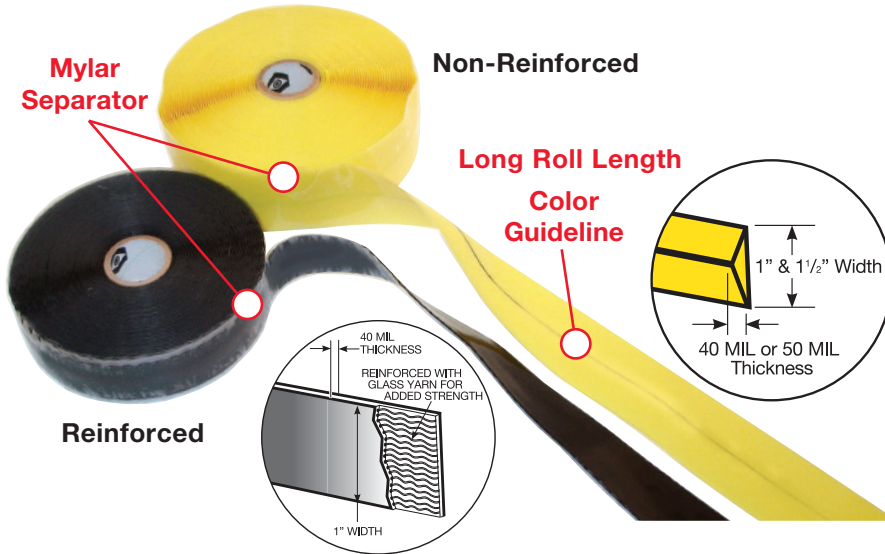


# Vulko-Wrap™ Insulating Tape

- RoHS Compliant
- Operating Temperature Range -60°F to 400°F
- Self-Vulcanizing Wrap
- High Dielectric Strength



## APPLICATIONS

- Bus Bar Insulation
- Cable Insulation Splices
- Corrosive Areas
- Electroplating Dangers
- Food Related Equipment
- High Heat
- High Voltage
- HVAC Equipment
- Lift Truck Battery
- Cable Terminals
- Motor Leads
- Outdoor Terminations
- Temporary Repair of Low Pressure Air and Hydraulic Lines
- Terminal Splicing
- Transformer Tap Lead Insulation
- Washdown Areas

## SPECIFICATIONS

### FOR NON-REINFORCED

**SPECIFICATIONS** Meets U.S. Military Spec. MIL-I-46852, superseded by CID A-A-59163.

**DIELECTRIC STRENGTH** (Per ASTM D-149): 300 volts per mil of finished wrap thickness for 40 mil and 275 volts per mil of finished wrap thickness for 50 mil.

**ELONGATION** (Per ASTM D-412): 300% minimum.

**SHELF LIFE** Product should be stored at 70°F or less for maximum shelf life. Store in original packaging in clean dry environment when not in use.

**PRODUCT LIMITATION** Vulko-Wrap™ has a low abrasion and cut resistance. A protective overwrap is recommended for applications exposed to dragging or impact.

### FOR REINFORCED

**SPECIFICATIONS** Meets U.S. Military Spec. MIL-I-22444C.

**DIELECTRIC STRENGTH** (Per ASTM D-149) 500 volts per mil of finished wrap thickness for 40 mil.

**ELONGATION** (Per ASTM D-412) 15% minimum.

**SHELF LIFE** Product should be stored at 70°F or less for maximum shelf life. Store in original packaging in clean dry environment when not in use.

**REINFORCEMENT** Reinforcing braid embedded in center of material provides enhanced mechanical strength while still allowing the product to cover irregular shapes.

## FEATURES & BENEFITS

**HIGH DIELECTRIC STRENGTH** — Can be used for all electrical connections.

**SPECIALLY COMPOUNDED, SYNTHETIC SILICONE ELASTOMER** — Resistant to oil, water, ozone, and many chemicals. Wide temperature range from -60°F to +400°F.

**VULCANIZES IMMEDIATELY** — Requires no heat—becomes fully bonded in 24 hours at room temperature. Remains pliable over time.

**NO ADHESIVES, ADHERES ONLY TO ITSELF** — Easy to remove – leaves no residue. Covered fittings are immediately reusable.

**TRIANGULAR SHAPE WITH COLOR GUIDELINE** — Allows even thickness for uniform high dielectric strength.

**WIDTH 1" TO 1.5"** — Covers more surface than ordinary tape with a single wrap.

**NON-REINFORCED PRODUCT STRETCHES TO APPROXIMATELY 2-1/2 TIMES ITS LENGTH** — Conforms to irregular shapes and uneven surfaces. Can be used on parts which move or vibrate.

**AVAILABLE IN 40 MIL OR 50 MIL THICKNESS** — Extra thick design allows wrapping over sharp and irregular surfaces without tearing or puncturing.

## ORDERING INFORMATION (Call for pricing & availability)

PART NO.	NOMINAL THICKNESS	NOMINAL WIDTH x LENGTH	WRAP COLOR/ GUIDELINE COLOR	DIELECTRIC STRENGTH	MEETS MIL SPEC	TENSILE STRENGTH
<b>98412</b> (Non-Reinforced)	40 Mil	1 in x 36 ft (2.54 cm x 1100 cm)	Yellow / Red	300 Volts / Mil	MIL-I-46852	1100 psi
<b>98512</b> (Non-Reinforced)	50 Mil	1.5 in x 36 ft (3.81 cm x 1100 cm)	Yellow / Black	275 Volts / Mil	MIL-I-46852	1100 psi
<b>98412BK</b> (Non-Reinforced)	40 Mil	1 in x 36 ft (2.54 cm x 1100 cm)	Black / Green	300 Volts / Mil	MIL-I-46852	1100 psi
<b>98512BK</b> (Non-Reinforced)	50 Mil	1.5 in x 36 ft (3.81 cm x 1100 cm)	Black / Yellow	275 Volts / Mil	MIL-I-46852	1100 psi
<b>18412</b> (Reinforced)	40 Mil	1 in x 36 ft (2.54 cm x 1100 cm)	Black / None	500 Volts / Mil	MIL-I-22444C	1100 psi



