

## End Dip & End Seal Paste for Firesleeve Sealing

### High Temperature & Heat Resistant Sealant For Industrial, Heavy Duty, Aerospace, Marine Grade Firesleeve



#### SleeveSeal™

##### End Seal Dip – Liquid Silicone Rubber

##### End Seal Paste – Silicone Rubber RTV

The ends of firesleeve can be sealed against the absorption of liquids by dipping the end in this liquid silicone rubber end dip sealant or by using end seal paste.

Available in any color: Oxide-Red and Black are the most common (other colors 1 gallon minimum).

Becomes tack free in 60 to 90 minutes and cures fully in 16 to 24 hours\*. Cure can be accelerated by increasing relative humidity and also adding heat.

500°F / 260°C rating once cured. Non-hazardous to ship. Liquid End Seal Dip may be thinned with odourless mineral spirits (xylene). Non corrosive and meets Mil-A-46146 as per NAVAIR 01-1A-20.

The 4 oz mini container opening can accommodate sleeve up to 1 3/4" ID.

The 16 oz container opening can accommodate sleeve up to 3 1/4" ID. Larger sleeve can be carefully convoluted to fit inside the jar opening.

A Low VOC version is available: Maximum VOC is 20g/L.

SleeveSeal™ High Temperature Liquid End Seal Dip and End Seal Paste	
Quantity	Part Number
Liquid End Seal Dip	
4 oz	US-ESD-04-X
16 oz (Pint)	US-ESD-16-X
128 oz (1 gallon)	US-ESD-128-X
128 oz (1 gallon)	US-ESD-LV-128-X*
640 oz (5 gallon)	US-ESD-640-X
End Seal Paste	
3 oz tube	US-ESP-03-X
10.3 oz cartridge	US-ESP-10-X
Desiccant Box	
1.5oz Desiccant in Box	AB-SGD-1

X = "OR" for oxide-red or "BK" for black. Other colors are available for the Dip: min quantity is 1 gallon.  
\* = Low VOC version.

### Desiccant Box



Desiccant box can be placed with uncured SleeveSeal™ Dip container in a sealed container or bag to considerably extend shelf life. Can be re-generated for unlimited re-use.

Perforated plastic box is approx 2 1/4" x 2 1/4" x 1". Total weight is 2.3oz (67g). Can be recharged at low temperature in an oven or microwave. Dry desiccant is blue in color and changes to pink as it absorbs moisture.

## Firesleeve EndWrap™ Tape / High Temperature Electrical Tape 500°F/260°C Silicone Rubber Self Fusing / Self Binding / Self Amalgamating Compression Tape



FlameShield™ end wrap & electrical amalgamating compression tape is a unique adhesive-free tape which self-fuses / self-bonds within 24 hours or less at room temperature or shorter time at elevated temperatures when wrapped over itself, providing an excellent water-tight and air-tight seal.

Tape is adhesive free; leaves no residue when removed. Typically used to protect the free ends of firesleeve from wicking liquids once installed on hoses or cables. Also used for electrical wire and cable splice protection and protection of wires at connector shell clamp band locations. Exceptional electrical insulation resistance in a single wrap.

Tested to:

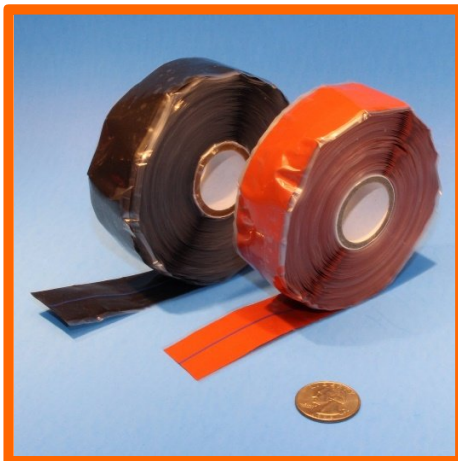
- ASTM D 149; tested for minimum 400 V/mil. for .010" to .030" thick tape, 300 V/mil for .040" thick tape and 250 V/mil for .060" thick tape.
- ASTM D 412; tested for minimum 700 psi tensile strength and minimum 300% elongation.
- ASTM D 2240; Durometer (Shore A); 55. Other test data available.

Using triangular profile tapes results in a smooth surface contour when spiral wrapped. The most common tapes are 1" wide triangular profile with either a 0.020", 0.030" or 0.040" center thickness. Meets Mil-I-46852C & A-A-59163 specifications. All tapes are available in 12 yard / 36 foot long rolls. Some tapes available in 20 yard / 60 foot long rolls.

