

## Pioneers in the tape industry.

3M has been in business for over 100 years and entered the world of tape in 1925 when we invented masking tapes. We haven't stopped since.

1902

Minnesota Mining and Manufacturing Company opens for business

1925

Minnesota Mining and Manufacturing Company invents masking tape

1940's

World War II demands make innovation an absolute necessity

1944

3M Pioneer Chemist Esther Eastwold paves the way with her discovery of an adhesive-friendly plasticizer

1945-1946

3M invents Scotch Brand No. 33 Electrical Tape, the new standard for insulating electrical connections

1960

Scotch Brand No. 33 is a household name, routinely seen in TV spots and magazine ads



### 1966

3M Scotch Brand No. 33 becomes "Super" with new operating temperature rating up to 176°F

#### 1969

3M Vinyl Electrical Tape makes the grade with a plus, boosting its upper operating temperature rating to 221°F

#### 1975

3M launches the first highly conformable, all-weather Scotch® Linerless Rubber Splicing Tape 130C

### 1985

3M improves on vinyl electrical tape again with even greater elasticity

### 2016

Scotch® Vinyl Electrical Tape celebrates its 70th birthday

#### 2020

The evolution continues with a new family of high-performing 3M™ Temflex™ General Use Vinyl Electrical Tapes to complement the full line of Scotch® Professional Grade Tapes

And now in the 21st century, 3M continues to invest in manufacturing and technology to deliver high-quality premium and general use vinyl electrical tapes for your every day needs. If there is a job or application that requires electrical tape, 3M has a solution.

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**Electrical Tape Quick Reference Guide** 



**Top Recommendations For Your Toolbox** 



#### From the tradesman to the professional...

# Tapes for Every Task >











### 3M™ Temflex™ General Use **Vinyl Electrical Tapes**

Our family of 3M™ Temflex™ General Use Vinyl Electrical Tapes is designed to meet basic needs in most general electrical and non-electrical applications.

- Our backings and adhesives are designed to hold up in everyday conditions when conducting simple low-voltage insulation, wire marking, cable bundling and pulling.
- Whether indoor or in protected outdoor environments, these tapes are dependable and will hold and insulate to get the job done.

And because they are made by 3M, one of the most recognizable and trusted brands of vinyl electrical tape around the world, you can be assured that they are manufactured with consistent and reliable quality to perform when and where you need it.

#### Scotch® Professional Grade **Vinyl Electrical Tapes**

Our family of Scotch® Professional Grade Vinyl **Electrical Tapes** is designed to work reliably in a wide range of standard to industrial conditions.

- That means our backings and adhesives are rigorously tested to stand up to and meet your tough challenges.
- They stretch, stick, stay stuck and stand up in heavy-duty and industrial installations, extreme cold and heat, as well as moist or corrosive environments.

These vinyl electrical tapes are made in the USA\* and supported globally by excellent local service. Have peace of mind that the tapes you rely on will be available for those critical projects, important installations that need to last, and when unexpected weather or unforeseen problems increase the need for maintenance and repair of your essential electrical systems.



### Choose Scotch® Professional **Grade Electrical Tape when:**

- · Quality and performance are a must
- · Your reputation is on the line
- · The job can't afford to fail
- · Working in critical environments

#### **High Performance** Adhesion | Dielectric | Elongation

- · High-quality vinyl or rubber that conforms and stretches
- · Moisture-tight electrical and mechanical protection
- · Flexible backings and strong adhesives combine to help deliver a reliable, tight seal

#### **Extreme Environments** Cold or Hot | Moisture | Outdoor

- · Strong adhesive consistently sticks in cold temperatures
- Remains stable and sticks in extreme heat
- · Stretches and conforms for a tight seal in moist, dry, and outdoor environments

### Peace of Mind Safety | Reliability | Reputation

- · Consistent quality and made in the USA\*
- · The tapes to use when you can't afford costly downtimes and electrical failures
- · Helps reduce the risk of unscheduled repairs

Performance that won't change with the working environment or the weather.

When you're working to deliver power to your customers, your supplies are your lifeline. That's even more true when you're faced with difficult conditions on the job, like harsh environments or cold temperatures. You need tapes that can stand up to all that nature throws at you – so you can be ready for anything.



Scotch® Professional Grade Electrical Tapes are backed by more than 75 years of 3M science and field-tested performance.



