TAPE, FIRE-RETARDANT, ELECTRIC ARC PROOFING

1. Scope

This material standard covers the requirements for fire-retardant, electric arc proofing tape dispensed in rolls.

This material standard applies to the following Seattle City Light Stock Numbers:

Stock Number	Description
736525	1-1/2″ x 20′ roll
736527	3″ x 20′ roll

2. Application

Tape is applied to high-energy, communication, and control cables that are within 18 inches of other cables to offer protection in the event of a fault from fire and electric arcs until limiting devices have time to operate.

Tape is formulated to expand in a fire to form a thick char buildup. This insulating shield protects cables and accessories from fault arc generated heat and flames.

Tape is conformable and easy to apply. Wrap tape in half-lapped layers. Tape may be stretched to obtain a snug, wrinkle-free wrap which conforms to the cable. Overlap the last 6 inches of protected cable when starting a new roll of tape. Because tape is not adhesive coated, it must be held in place after wrapping with bands of silicone adhesive glass cloth tape, Stock Number 736632. The most effective and economical way to hold tape in place is by banding (two complete wraps) the first and last applied wrap.

Tape is light in color to facilitate visual inspection.

Prior to application, engineering should review tape's potential affect on cable rating.

3. Properties (nominal)

color	white to light gray
thickness, in	0.030
adhesive	none
breaking strength	1200 psi
elongation 0023 degrees C	150% at break
0-12 degrees C	130% at break
flame resistant, per UL 94 (self-extinguishing)	V-O
oxygen index, per ASTM D-2863	29-30%
dielectric breakdown	500 V/mil
shelf life	5 years from the date of manufacture

4. Testing

Test data that confirms the properties cited in the manufacturer's data sheet and this material standard shall be provided upon request.

5. Packaging

Each roll of tape shall be individually protected with plastic and legibly marked with the following information:

- Manufacturer's name
- Manufacturer’s catalog number
- Product description

standards coordinator	*standards manager*	*unit director*
John Shipek	John Shipek	Pamela S. Johnson

5. Packaging, continued

Each shipping container shall be marked with Seattle City Light's Purchase Order Number.

6. Issuance

RL

7. Approved Manufacturer

3M Scotch Brand

Stock Number	Product Number	Description	UPC
736525	77W	1-1/2″ x 20′ roll	00051138983741
736527	77W	3″ x 20′ roll	00051138983758

8. References

78-8124-5426-8 C; 3M Scotch Fire-Retardant Electric Arc Proofing Tape 77 Series, Data Sheet, March 2009

Shipek, John; SCL Standards Engineer, subject matter expert and originator of 7365.20 (john.shipek@seattle.gov)

www.3m.com

Youngs, Rob; subject matter expert (rob.youngs@seattle.gov)