Triangular tapes have a center guideline to aid in properly spacing the tape when spiral wrapping.

T-SR-SA25 and T-SR-SA15 reinforced limited stretch tapes meeting MIL-I-22444 provides uniform thickness even on sharp corners and edges.

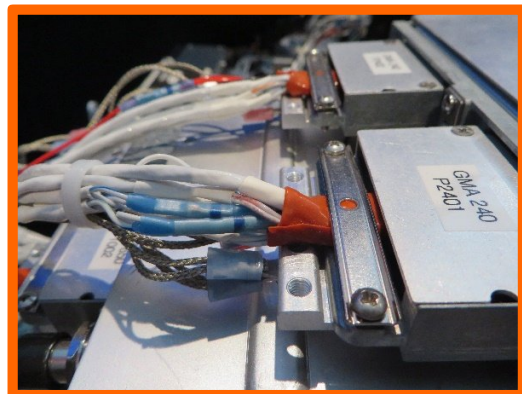
Tape part numbers ending in "BK" are Black color; "OR" are Oxide-Red color. Other colors are available by custom run.



Type II tapes (above) have a center guideline



Type I tapes have uniform thickness



## Firesleeve EndWrap™ Tape / High Temperature Electrical Tape 500°F/260°C

(Continued)



All tapes are available in 12 yard / 36 foot long rolls. Some tapes available in 20 yard / 60 foot long rolls.

### FlameShield™ High Temperature Silicone Rubber Self Fusing Firesleeve EndWrap™ Tape

Meets MIL-I-46852 / A-A-59163 specifications - Type I and Type II

Part Number	Tape Width Inches / mm	Thickness inches / mm	Color / Type / Profile
T-SR-M013-08-RBK-20	1/2 / 12.7	0.020 / 0.508	Black / I / Rectangular
T-SR-M013-08-RXX-30	1/2 / 12.7	0.030 / 0.760	Black or Red / I / Rectangular
T-SR-M016-10-RBK-20	5/8 / 15.7	0.020 / 0.508	Black / I / Rectangular
T-SR-M019-12-ROR-10	3/4 / 19	0.010 / 0.254	Oxide-Red / I / Rectangular
T-SR-M019-12-RBK-20	3/4 / 19	0.020 / 0.508	Black / I / Rectangular
T-SR-M025-16-TXX-20	1 / 25.4	0.020 / 0.508	Black or Red / II / Triangular
T-SR-M025-16-RXX-20	1 / 25.4	0.020 / 0.508	Black or Red / I / Rectangular
T-SR-M025-16-TXX-30	1 / 25.4	0.030 / 0.760	Black or Red / II / Triangular
T-SR-M025-16-RXX-30	1 / 25.4	0.030 / 0.760	Black or Red / I / Rectangular
T-SR-M025-16-TXX-40	1 / 25.4	0.040 / 1.000	Black or Red / II / Triangular
T-SR-M025-16-RXX-40	1 / 25.4	0.040 / 1.000	Black or Red / I / Rectangular
T-SR-M038-24-RXX-20	1 1/2 / 38.1	0.020 / 0.508	Black or Red / I / Rectangular
T-SR-M038-24-RXX-12	1 1/2 / 38.1	0.012 / 0.304	Black or Red / I / Rectangular
T-SR-M051-32-RXX-20	2 / 50.8	0.020 / 0.508	Black or Red / I / Rectangular
T-SR-M051-32-TXX-20	2 / 50.8	0.020 / 0.508	Black or Red / II / Triangular
T-SR-M051-32-RXX-20	2 / 50.8	0.030 / 0.760	Black / I / Rectangular
Guideline Color Triangular Type II Tapes Only: .020" = blue / .030" = white / .040" = green			

### Supported Tape with Limited Elongation Meets MIL-I-22444 (also meets ABS 5334 Specifications)

T-SR-SA25-08-20-RXX*	1/2 / 12.7	0.020 / 0.508	Red or Black / I / Rectangular
T-SR-SA25-16-20-RXX*	1 / 25.4	0.020 / 0.508	Red or Black / I / Rectangular
T-SR-SB15-16-20-RXX*	1 / 25.4	0.020 / 0.508	Red or Black / I / Rectangular
T-SR-SA25-16-40-RXX*	1 / 25.4	0.040 / 1.000	Red or Black / I / Rectangular

For the "-XX" value above in the part number, use "-OR" for Oxide-Red or "-BK" for Black

\* NOTE: T-SR-SA25/SB15 tapes have an encapsulated sinusoidal weave fiberglass reinforcement layer, limiting stretch of the tape to a maximum of 25% (SA25), or 15% (SB15) ensuring that the tape thickness remains constant over irregular surfaces and edges.