When you need to build a protective jacket and/or electrical insulation for splices and cables, choose Scotch® Heavy-Duty Professional Grade Vinyl Electrical Tape, Super 88. Made of a thicker, more durable PVC backing and the same great premium-grade adhesive as Scotch® Super 33+™ Professional Grade Vinyl Electrical Tape, it performs in all weather, providing protection you can trust.

**Grade Vinyl Electrical Tape Super 88** 

#### Additional features:

- Resistant to UV rays, abrasion, moisture, alkalies, acids, corrosion and varying weather conditions
- · Cold and sunlight resistant
- · Thicker backing for faster build-up / less wraps
- Provides added insulation and excellent adhesion to steel in all weather conditions
- Hot and cold weather performance with operating temperatures between -18°C and 105°C (0°F and 221°F)
- Compatible with solid dielectric cable insulations, as well as epoxy and polyurethane resins
- CSA and VDE Certified, UL 510 Listed, IEC 60454-3-1-7/F-PVCP/90 and RoHS 2015/863/EU Compliant

#### **Applications:**

- Suitable for harsh indoor, extreme and exposed outdoor uses
- · For heavy commercial and industrial environments
- Primary electrical insulation for all wire and cable splices rated up to 600 volts and 105°C (221°F)
- Primary electrical insulation for 600-volt bus applications, and protective jacketing for high and low-voltage bus
- Protective jacketing for high-voltage cable splices and repairs
- · Durable harnessing of wires and cables

Need even more durability and thickness? 3M also makes 10-mil Scotch® Heavy-Duty Grade Vinyl Electrical Tape 22.





Low Voltage nsulation









Indoor and Exposed Outdoor

## The electrical tape

for critical everyday and moist, corrosive or tough industrial environments.



# Scotch® Super 33+™ Professional Grade Vinyl Electrical Tape

For some of your most demanding electrical maintenance and repair jobs and reliable performance and quality, turn to Scotch® Super 33+™ Professional Grade Vinyl Electrical Tape. Its unique combination of aggressive pressure-sensitive, rubberresin adhesive and elastic PVC backing offers both moisture-tight electrical and mechanical protection. Its excellent strength, flexibility and ability to recover means it can stretch up to 250% without breaking.

#### **Additional features:**

- When you see the gold core, you have found the gold standard in electrical tape
- Stretch and flexibility to conform to odd shapes and create nice, tight seals for electrical connections
- Highly resistant to abrasion, moisture, alkalies, acids, corrosion and varying weather conditions
- · Cold and sunlight resistant
- Provides excellent insulation and adhesion in all weather conditions with long-lasting performance between -18°C and 105°C (0°F and 221°F)
- · Compatible with rubber and synthetic splicing compounds
- CSA and VDE Certified, UL 510 Listed, IEC 60454-3-1-7/F-PVCP/90 and RoHS 2015/863/EU Compliant

#### **Applications:**

- · Excellent for critical applications
- For residential, light and heavy commercial and industrial environments
- Suitable for harsh indoor, extreme and exposed outdoor uses
- Primary electrical insulation for all wire and cable splices rated up to 600 volts and 105°C (221°F)
- Primary electrical insulation for 600-volt bus bar applications, and protective jacketing for highand low-voltage bus bar
- Protective jacketing for low- and high-voltage cable splices and repairs
- · Long-lasting harnessing of wires and cables



Protective Jacketing Low Voltage Insulation Extreme Conditions Black Only

Flame Retardant Cold ar Sunligl Resista Indoor and Exposed Outdoor

6 | Tapes for Every Task



Scotch® Professional Grade Vinyl **Colour Coding Electrical Tape 35** 

Available in a wide variety of colours, Scotch® Vinyl Colour Coding Electrical Tape 35 is your go-to solution for phase identification, colour coding, marking and more, in demanding or harsh environments. It stretches easily and adheres in almost any shape or angle for maximum versatility.

Available Colours





- Resistant to abrasion, moisture,
- alkalies, acids, corrosion, and varying weather conditions

**Additional features:** 

- Suitable for temperatures between -10°C and 105°C (14°F to 221°F)
- · Available in 9 fade-resistant colours: blue, brown, grey, green, orange, red, violet, white, and yellow
- CSA and VDE Certified, UL 510 Listed, IEC 60454-3-1-6/F-PVCP/90 and RoHS 2015/863/EU Compliant

- Suitable for harsh indoor and weather protected outdoor uses
- leads and piping systems
- · Long-lasting marking for safety areas and equipment
- · Easily identified insulation for electrical wiring

#### **Applications:**

- For residential, commercial and industrial environments
- · More permanent phase identification, colour-coding of motor
- · Marking and identifying cables on cell sites







## The electrical tape

for excellent primary insulation and moisture protection through self-fusing technology.



