing Tape 77 Series Coverage Table

Cable O.D. (inches)	Tape Width (inches)	Approximate number of 20-foot rolls needed to cover 100 feet of cable with one-half lap wrap
1"	1 ½"	21
1 ¼"	1 ½"	27
1 ½"	1 ½"	32
1 ¾"	3"	19
2"	3"	20
2 ¼"	3"	24
2 ½"	3"	27
2 ¾"	3"	29
3"	3"	32
3 ½"	3"	37
4"	3"	42
4 ½"	3"	48

Use this formula to determine the quantity of Scotch® Tape 77 required to cover cables with a one-half lap wrap:

C = Circumference ($C = \pi D$)

$\pi = 3.14$

D = Cable O.D. in Inches

LC = Length of Cable in Inches

W = Width of Tape in Inches (minus ½ tape width)

LT = Length of Tape in Inches

$$\frac{(C) (LC)}{(LT) (W)} = \text{Number of Rolls Required}$$

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