

**3M** Data Sheet  
**Temflex™ 1700**  
Vinyl Electrical Tape



WWW.CABLEJOINTS.CO.UK  
**THORNE & DERRICK UK**  
TEL 0044 191 490 1547 FAX 0044 477 5371  
TEL 0044 117 977 4647 FAX 0044 977 5582  
WWW.THORNEANDDERRICK.CO.UK

## 1. Product Description

Temflex™ 1700 Electrical Tape is a good quality and economical general purpose vinyl insulating tape. It has excellent resistance to: abrasion, moisture, alkalies, acid, copper corrosion and varying weather conditions (including sunlight). It is a polyvinyl chloride (PVC) tape that has a high wet dielectric strength, is flame-retardant and conformable, and provides excellent mechanical protection with minimum bulk. It is a UL listed and CSA certified "Insulating Tape".

## 2. Applications

- Primary electrical insulation for all wire and cable splices rated up to 600 volts
- Protective jacketing for high-voltage cable splices and repairs
- Harnessing of wires and cables
- For indoor and outdoor application
- For above or below grade application

## 3. Typical Properties\*

|                                           |                     |
|-------------------------------------------|---------------------|
| <b>Temperature Rating<sup>1</sup></b>     | 80°C                |
| <b>UL 510 Flame Retardant<sup>2</sup></b> | Yes                 |
| <b>Electric Strength<sup>3</sup></b>      | >39.4 kV/mm         |
| After Humidity Condition                  | >90% of Standard    |
| <b>Insulation Resistance<sup>4</sup></b>  | >10 <sup>6</sup> MΩ |
| <b>Thickness<sup>3</sup></b>              | 0.18 mm             |
| <b>Elongation<sup>3</sup></b>             | 200 %               |
| <b>Breaking Strength<sup>3</sup></b>      | 29.77N/10 mm        |

**Adhesion to Steel<sup>3</sup>** 2.63 N/10 mm

**Adhesion to Backing<sup>3</sup>** 2.41 N/10 mm

\*These are typical values and should not be used for specification purposes.

<sup>1</sup> IEC 60216

<sup>2</sup> UL-recognized for flame retardancy per UL 510, Product Category OANZ2, File E 129200

<sup>3</sup> IEC 60454-2

<sup>4</sup> IEC60426

## 4. Installation Technique

The tape shall be applied in half-lapped layers with sufficient tension to conform and produce a uniform covering. In most applications, this tension will reduce the tape's width to approximately  $\frac{5}{8}$  of its original width. On pigtail splices, the tape should be wrapped beyond the end of the wires and then folded back, leaving a protective cushion to resist cut-through. Always wrap the tape "uphill". **Apply the tape with no tension on the last wrap to prevent flagging.**

## 5. Maintenance

Temflex™ 1700 Electrical Tape is stable under normal storage conditions. It complies with the storage requirements of UL Standard 510.

## 6. Availability

Temflex™ 1700 Electrical Tape is available from your local 3M authorized electrical distributor. Its standard roll size is  $\frac{3}{4}$  in. x 60 ft.

Temflex™ 1700P Printed Tape is available in two roll sizes,  $\frac{3}{4}$  in. x 66 ft. and  $1\frac{1}{2}$  in. x 44 ft., for use in MSHA-approved (Mine Safety and Health Administration) splicing kits.



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Electro Product Division  
Carl-Schurz-Straße 1  
D-41453 Neuss  
Germany  
Tel: +49 2131 – 14 0  
Fax: +49 2131 – 14 3897

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