

## Tape, Insulating, Electrical



### 1. Scope

This standard covers the requirements for self-amalgamating, electrical insulating tape. Self-amalgamating means self-bonding, self-fusing, or non - vulcanized.

This standard applies to the following Seattle City Light stock numbers:

Stock Number	Description
736503	3/4 in x 30 ft roll
736504	1 in x 30 ft roll
736505	1-1/2 in x 30 ft roll

### 2. Application

This product is a highly conformable, linerless, ethylene rubber (EPR), high-voltage insulating tape, formulated to provide excellent thermal dissipation of splice heat. The tape has excellent physical and electrical properties, which provide immediate moisture seals and void-free build-ups.

Insulating tape is intended for the following applications:

- Primary insulation for splicing all types of solid dielectric insulated cables through 69 kV
- Primary insulation for building stress cones on all types of solid dielectric insulated cables up to 35 kV
- Jacketing (secondary insulation) on high-voltage splices and terminations
- Moisture-sealing electrical connections
- Bus bar insulation

Standards Coordinator  
John Shipek

Standards Supervisor  
John Shipek

Unit Director  
Darnell Cola



Insulating tape is linerless to permit quicker application.

For best ultraviolet light (UV) protection, overwrap with a high-quality, vinyl electrical tape.

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### 3. Properties (nominal)

Material	Self-amalgamating, ethylene propylene rubber (EPR)
Material thickness	30 mil
Color	black
Temperature rating, emergency	
Operating	90° C (194° F)
Emergency Overload	130° C (266° F)
Dielectric strength	750 V/mil
Thermal conductivity (at 23° C)	0.3 W/m° C
Breaking strength	7.5 lb/in (of width)
Tensile Strength	250 psi
Core Diameter	1-1/2 in
Shelf life (inside storage)	5 years from the date of manufacture

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### 4. Testing

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

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### 5. Packaging

Each roll of tape shall be individually packaged in cellophane, plastic, or metal containers to prevent damage during shipping, storage, and casual handling prior to use.

Each roll of tape shall be legibly marked with the following information:

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

Number of rolls of tape per case shall be according to Section 7.

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

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### 6. Issuance

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## 7. Approved Manufacturers

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<b>Stock Number</b>	<b>736503</b>
Description	3/4 inch x 30 ft roll
Manufacturer	3M
Product	130C
ID	80-6108-3340-4
UPC	00-54007-41717-0
Case Quality:	24 rolls

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<b>Stock Number</b>	<b>736504</b>
Description	1 inch x 30 ft roll
Manufacturer	3M
Product	130C
ID	80-6108-3375-0
UPC	00-54007-41753-8
Case Quality	24 rolls

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<b>Stock Number</b>	<b>736505</b>
Description	1-1/2 inch x 30 ft roll
Manufacturer	3M
Product	130C
ID	80-6108-3341-2
UPC	00-54007-41718-7
Case Quality	12 rolls

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## 8. References

**3M Electrical Products** catalog, 80-6016-0382-4, 2011

**3M Scotch Linerless Rubber Splicing Tape 130C**, Data Sheet, 2005, 78-8125-9449-3-B

**SCL 7365.3** (canceled); Tape, Insulating, Electrical

**Shipek, John**; Standards engineer and originator of 7365.31.

[www.3m.com/electrical](http://www.3m.com/electrical)