



**Products That Work  
Service That Counts  
Experience That Matters**

**Advanced Flexible Composites**

# DuraStick® Skived PTFE Film Tape (660 Series)



## Description

DuraStick® Skived PTFE Film Tapes are the most conformable and have the highest elongation of any PTFE tape produced by AFC. These tapes are manufactured by applying a silicone adhesive\* to a skived PTFE film and are excellent for use in applications where stretch or conformity is desired. Pure PTFE film tapes, such as these, exhibit the best chemical, fire and weathering resistance of any tape manufactured by AFC. In addition, these tapes have exceptional electrical properties and are ideal for wire and cable insulation and protection.

\* Acrylic adhesive is available upon special request.

## What is PTFE?

Polytetrafluoroethylene (PTFE), a fluorocarbon plastic, is a plastic in which the hydrogen normally found in association with carbon in organic materials has been replaced with fluorine. The resulting polymer possesses a number of unique properties: inertness to chemicals; fire resistance (will not support a flame); excellent resistance to weathering; low friction (**second only to ice**); excellent anti-stick properties; flexibility; extreme heat and cold resistance; outstanding electrical, insulative and dielectric properties; and resistance to ultraviolet (UV), infrared (IR), microwave and radio frequency (RF).

## DuraStick® Skived PTFE Film Tape Characteristics

DuraStick® Skived PTFE Tapes are engineered to retain the distinctive properties of PTFE; however, by adding an adhesive to one side, the need for mechanical fastening is eliminated. These tapes offer high elongation (up to 300%), and provide an excellent surface when the dimensional stability and pressure resistance of coated fabric is not required. DuraStick® Skived PTFE Tapes conform to Mil Spec I-23594C Type I, have received USDA approval for food processing and handling, are FDA compliant (21 CFR177.1550), and are suitable for applications with operating temperatures ranging from -100°F to 500°F (-73°C to 260°C).

## Typical Applications

### Food Processing:

- Work surface covering
- Tray liners

### Printing and Textiles:

- Non-stick roll coverings

### Building Products:

- Vinyl window manufacturing

### Chemical Processing:

- Tank seals and contaminant barriers
- Gaskets, membranes, seals & diaphragms
- Corrosion resistant chute, drum, and hopper liners
- Lining of spray booths
- Guide rails

### Aerospace, Communications & Military:

- Composite mold release/bonding
- Vacuum bagging

### Pulp and Paper:

- Non-stick roll coverings

### Electrical:

- Commutator insulation
- Slot liners, spacers, field and armature winding
- Wire and cable insulation and protection

### Other Applications:

- Work surface covering
- Heat sealing bars and jaws



**Additional applications exist. Contact AFC for more specific information.**

## Why AFC?

The company's track record of accomplishment, coupled with its vast experience, makes it the logical business partner for customers interested in success. AFC makes the difficult look routine.



## Core Values

### Innovation

AFC has a history of developing new and innovative products for its customers. Evidence of their innovation can be seen in its listing of proprietary products and its patent activity.

*"AFC has developed new products for us to bring to our customers. A small company like ours could not survive without a partner like AFC."* AFC Customer



### Quality

AFC has dedicated itself to meeting the most rigorous standards in each product it is involved in producing, with particular focus placed on quality production techniques.

*"We have dealt with several manufacturers, and AFC's product quality is superior, as is their customer service. AFC is always helpful; if an immediate answer is not available, a call back is always received promptly. I look forward to many more years of working together."* AFC Customer

### Service

The cornerstone of AFC's success has been its steadfast commitment to customer service and satisfaction.

*"AFC's delivery history and customer service have helped us grow our sales in new markets. Their technical assistance and customer service has helped us grow our business. We are proud to have them as a member of our team."* AFC Customer



# DuraStick® Tape Design Guide (Skived PTFE)

## 1. Select Tape Style (from table below)

**Need help?** Contact your Distributor, OEM, or a member of AFC's Customer Service team to help you determine the fabric that would be best for your application.

