

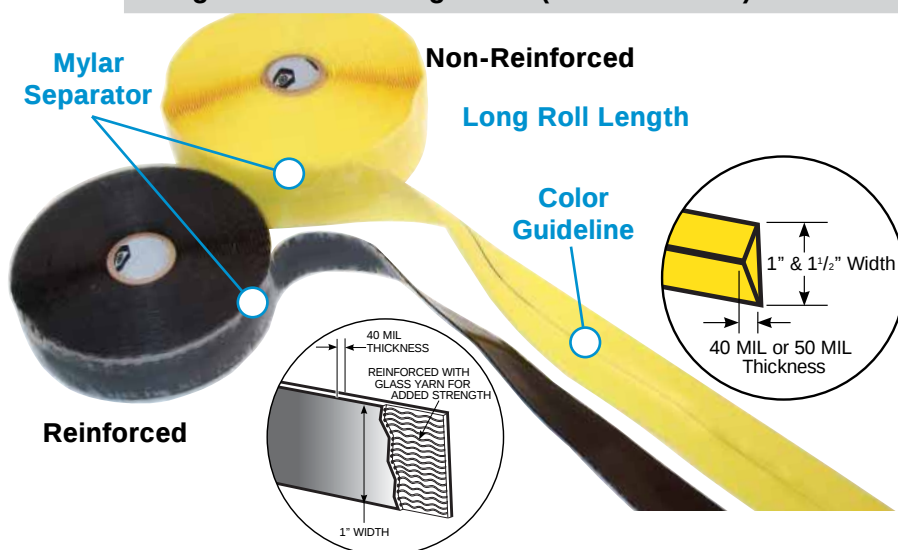
VULKO-WRAP™ INSULATING MATERIAL

BEST FOR: Cable Insulation & Terminal Splices • High Heat & Voltage • Outdoor Terminations

- Self-Vulcanizing Wrap
- High Dielectric Strength

- Temperature Rating (-60°F to +400°F)

- Reinforced with Glass Yarn Fiber
- RoHS Compliant



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.

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.

Width 1" to 1-1/2"

Covers more surface than ordinary tape with a single wrap.

Available in 40 MIL or 50 MIL Thickness

Extra thick design allows wrapping over sharp and irregular surfaces without tearing or puncturing.

OTHER APPLICATIONS

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

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 MIL-I-46852, superseded by CID A-A-59163.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.

TENSILE/BREAK STRENGTH (Per ASTM D-412): 700 PSI Min.; 17 lbs. for 40 mil; 42 lbs. 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.

ORDERING INFORMATION

PART NO.	THICKNESS WIDTH & LGTH.	COLOR	DIELECTRIC STRENGTH	MEETS MIL SPEC	NO. OF WRAPS	FINISHED THICKNESS	VOLTAGE PROTECTION
98412 Non-Reinforced	40 Mil 1 in. x 36 ft.	Yellow	300 Volts/Mil	MIL-I-46852	1 2 3	20 mil 40 mil 60 mil	5,500 11,000 16,500
98512 Non-Reinforced	50 Mil 1 in. x 36 ft.	Yellow	275 Volts/Mil	MIL-I-46852	1 2 3	25 mil 50 mil 75 mil	6,875 13,750 20,625
98412BK Non-Reinforced	40 Mil 1 in. x 36 ft.	Black	300 Volts/Mil	MIL-I-46852	1 2 3	20 mil 40 mil 60 mil	5,500 11,000 16,500
98512BK Non-Reinforced	50 Mil 1 1/2 in. x 36 ft.	Black	275 Volts/Mil	MIL-I-46852	1 2 3	25 mil 50 mil 75 mil	6,875 13,750 20,625
18412 Reinforced	40 Mil 1 in. x 36 ft.	Black	500 Volts/Mil	MIL-I-22444C	1 2 3	36 mil 72 mil 108 mil	18,000 36,000 54,000

Assumes 50% overlap and stretching the wrap 2.5 times. Assumes 25% overlap and stretching the wrap 10%.

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. 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.

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.

3. After the connection has been completely wrapped, a layer of abrasion protection must be added like TPC 18412 or a vinyl electrical tape.

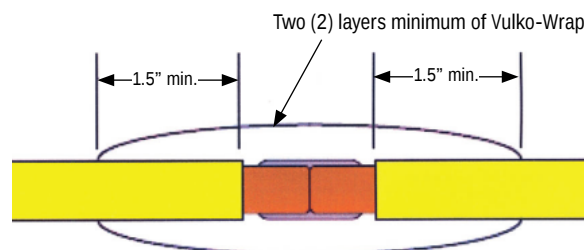


FIGURE 1 In-Line Splice

"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.

4. After the connection has been completely wrapped, a layer of abrasion protection must be added like TPC 18412 or a vinyl electrical tape.

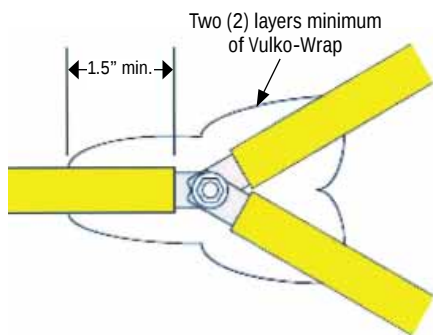


FIGURE 2a "Y" Splice (top view)

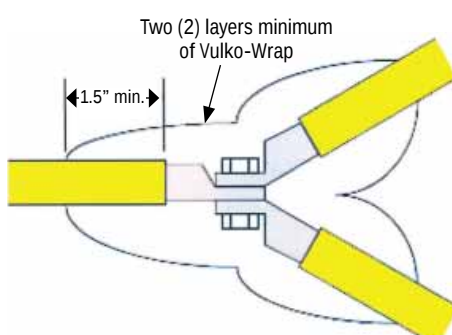


FIGURE 2b "Y" Splice (side view)

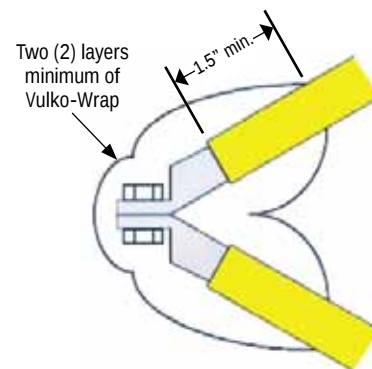


FIGURE 3 "V" Splice

NOTE: Cushion sharp edges by applying extra layered sections of Vulko-Wrap or use Reinforced Vulko-Wrap



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