



# Choose the Right Tape

for your **Electrical Project**





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# Insulating & Splicing

Need to connect some cables? 3M has the right tapes for your electrical insulating and splicing needs. Whether you're connecting low-voltage wires or insulated cables carrying up to 69 kV, 3M tapes are designed to make your splices stable and durable for years of worry- and maintenance-free service.



## Scotch® Linerless Rubber Splicing Tape 130C

### Applications

- Insulate electrical connections up to 69 kV
- Seal out moisture from low- and medium-voltage connections
- Insulate bus bars
- Insulate motor leads
- End seal high-voltage cables



Linerless design for fast installation

Dissipates heat well for stable, long-lasting splices

Self-fusing material creates a moisture tight seal

Rated for 90°C continuous operating temperature and overload temperatures up to 130°C

Stable & Durable for years of **maintenance-free** service.



Self-fusing material creates a moisture tight seal

Rated for 90°C continuous operating temperature and overload temperatures up to 130°C

Liner to be removed during installation

## Scotch® Rubber Splicing Tape 23

### Applications

- Insulate electrical connections up to 69 kV
- Seal out moisture from low- and medium-voltage connections
- Insulate bus bars
- Insulate motor leads
- End seal high-voltage cables



# Insulating & Splicing



## Scotch® Self-Fusing Silicone Rubber Tape 70 and 70 HDT

### Applications

- Pre-wrap low- and medium-voltage connections for clean re-entry, (e.g. motor lead connections or split-bolt connectors)
- Use as an overwrap for protection of terminating high-voltage cables against arcing and tracking

Class "H" temperature rated (180°C or 356°F)

Extremely UV and ozone resistant

Self-fusing material bonds quickly

Excellent track and arc resistance

# Insulating & Splicing



## Scotch® Varnished Cambric Tape 2510 and 2520

### Applications

- Insulate electrical connections up to 600 V
- Pre-wrap low-voltage connections for clean re-entry, (e.g. split bolt connections)

Temperature resistant  
up to 105°C

Excellent tear, puncture,  
and cut-through resistance

# Insulating & Splicing



Self-fusing material bonds quickly

Retains conductivity with stretch

Stable at elevated temperatures up to 130°C

Liner to be removed during installation

## Scotch® Semi-Conducting Tape 13

### Applications

- Replace semi-conducting layer beneath metallic shield in various medium-voltage cable repairs and splices
- Electrically round-out high-voltage connectors and bond to insulating materials to minimize electrical stresses
- Round-out bolted connections on insulated bus bars
- Provide shielding for cable splices on solid dielectric insulated power cables
- Not to be used for electrical insulation!



# Insulating & Splicing



## 3M™ Temflex™ Lined Splicing Tape 2155

### Applications

- Insulate electrical connections up to 600 V
- Seal out moisture from low-voltage connections
- Insulate service drops
- Insulate lighting connections

Rated for temperatures up to 80°C

Self-fusing material creates a moisture-tight seal

Liner to be removed during installation

# Insulating & Splicing



# Sealing, Padding & Shaping

3M and Scotch brand Mastic Tapes are an excellent choice when you need to create watertight connections. Mastic tapes also work wonders to pad sharp edges and to smooth out irregular shapes and transitions, plus they're soft enough to mold by hand. The extra padding offered by mastic tapes provides protection against vibrations that may wear through other materials over time.

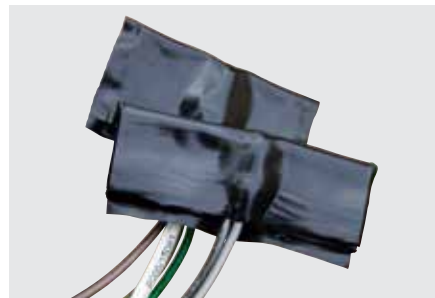


Scotch® Vinyl Mastic Tape 2200 and 2210

Scotch® Electrical Moisture Sealant 06147 and 06149

## Applications

- Seal-out moisture and insulate low-voltage connections in one easy step
- Pad and insulate bolted connections
- Insulate service drops
- Insulate lighting connections
- Protect grounding rod connections
- End seal cables