Scotch® 130C Linerless Rubber Splicing Tape 130C

You've built a reputation on standout craftsmanship. So whether it's moisture sealing low-voltage wires or cables carrying up to 69 kV, making a secure, weather-resistant connection is crucial. Choose Scotch® Linerless Rubber Splicing Tape 130C for insulating, splicing, and padding low- to high-voltage cables, especially in outdoor or underground applications. Adding rubber tapes to your toolbox can help reinforce your work for years of worry-free and maintenance-free service.

#### **Additional features:**

- · Highly conformable, ethylene rubber (EPR)
- · Rated for 90°C continuous operating temperature and overload temperatures up to 130°C
- · Excellent physical and electrical properties
- · Compatible with common, solid dielectric cable insulation
- Self-fusing material provides immediate moisture seals and void-free build-ups
- Weather resistant
- High thermal conductivity which provides excellent thermal dissipation of splice heat
- · RoHS 2015/863/EU Compliant

#### **Applications:**

- · For indoor and outdoor, heavy commercial and industrial environments
- · 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 bus bar insulation
- · Jacketing (secondary insulation) on high-voltage splices and terminations
- · Padding, insulating and moisture-sealing electrical connections, bus bar and motor leads
- · End-sealing high-voltage cables



Tapes for Every Task 8 | Tapes for Every Task



You have a reputation for consistent and reliable work. So whether it's moisture sealing low-voltage wires or cables carrying up to 69 kV, making a secure, weather-resistant connection is crucial. Choose Scotch® Rubber Splicing Tape 23 for insulating, splicing, and padding low- to highvoltage cables, especially in outdoor or underground applications. Adding rubber tapes to your toolbox can help reinforce your work for years of worry-free and maintenance-free service.

#### **Additional features:**

- · Highly conformable, ethylene rubber (EPR)
- · Removable liner protects from dust and dirt during installation
- · Rated for 90°C continuous operating temperature and overload temperatures up to 130°C
- · Excellent physical and electrical properties which are unaffected by degree of stretch
- · Compatible with common, solid dielectric cable insulation
- · Self-fusing material provides immediate moisture seals and void-free build-ups
- · Weather resistant
- · RoHS 2015/863/EU Compliant

#### **Applications:**

- · For indoor and outdoor, heavy commercial and industrial environments
- · Primary insulation for splicing all types of solid dielectric insulated cables through 69 kV
- · Padding, insulating and moisture-sealing electrical connections, bus bar and motor leads
- · Jacketing (secondary insulation) on high-voltage splices and terminations
- · Padding, insulating and moisture-sealing electrical connections, bus bar and motor leads
- · End-sealing high-voltage cables













Removable



# 3M™ Temflex™ General Use **Vinyl Electrical Tapes**



Choose 3M™ Temflex™ General Use **Vinyl Electrical Tape when:** 

- · Working on everyday holding, bundling and marking needs
- · You need a dependable, basic electrical tape in your tool box
- · Simple jobs need to get done reliably and affordably

Dependable quality for your everyday needs.

#### **Everyday Use**

- · Various performance levels to meet your everyday jobs
- · Good stick for basic holding and harnessing
- · Broad temperature ranges to perform in standard indoor and protected outdoor applications

#### **Trusted Companion** Consistent | Reliable | Trusted

- · Reliable performance by a brand you trust
- · Consistent quality
- · Locally stocked for dependable availability

Just because you have your favourite power tool does not mean you leave your trusted screw driver at home. There are some pieces of equipment you just always keep handy like general use electrical tape for those day-to-day activities that keep the job on track.

10 | Tapes for Every Task ●●●●● Tapes for Every Task







Vinyl Electrical Tape 165. This affordable solution offers reliable

performance for protective jacketing, harnessing, marking and

insulating low voltage cables in non-critical applications.