A Certificate of Conformity is available at \$6.00 per roll or \$25.00 per line item. Test report is available at \$150.00 per line item. This tape is also available meeting several other OEM and National Stock Number / NATO Stock Number specifications (available under military cage code is L8347).

These tapes are guaranteed to meet specification for 2 years from date of manufacture providing tapes are stored dry at 21°C +/- 3°C or 70°F +/- 5°F. Standard tapes have an interleaved liner of polyethylene (Mylar®). Polyester liner available.

## Firesleeve Accessories: Stainless Steel Clamps & Clamp Tools

### Type 201 Stainless Steel - 1/4" / 6.4mm wide



Preformed Stainless Steel Twice-Around clamps are the strongest clamps available for firesleeve or hose assembly. Use our Firesleeve Clamp Tool for closing and locking these clamps. Clamp widths available are 0.25", 0.375", 0.5", 0.625" and 0.75" wide. 0.25" wide clamps are type 201 stainless steel.



The inside of the clamp is formed to provide a smooth surface as possible to the underlying material being clamped - reducing potential damage to the surface integrity during installation.

Free-end or twice-around clamps are used to secure firesleeve over hoses at the fitting. Twice-around clamps offer better tensile strength than free end clamps and provide superior clamping of hydraulic hoses onto fittings.

<b>FlameShield™ Type 201 Stainless Steel Preformed Twice Around Clamps</b> <b>1/4" / 0.25" / 6.35mm wide - .020"/.51mm thick</b>	
<b>Part Number</b>	<b>Max Sleeve or Hose OD Inches / mm</b>
C-TA-250-13-201SS	13/16 / 20
C-TA-250-16-201SS	1 / 25
C-TA-250-22-201SS	1 3/8 / 34
C-TA-250-24-201SS	1 1/2 / 38
C-TA-250-32-201SS	2 / 51
C-TA-250-40-201SS	2 1/2 / 63
C-TA-250-44-201SS	2 3/4 / 70
C-TA-250-48-201SS	3 / 76
C-TA-250-56-201SS	3 1/2 / 88
C-TA-250-64-201SS	4 / 101
C-TA-250-72-201SS	4 1/2 / 114

Full box quantity is 100 clamps. Discount for full box purchase is 25%  
Half-box quantity is 50 clamps. Discount for half-box purchase is 15%



<b>FlameShield™ Type 201 / 316 Stainless Steel / Galvanized Carbon Steel Preformed Twice Around Clamps</b> <b>3/8" / 0.375" / 9.6mm wide - .025"/.64mm thick</b>	
Part Number	Max Sleeve or Hose OD Inches / mm
C-TA-375-13-X	13/16 / 20
C-TA-375-16-X	1 / 25
C-TA-375-22-X	1 3/8 / 34
C-TA-375-32-X	2 / 51
C-TA-375-40-X	2 1/2 / 63
C-TA-375-48-X	3 / 76
C-TA-375-56-X	3 1/2 / 88
C-TA-375-64-X	4 / 101

For the "X" value, substitute:

"201SS" for 201 Stainless Steel

"316SS" for 316 Stainless Steel

"GAL" for Galvanized Carbon Steel

Full box quantity is 100 clamps. Discount for full box purchase is 25%

Half-box quantity is 50 clamps. Discount for half-box purchase is 15%

<b>FlameShield™ Type 201 / 316 Stainless Steel / Galvanized Carbon Steel Preformed Twice Around Clamps</b> <b>1/2" / 0.5" / 12.7mm wide - .030"/.76mm thick</b>	
Part Number	Max Sleeve or Hose OD Inches / mm
C-TA-500-16-X	1 / 25
C-TA-500-20-X	1 1/4 / 31
C-TA-500-24-X	1 1/2 / 38
C-TA-500-28-X	1 3/4 / 44
C-TA-500-32-X	2 / 51
C-TA-500-40-X	2 1/2 / 63
C-TA-500-44-X	2 3/4 / 69
C-TA-500-48-X	3 / 76
C-TA-500-56-X	3 1/2 / 88
C-TA-500-64-X	4 / 101

For the "X" value, substitute:

