

# Electrical Splicing Tape

for Harsh Environments

**CURTISS -  
WRIGHT**

Nuclear Power Products and Services



## Product Description

An easy-to-install alternate for electrical splicing.

## Applications

- Moisture sealing electrical splices
- Motor lead connections
- Jacket repairs
- End sealing of cables

## Design Features

- Self-bonding
- Easy Installation
- In-line, "V", 3-way and parallel
- Crimped or bolted
- 600 volt (LOCA)
- 266°F (130°C) tape rating
- EQ tested
- No maintenance
- Low current leakage
- High insulation resistance
- No adhesives
- No special cleaners
- No special tools
- Flame resistant
- Protects against oils, chemicals, ozone, heat and sunlight

## Qualification Levels

### 600V

- Qualified life: 40 years at 194°F (90°C)
- Radiation: tested to 2E8 rads gamma
- LOCA: tested to 435°F/80 psig (223°C/652.9 kPa), 30-day
- Chemical spray

### Medium Voltage

- Qualified life: 40 years at 194°F (90°C)
- Radiation: tested to 5.2E7 rads gamma
- HELB: tested to 412°F (211°C) peak, 6 hour duration

## Qualification Standards

Successfully qualified by test for power and control circuits in harsh environments, in accordance with:

- ANSI N45.2
- 10CFR50/Appendix B
- 10CFR50.49
- 10CFR21
- NQA-1
- IEEE Standards (vary per applicable EQ Qualification Report)

# Electrical Splicing Tape

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Test Report	Application Instruction	Voltage	Insulation	Jacket	Cover
SAIC-TR-399.16-05	SAIC-TR-399.16-02	0-600	Scotch 130C	Bishop 44	N/A
EGS-TR-399.16-16	EGS-TR-399.16-14	0-600	Scotch 130C	Scotch 130C	(Note 1)
EGS-TR-399.16-21	EGS-TR-399.16-22	0-600	Scotch 130C	Scotch 130C	Scotch 69
EGS-TR-399.16-20	SAIC-TR-399.16-11	Medium (Note 2)	Scotch 130C	Bishop 44/Scotch 130C	(Note 1)

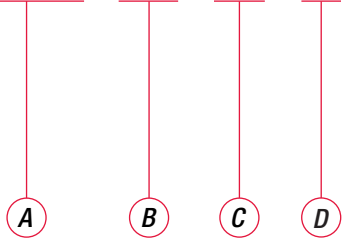
*Notes:*

- Scotch 69 can be used as an optional covering tape over the jacketing tape to provide additional mechanical protection and will prevent the Scotch 130C tape from adhering to adjacent splices or metallic structures.
- For stress shielding over all conductors energized at 2000 volts or greater, EGS used Bishop 17 semi-conducting tape and Scotch 24 shielding tape.

**How to Order**

EGS Harsh Environment Electrical Splicing Tape is ordered by product number.

*Example:* 399.16 - EPR - 3/4 - 30



Project Number	Material	Width (inches)	Length (feet)	Description
399.16	EPR	3/4	30	3M Scotch 130C Ethylene Propylene Rubber Insulating and Jacketing Tape
399.16	EPR	1.0	30	
399.16	EPR	1.5	30	
399.16	EPR	2.0	30	
399.16	NEO	3/4	30	Bishop 44 Neoprene Jacketing Tape
399.16	SC	3/4	15	Bishop 17 Semi-Conducting EPR Tape
399.16	CU	1	15	Scotch 24 Copper Braid Tape
399.16	GLS	3/4	66	Scotch 69 Glass Covering Tape

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