



Choose the
Right Tape
for your **Electrical Project**



Table of Contents

Insulating and Splicing4

Scotch® Linerless Rubber Splicing Tape 130C4

Scotch® Rubber Splicing Tape 237

Scotch® Self-Fusing Silicone Rubber Tape 70 and 70 HDT.....8

Scotch® Varnished Cambric Tape 2510 and 2520 10

Scotch® Semi-Conducting Tape 13 13

3M™ Temflex™ Linered Splicing Tape 2155 14

Sealing, Padding, and Shaping 16

Scotch® Vinyl Mastic Tape 2200 and 2210 16

3M™ Scotch-Seal™ Mastic Sealing Tape 2229 18

3M™ Scotchfil™ Electrical Insulation Putty21

Scotch® Rubber Mastic Tape 222822

Fire Retardant & Arc Proofing25

Scotch® Fire Retardant Electric Arc Proofing Tape 7725

Jacket Repairing26

Scotch® Cable Jacket Repair Tape 223426

Scotch® Mining Tape 3126

Bundling and Harnessing28

3M™ Temflex™ Friction Tape 175528

Scotch® Electrician's Bundling Tape 200031

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



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™ Linered 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

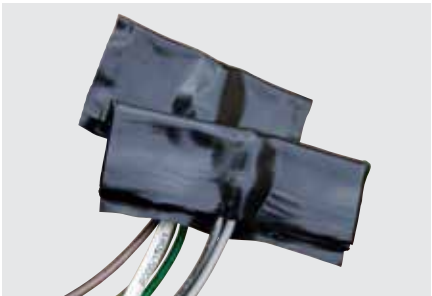
Insulating & Splicing

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



Aggressive mastic provides excellent bond

Vinyl backing eliminates need to overwrap

Excellent moisture sealing capabilities

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

Watch the video!



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.

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.



Scotch® Electrician's Bundling Tape 2000

Applications

- Bundle and bind wires and cables



Bundling & Harnessing Tapes

3M, Scotch, Scotch-Seal, Scotchfil and Temflex are trademarks of 3M Company.

Important Notice

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability.

3M's product warranty is stated in its Product Literature available upon request. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether, indirect, special, incidental or consequential regardless of the legal theory asserted.**

3M products shown with a flag in this brochure are manufactured in the USA as of January, 2014. 3M products offered on a government contract that require country of origin representation must be certified by 3M Trade Compliance. Contact customer service at 800.245.3573 to request a certificate.

The information in this brochure is accurate, to 3M's knowledge and belief, which may be based on information provided by third party suppliers to 3M.



Electrical Markets Division

6801 River Place Blvd.
Austin, TX 78726-9000
800.245.3573
Fax 800.245.0329
<http://www.3m.com/electrical>

Please recycle. Printed in USA.
© 3M 2014. All rights reserved.
80-6016-0763-5 (0245)xx-1