"201" for 201 Stainless Steel

"316" for 316 Stainless Steel

"GAL" for Galvanized Carbon Steel

Full box quantity is 100 clamps. Discount for full box purchase is 25%

Half-box quantity is 50 clamps. Discount for half-box purchase is 15%

<b>FlameShield™ Type 201 / 316 Stainless Steel / Galvanized Carbon Steel</b> <b>Preformed Twice Around Clamps</b> <b>5/8" / 0.625" / 15.9mm wide - .030"/.76mm thick</b>		
Part Number	Max Sleeve or Hose OD Inches / mm	Price Each 201 / 316 / Galv
C-TA-625-24-X	1 1/2 / 38	\$ 5.44 / \$ 16.56 / \$ 2.04
C-TA-625-28-X	1 3/4 / 38	\$ 6.04 / \$ 18.60 / \$ 2.28
C-TA-625-32-X	2 / 51	\$ 6.60 / \$ 20.40 / \$ 2.48
C-TA-625-36-X	2 1/4 / 57	\$ 7.04 / \$ 21.76 / \$ 2.64
C-TA-625-40-X	2 1/2 / 63	\$ 7.48 / \$ CALL / \$ 2.88

For the "X" value, substitute:

"201" for 201 Stainless Steel

"316" for 316 Stainless Steel

"GAL" for Galvanized Carbon Steel

Full box quantity is 100 clamps. Discount for full box purchase is 25%

Half-box quantity is 50 clamps. Discount for half-box purchase is 15%

<b>FlameShield™ Type 201 / 316 Stainless Steel / Galvanized Carbon Steel</b> <b>Preformed Twice Around Clamps</b> <b>3/4" / 0.75" / 19.1mm wide - .030"/.76mm thick</b>		
Part Number	Max Sleeve or Hose OD Inches / mm	Price Each 201 / 316 / Galv
C-TA-750-32-X	2 / 51	\$ 8.16 / \$ 25.60 / \$ 3.04
C-TA-750-44-X	2 3/4 / 69	\$ 8.88 / \$ 29.64 / \$ 3.44
C-TA-750-48-X	3 / 76	\$ 9.64 / \$ 30.96 / \$ 3.60
C-TA-750-56-X	3 1/2 / 88	\$ 10.24 / \$ 33.68 / \$ 3.92
C-TA-750-64-X	4 / 101	\$ 11.76 / \$ 36.32 / \$ 4.52
C-TA-750-72-X	4 1/2 / 114	\$ 12.64 / \$ 39.00 / \$ 4.76
C-TA-750-80-X	5 / 127	\$ 13.64 / \$ 41.68 / \$ 5.90
C-TA-750-84-X	5 1/4 / 133	\$ 14.16 / \$ 43.56 / \$ 6.10
C-TA-750-96-X	6 / 152	\$ 15.68 / \$ 48.16 / \$ 6.40
C-TA-750-100-X	6 1/4 / 165	\$ 17.28 / \$ N/A / \$ 6.56
C-TA-750-112-X	7 / 177	\$ CALL / \$ N/A / \$ 7.12
C-TA-750-128-X	8 / 203	\$ 21.28 / \$ N/A / \$ 10.08

For the "X" value, substitute:

"201" for 201 Stainless Steel

"316" for 316 Stainless Steel

"GAL" for Galvanized Carbon Steel

Full box quantity is 100 clamps. Discount for full box purchase is 25%

Half-box quantity is 50 clamps. Discount for half-box purchase is 15%

## Firesleeve Stainless Steel Free End Clamps – 316 Stainless

### Free End Clamps & Clamp Tool



#### Clamps – Stainless Steel; Free End; Self Locking

These stainless steel clamps are self locking and can be closed with common hand tools such as standard or needle nose pliers. A tighter clamping can be achieved with the Firesleeve Clamp Tools.

Clamps are available in two widths: .181" (tensile 150 lbs) and .311" (tensile 300 lbs). Clamps longer than 20" are available – call for details. 316 Stainless Steel.