Available Colours

#### **Additional features:**

- Provides resistance to abrasion, moisture, alkalies, and solvents
- · More stretch and flexibility for better bundling and sealing
- · Operates well in temperatures between 0°C and 90°C (32°F to 194°F)
- · CSA and VDE Certified, UL 510 Listed, IEC 60454-3-1-5/F-PVCP/90 and RoHS 2015/863/ **EU Compliant**

#### **Applications:**

· Suitable for moderate indoor and weather protected

19 mm x 18,3 m x 0,15 mm

3M. AUSTIN TX 78753

ABRIQUÉ EN POLOGNE

- · For residential, commercial and manufacturing (OEM) environments
- · Colour-coding for phase identification, wire marking and safety
- · Electrical insulation for wire and cable splices rated up to 600 volts
- · Harnessing and bundling of wires and cables
- · Wire pulling and fishing

#### **Additional features:**

· Provides resistance to abrasion, moisture, alkalies, and solvents

19 mm x 18,3 m x 0,177 mm 3M, AUSTINTX 78753

FABRIQUÉ EN POLOGNE

- · Better adhesion, strength and thickness for more demanding general use applications
- Operates well in temperatures between -7°C and 90°C (19°F to 194°F)
- CSA Certified, UL 510 Listed, IEC 60454-3-1-5/F-PVCP/90 and RoHS 2015/863/ **EU Compliant**
- · Available in black only

#### **Applications:**

and protected outdoor applications.

- Suitable for moderate indoor and weather protected outdoor uses
- · For residential and commercial environments

solution offers value and reliable performance for protective

jacketing, harnessing and insulating low voltage cables in indoor

- · Provides a protective jacket for high-voltage cable splices and repairs
- Electrical insulation for wire and cable splices rated up to 600 volts
- · Harnessing and bundling of wires and cables

Light to Medium Duty

**Protective Jacketing** 

Cable Harness Voltage Insulation

Moderate Variety of **Conditions** Colours

Flame Retardant **Protected** Outdoor



Cable Harness and **Jacketing** 

Low Voltage Insulation Moderate **Conditions** 



Black Only

Flame Retardant

Indoor and **Protected** Outdoor

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## **Electrical Tape Quick Reference Guide**



Still not sure which 3M™ Electrical Tape is right for your application? Use this simple chart to compare the options or visit 3M.ca/ElectricalTape for more information.















Typical Values	3M™ Temflex™ General Use Vinyl Electrical Tape 165	3M™ Temflex™ General Use Vinyl Electrical Tape 175	Scotch® Vinyl Colour Coding Electrical Tape 35	Scotch® Super 33+™ Professional Grade Vinyl Electrical Tape	Scotch® Heavy-Duty Professional Grade Vinyl Electrical Tape Super 88	Scotch® Linerless Rubber Splicing Tape 130C	Scotch® Rubber Splicing Tape 23
Best For	Light to Medium-Duty	Medium-Duty	Medium to Heavy-Duty	Medium to Heavy-Duty	Heavy-Duty	Medium to Heavy-Duty	Medium to Heavy-Duty
Target Applications	Temporary and/or non-critical marking, bundling, holding and secondary insulation	Semi-permanent bundling, holding and secondary insulation	Long lasting colour identification and marking	Permanent, low- voltage primary and secondary insulation, cable jacketing and mechanical protection	Permanent low- voltage primary and secondary insulation, cable jacketing, mechanical protection and padding	Permanent low- to high-voltage primary insulation, cable jacketing, moisture-sealing and padding	Permanent low- to high-voltage primary insulation, cable jacketing, moisture-sealing and padding
Application Environment	Moderate temperatures and conditions	Moderate temperatures and conditions	Harsh temperatures and moist or corrosive conditions	Extreme temperatures and moist or corrosive conditions	Extreme temperatures and moist, corrosive or rough conditions	Moderate temperatures (high overload up to 130°C) and moist, corrosive or rough conditions	Moderate temperatures (high overload up to 130°C) and moist, corrosive or rough conditions
Operating Temperature <sup>1</sup>	0 to 90°C (32 to 194°F)	-7 to 90°C (19 to 194°F)	-10 to 105°C (14 to 221°F)	-18 to 105°C (0 to 221°F)	-18 to 105°C (0 to 221°F)	Up to 90°C (up to 194°F)	Up to 90°C (up to 194°F)
Thickness	0,15 mm (6 mils)	0,177 mm (7 mils)	0,177 mm (7 mils)	0,177 mm (7 mils)	0,215 mm (8.5 mils)	0,762 mm (30 mils)	0,762 mm (30 mils)
Sticking Power (Adhesion to Steel)	18 oz/in	18 oz/in	20 oz/in	28 oz/in	25 oz/in	-	-
Stretch² (Elongation)	200%	200%	225%	250%	250%	850%	1000%
Strength <sup>2</sup> (Backing Strength)	13.2 lb/in	15.4 lb/in	17 lb/in	15 lb/in	20 lb/in	7.5 lb/in	8 lb/in
Insulation <sup>2</sup> (Dialectric Strength)	1000V/mil	1000V/mil	1250V/mil	1150V/mil	1250V/mil	750 V/mil	800 V/mil
Colour Details			0000				



### **Top Recommendations For Your Toolbox**



Scotch<sup>®</sup> Super 33+™ and Scotch® Super 88

Critical projects and



Scotch® 35 Outdoor or permanent marking and labeling.