## GENERAL INSTRUCTIONS

1. Measure and cut the desired length of Vulko-Wrap™ from the roll and remove the mylar separator. Take precaution to avoid having the wrap fold onto itself.
2. Hold one end of the Vulko-Wrap™ on the termination to be covered. Stretch and wrap the Vulko-Wrap™ around the termination, overlapping it approximately 50%.
3. Continue to stretch and wrap while applying until the entire termination is encapsulated. Overlap the tail end of the Vulko-Wrap™ back over itself.
4. Apply a second layer of Vulko-Wrap™ over the entire surface of the first layer. This second layer (and subsequent layers) does not require any stretching. Continue to wrap until desired or required thickness is achieved.

It is recommended that you apply at least two (2) layers of Vulko-Wrap™ over any surface you are covering. The number of layers required is dependent upon the voltage potential of the termination the Vulko-Wrap™ is being applied over, and also dependent upon the amount of abuse the termination is expected to experience. See **ORDERING INFORMATION** on front.

Apply the first layer of Vulko-Wrap™ with a maximum stretch (< 75% of original width). Apply the second layer with minimal or zero stretch of the wrap.

## SPLICE CONFIGURATIONS

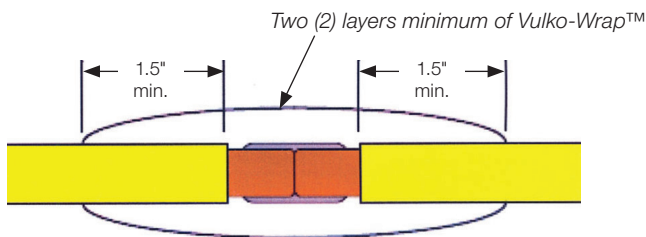
### In-Line Splice Connections

1. Begin wrapping the first layer of Vulko-Wrap™ onto the termination by holding the lead end on the surface and stretching the tape around until it overlaps itself approximately 50%. Continue to wrap the termination until the Vulko-Wrap™ extends 1.5 inches in each direction beyond the termination (See *FIGURE 1*).

Overlap the tail end of the Vulko-Wrap™ back over itself. The first layer should have a maximum stretch of < 75% of its original width.

2. Apply a second layer (and subsequent layers) over the entire surface of the first layer. The second and subsequent layers do not require any stretching. Continue to wrap until the desired or required thickness is achieved. If the splice will have exposure to mechanical abuse, it is recommended to use Reinforced Vulko-Wrap™ (P/N 18412) as an added layer or layers over the Vulko-Wrap™ to provide added protection. The number of added layers is dependent upon the expected severity of the abuse.

**NOTE:** If you have a connection or splice with irregular surfaces, you can use Vulko-Wrap™ to fill in any voids or cavity. You can cut pieces of Vulko-Wrap™ and create “pillows” by layering them and pushing them into the voids or cavities. You can stretch and push the Vulko-Wrap™ into the void or cavity using your finger or thumb to apply pressure. Reinforced Vulko-Wrap™ can be used as a pre-wrap on sharp edges, or for the total wrap.

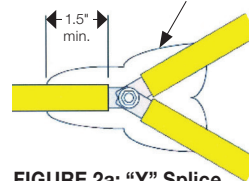


**FIGURE 1: In-Line Splice**

### “Y” and “V” Splice Connections

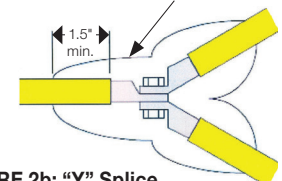
1. Use the Vulko-Wrap™ to fill in and/or smooth out the voids existing around the non-insulated terminal connection (the “V” gaps existing in the “Y” and “V” connections). Carefully wrap Vulko-Wrap™ in a crossing pattern around these gaps at the non-insulated terminals. Use a maximum stretch (< 75% of original width) when applying the Vulko-Wrap™ around the gaps at the non-insulated terminal connections.
2. After completing the step above, start to wrap the Vulko-Wrap™ around the “Y” or “V” splice making sure to meet the minimum 1.5 inch clearance as shown in Figures 2a, 2b or 3. Again, the first layer should have a maximum stretch of < 75% of its original width. Be sure to overlap the tail end of the Vulko-Wrap™ back over itself.
3. Apply a second layer (and subsequent layers) over the entire surface of the first layer. The second and subsequent layers do not require any stretching. Continue to wrap until the desired or required thickness is achieved. If the splice will have exposure to mechanical abuse, it is recommended to use Reinforced Vulko-Wrap™ (P/N 18412) as an added layer or layers over the Vulko-Wrap™ to provide added protection. The number of added layers is dependent upon the expected severity of the abuse.

Two (2) layers minimum of Vulko-Wrap™



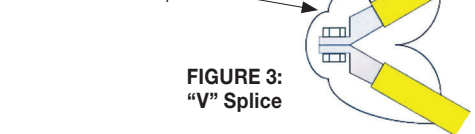
**FIGURE 2a: “Y” Splice (top view)**

Two (2) layers minimum of Vulko-Wrap™



**FIGURE 2b: “Y” Splice (side view)**

Two (2) layers minimum of Vulko-Wrap™



**FIGURE 3: “V” Splice**