Free End Clamps – .18" / 5mm wide - 316 Stainless Steel – Self Locking – 150# Tensile				
Part Number	Max Sleeve OD Inches / mm *	Length inch / mm	Price 100 per bag	Price Each
C-SSSL-3XX-W181-L05	3/8 / 9.5	5" / 127	\$ 127.00	\$ 1.86
C-SSSL-3XX-W181-L06	7/16 / 11	6" / 152	\$ 139.00	\$ 2.09
C-SSSL-3XX-W181-L08	1 1/8 / 28	8" / 203	\$ 160.00	\$ 2.40
C-SSSL-3XX-W181-L14	3 / 76	14" / 355	\$ 183.00	\$ 2.75
C-SSSL-3XX-W181-L20	5 / 127	20" / 508	\$ 243.00	\$ 3.65

Free End Clamps – .31" / 8mm wide - 316 Stainless Steel – Self Locking – 300# Tensile				
C-SSSL-3XX-W311-L08	1 1/8 / 28	8" / 203	\$ 183.00	\$ 2.75
C-SSSL-3XX-W311-L14	3 / 76	14" / 355	\$ 263.00	\$ 3.95
C-SSSL-3XX-W311-L20	5 / 127	20" / 508	\$ 445.00	\$ 6.68

Clamp Tool		
C-FCT-1		\$ 44.61

- The maximum sleeve OD is based on using the C-FCT-1 tool to close the clamp. A portion of the clamp free end must be inserted into the winder of the tool, and that length is lost from the total available length of the clamp – and therefore the OD that the clamp is capable of fitting is smaller than if the clamp tool is not used and the clamp is closed by other means.

## Firesleeve Stainless Steel Clamps

### Free End Clamps & Clamp Tool



#### ***Firesleeve Clamp Tool***

Firesleeve Clamp Tool aids in the tightening of either style of clamp up to 3/8" wide. Built-in handles for the winder and cutter or a standard 1/2" wrench can be used for additional torque on the winder. The tool requires 4.5" of clamp free end for the winder to be properly loaded.

Clamp Tool		
C-FCT-1		\$ 44.61

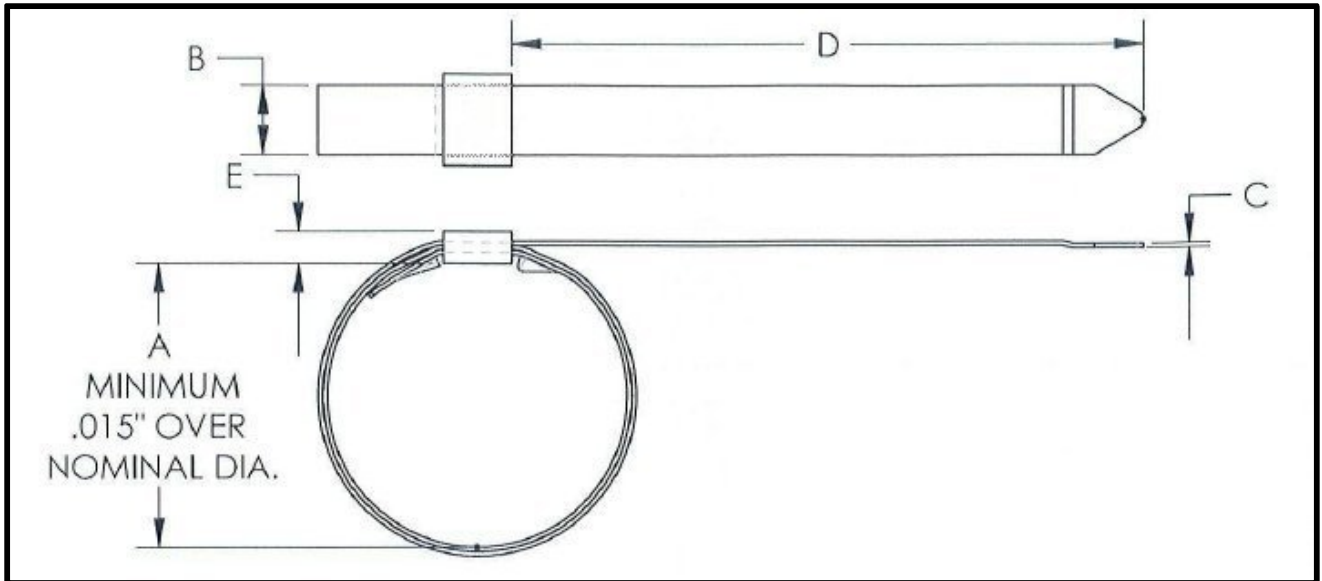


Using FlameShield™ end wrap compression tape over the clamp makes for a neat and clean installation that prevents contamination of the sleeve end.



## Firesleeve Stainless Steel Preformed Twice Around Clamps – Smooth ID

### Dimensional Data



**Twice Around Clamp Physical Dimensions and Material Specifications**

Part Number	Material Band / Buckle	Nominal I.D.	Width +/- .005	Thickne ss +/- .002	Tail Length	Buckle Height Max
-------------	---------------------------	-----------------	-------------------	---------------------------	-------------	----------------------