3M™ Temflex 165 and 3M™ Temflex 175

Daily insulation, holding, and temporary marking.



Scotch® 130C and Scotch® 23

Moisture-sealing and higher voltage.

Product	UPC	Roll Size	Colour	MOQ	Case Qty.
SUPER33-1/2X36	54007101178	1/2" x 108'	Black	48	48
SUPER33+ 3/4X66	54007061328	3/4" x 66'	Black	10	100
SUPER33-1X36	54007101413	1" x 108'	Black	12	48
SUPER33-1-1/2X36	54007502364	1.5" x 108'	Black	50	50
SUPER88-3/4X66	51128571385	3/4" x 66'	Black	10	100
SUPER88-1X36	54007103318	1" x 108'	Black	48	48
SUPER88-1-1/2X36	54007103493	1.5" x 108'	Black	12	12
SUPER88-2X36	54007103561	2" x 108'	Black	12	12
35-3/4X66BL	54007108368	3/4" x 66'	Blue	10	100
35-1/2X20BL	54007102403	1/2" x 20'	Blue	10	100
35-3/4X66BR	54007108856	3/4" x 66'	Brown	10	100
35-1/2X20BR	54007102991	1/2" x 20'	Brown	10	100
35-3/4X66GY	54007000723	3/4" x 66'	Grey	10	100
35-1/2X20GY	54007102816	1/2" x 20'	Grey	10	100
35-3/4X66GR	54007108511	3/4" x 66'	Green	10	100
35-1/2X20GR	54007102656	1/2" x 20'	Green	10	100
35-3/4X66OR	54007108696	3/4" x 66'	Orange	10	100
35-1/2X20OR	54007102731	1/2" x 20'	Orange	10	100
35-3/4X66RD	54007108108	3/4" x 66'	Red	10	100
35-1/2X20RD	54007102243	1/2" x 20'	Red	10	100
35-3/4X66VI	54007112716	3/4" x 66'	Violet	10	100
35-1/2X20VI	54007499237	1/2" x 20'	Violet	100	100
35-3/4X66WH	54007108283	3/4" x 66'	White	10	100
35-1/2X20WH	54007102328	1/2" x 20'	White	10	100
35-3/4X66YL	54007108443	3/4" x 66'	Yellow	10	100
35-1/2X20YL	54007102571	1/2" x 20'	Yellow	10	100
165BK4A	76308925680	3/4" x 60'	Black	100	100
165BL4A	76308925697	3/4" x 60'	Blue	10	100
165BR4A	76308925703	3/4" x 60'	Brown	10	100
165GY4A	76308925727	3/4" x 60'	Grey	10	100
165GR4A	76308925710	3/4" x 60'	Green	10	100
165OR4A	76308925734	3/4" x 60'	Orange	10	100
165PR4A	76308925741	3/4" x 60'	Purple	10	100
165RD4A	76308925758	3/4" x 60'	Red	10	100
165WH4A	76308925765	3/4" x 60'	White	10	100
165YL4A	76308925772	3/4" x 60'	Yellow	10	100
175BK4A	76308926182	3/4" x 60'	Black	100	100
130C-3/4X30	51128572856	3/4" x 30'	Black	8	24
130C-1X30	54007417538	1" x 30'	Black	8	24
130C-1.5X30	54007417187	1.5" x 30'	Black	12	12
130C-2X30	54007417545	2" x 30'	Black	12	12
23-3/4X30	7891040003860	3/4" x 30'	Black	20	20
23-25X9.15	7891040003969	1" x 30'	Black	32	32
23-1-1/2X30	7891040003976	1.5" x 30'	Black	20	20
23-2X30	54007150336	2" x 30'	Black	16	16

<sup>&</sup>lt;sup>1</sup> Temperature range may vary by local agency standards.

<sup>&</sup>lt;sup>2</sup> Based on ASTMD 1000. Not for specifications. Values are typical, not to be considered minimum or maximum. Properties measured at room temperature 73°F (23°C) unless otherwise stated.

#### **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 direct, indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.

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.



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