Excellent moisture sealing capabilities

Aggressive mastic provides excellent bond

Vinyl backing eliminates need to overwrap

Material flows to cover punctures or cuts

An excellent choice when you need to create **watertight connections.**



## 3M™ Scotch-Seal™ Mastic Sealing Tape 2229

### Applications

- Electrically insulate and seal-out moisture from low-voltage connections
- Seal high-voltage cable splice and termination accessories
- Pad sharp edges of a low-voltage connection to prevent cut-through of vinyl tape overwrap
- Smooth transitions of irregular shapes
- End seal cables



Material flows to cover punctures or cuts

Excellent moisture sealing capabilities

Aggressive mastic provides excellent bond

# Sealing, Padding & Shaping





Easy to mold and shape by hand down to 32°F (0°C)

Excellent aging properties - will not dry out

Noncorrosive, synthetic rubber

## 3M™ Scotchfil™ Electrical Insulation Putty

### Applications

- Build-up cable splices and fill out major irregularities and voids in low-voltage splices to create a uniform base for further taping
- Smooth bus bar irregularities, round out connections, and pad sharp edges
- Create a moisture seal at ground wire exit points in high-voltage splices
- Create a moisture seal in multiconductor cable connections



# Sealing, Padding & Shaping



## Scotch® Rubber Mastic Tape 2228

### Applications

- Primary electrical insulation for bus bar connections up to 35 kV
- Insulate electrical connections up to 1,000 V
- Seal-out moisture from connections

Rated for 90°C continuous operating temperature and overload temperatures up to 130°C

Flexible and conformable over irregular shapes

Self-fusing material creates a moisture tight seal

# Sealing, Padding & Shaping



# Fire Retardant & Arc Proofing

Arc proofing tapes are like insurance for your cables. Wrap low- and medium-voltage cables and accessories to protect them from fault-arc generated heat and flames caused by failures in adjacent cables. Its unique formulation expands when exposed to heat to form a thick char buildup between the flames and the cable, which protects the cable and minimizes damage to other phases or additional circuits.

## Scotch® Fire Retardant Electric Arc Proofing Tape 77

### Applications

- Protect cables from electric arcs and fires
- Use on energy cables running in close proximity to other energy cables, such as:
  - Cables in substations, manholes, and vaults
  - Critical feeder cables and nearby branch circuits
  - Energy cables in buildings that cannot afford to lose power, (e.g. hospitals, military bases, server farms, etc.)
  - Energy cables in cable trays

### Cables During and After the Consolidated Edison Flame Test



Cable Protected with Scotch® Fire Retardant Electric Arc Proofing Tape 77 During Test      Unprotected Cable During Test



Cable Protected with Scotch® Fire Retardant Electric Arc Proofing Tape 77 After Test      Unprotected Cable After Test

Adhesive-free design enables removal for cable or accessory inspection

Available in black or white

Swells with exposure to heat

Light color makes fire damage easy to identify

Insurance for your cables.

Watch the video!



# Jacket Repairing

3M has developed an extremely tough tape for your extremely rough environments. Use it to wrap over a splice or a damaged section of a cable jacket for extra mechanical protection. The outer layer of the tape is composed of vulcanized CSM rubber to provide outstanding resistance to abrasion, tearing, cut-through, as well as resistance to many chemicals. The inner layer is composed of flame-retardant mastic that acts as a moisture barrier and provides excellent adhesion to a variety of cable jacket materials.



Scotch® Cable Jacket Repair Tape 2234

Scotch® Mining Tape 31

### Applications

- Repair sections of damaged cable jacket
- Seal out moisture and environmental elements
- Overwrap a splice for added mechanical protection
- Scotch® Mining Tape 31 is MSHA approved for cable repair



Ultra tough vulcanized CSM rubber

UL recognized for temperatures up to 105°C

Flame retardant

Seal out moisture

Extremely **tough** tape for your extremely **rough** environments.



# Bundling & Harnessing

Bundling tapes can act like a third-hand and help you in a time of need. Use bundling tapes to bind and hold unwieldy wires, organize your work area or project, and generally make your job easier. Bundling tapes also offer excellent mechanical protection.



## 3M™ Temflex™ Friction Tape 1755

### Applications

- Bundle and bind wires and cables
- Create wire harnesses
- Wrap tool handles for better grip

Excellent abrasion resistance

Excellent resistance  
to salt water

High tensile strength  
and low stretch

Designed to  
**make your job easier.**



Water resistant

Strong yet easy to tear by hand

## Scotch® Electrician's Bundling Tape 2000

### Applications

- Bundle and bind wires and cables



# Bundling & Harnessing Tapes



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80-6016-0763-5 (0245)xx-1