3M™ Temflex™ Vinyl Electrical Tape 175

Data Sheet October 2020

Product Description

3M Temflex Vinyl Electrical Tape 175 is a 7-mil thick, high-performance general-purpose flame-retardant vinyl insulating tape. It is designed to perform in ambient temperatures up to 194°F (90°C). The tape is conformable for cold weather application down to 19°F (-7°C). It has excellent resistance to abrasion, moisture, alkalies, acid, copper corrosion and varying weather conditions. The combination of an elastic PVC backing and pressure-sensitive rubber-based adhesive provides electrical and mechanical protection with minimum bulk.

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

Properties

Physical Properties	Value Imperial (Metric)	Electrical Properties	Value Imperial (Metric)
Temperature Rating - UL 510 ¹	176°F (80°C)	Voltage Rating UL 510 ¹ CSA ²	600 V 1000 V
Temperature Rating CSA - C22.2 No. 197 ²	19°F (-7°C) 194°F (90°C)	Dielectric Strength ³ - Minimum Standard Condition After Humidity Condition	1000 V/mil (40 kV/mm) >90% of std.
Color - Visual	Black	Insulation Resistance ³ - Minimum (High Humidity Method)	1x10 ⁶ Megohms
Flame Retardant - UL 510	Pass		
Mechanical Properties	Value Imperial (Metric)		
Thickness ³ - Nominal	7 mils (0.178 mm)		
Adhesion to Steel ³ - Minimum	18 oz/in (2.0 N/cm)		
Adhesion to Backing ³ - Minimum	18 oz/in (2.0 N/cm)		
Breaking Strength ³ - Minimum	15 lbs/in (27 N/cm)		
Elongation ³ - Nominal	200%		

Notes:

- 1. In accordance with the National Electrical Code, NFPA 70
- 2. In accordance with Canadian Electrical Code, Part 1
- 3. ASTM D1000 Test Method properties measured at room temperature 73°F (23°C) unless otherwise stated

Agency Approvals & Self Certifications

- UL Listed: UL 510 Standard "Insulating Tape", Category OANZ, File No. E129200
- CSA Listed: CSA-C22.2 No.197 "PVC Insulating Tape", File No. 048769, Class 9052-02
- For Regulatory information including RoHS, REACH, please visit <u>www.3M.com/regs</u>



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Installation Techniques	3M Temflex Vinyl Electrical Tape 175 shall be applied in half-lapped layers with a sufficient tension to produce a uniform wind (for most applications this tension will reduce the tape width to approximately 5/8 of original width). On pigtail splices, the tape shall be wrapped beyond the end of the wires and then folded back, leaving a protective cushion to resist cut-through. Wrap tape up-hill, taping from a smaller diameter surface to a larger diameter surface. Apply the tape with no tension on the last wrap to prevent flagging.
Shelf Life & Storage	This product has a 5-year shelf life (from date of manufacture) when stored in a humidity-controlled storage (10°C/50°F to 27°C/80°F and <75% relative humidity).
Availability	3M Temflex Vinyl Electrical Tape 175 is available from 3M authorized distributors
	Also available from 3M.com/electrical or call 1.800.245.3573.

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