| Product ID | Adhesive System | Nominal Thickness (Substrate) | Nominal Thickness (Adhesive) | Adhesion (oz/inch of width) | Tensile <sup>1</sup> Strength (lbs/sq inch) | Elongation (%) | Dielectric Strength (volts) | Max. Operating Temp. | Full Width (In.) | Slit Roll Length(s) (Yards) |
|------------|-----------------|-------------------------------|------------------------------|-----------------------------|---------------------------------------------|----------------|-----------------------------|----------------------|------------------|-----------------------------|
| 660-02SN   | Silicone        | 0.002"                        | 0.0015"                      | 30                          | 30                                          | 100            | 11,000                      | 500°F (260°C)        | 22               | 36                          |
| 660-03SN   | Silicone        | 0.003"                        | 0.003"                       | 40                          | 18                                          | 200            | 14,000                      | 500°F (260°C)        | 22               | 36                          |
| 660-05SN   | Silicone        | 0.005"                        | 0.015"                       | 40                          | 30                                          | 200            | 14,000                      | 500°F (260°C)        | 22               | 36                          |
| 660-10SN   | Silicone        | 0.010"                        | 0.015"                       | 55                          | 60                                          | 300            | 20,000                      | 500°F (260°C)        | 22               | 36                          |

Please note: Additional thicknesses and styles available upon special order.

\* Acrylic adhesive is available upon special request.

<sup>1</sup>Disclaimer: AFC measures tensile strength according to ASTM D828 and adhesion according to D 3654/D 3654M. The figures above are averages and actual results will vary.

## Silicone Adhesive Properties

DuraStick® silicone tapes are an excellent choice when the tape is being applied to a heated surface. Silicone adhesives operate over a wide range of temperatures -100°F to 500°F (-73°C to 260°C) and are best used within six months of the date of manufacture. After six months, the adhesive will begin to cross-link and eventually lose its tack. To obtain the maximum shelf life, these tapes should be stored in an air-conditioned room or refrigerated at low humidity.

## 2. Determine whether you desire full width or slit tape:

- Full Width: Full width tape is available in the above width(s) and are ordered by lineal yard or lineal meter.
- Slit Width: Slit tape is available from 1/4" to the maximum width from the table and can be slit to the nearest 1/32 inch.

## 3. Select Your Width:

- Full Width: see above table
- Slit Width: inches or millimeters

## 4. Select Your Length:

- Full Width: only available in 36 yard log
- Slit Width: see above table

### Full Width Design Example:

Material Style-660-10SN, Full Width-20", Length-36 yards

### Slit Roll Design Example:

Material Style-660-10SN, Width 3", Length-36 yards

## Fabrication Capabilities

AFC offers the following fabrication capabilities and services for its fabrics:

- Conveyor belting
- Specialty fabrication
- Belt and fabric perforating
- Custom fabric and tape slitting
- Fabric and tape sheeting
- Custom die cutting

## Tape Treatments and Specialty Coatings

AFC can specially treat its tapes to provide a bondable, abrasion resistant, or static-dissipative surface. In addition, the company also specialty coats tapes to meet specific application needs.

Contact your local distributor or OEM to see for yourself the DuraStick® Advantage. Let AFC prove to you that it **Provides Value Beyond Price.**

## Did You Know?

PTFE is reputedly the most inert substance used in industrial applications. Unaffected by all commonly known chemicals and solvents, it is only attacked by a few sodium and fluorine based compounds . . . and then, only under high temperature (300°C) and pressure conditions.

## Exceptional Service

With the shortest turnaround times in the industry, AFC has built its reputation upon its extraordinary service capabilities. Customer service hours are from 8:30 AM to 6:00 PM EST.

- Same Day Emergency Services: Most orders placed before 1:00 EST
- Next Day Emergency or Expedited Services
- Normal Service: Ships within 5 working days

## Tape Care

When handling, do not fold or crease the tape. The material is susceptible to discoloration by ultra-violet light (turns white), but otherwise is unaffected by chemicals. To ensure maximum product life, be certain that the tape stays within its specified temperature range.

## Experience That Matters

Many companies in the industry boast of long and proud histories. However, no company can match AFC's over 150 years of combined senior management expertise.

As an experienced leader, AFC welcomes the challenges that less experienced companies cannot address; AFC calls them opportunities. While many companies have come and gone during the last 15 years, AFC has proven itself time and again to be a solid, grounded and dependable business partner. One that prides itself as a self-motivating, entrepreneurial spirited company. Perhaps our customers say it best.

*"When you consider service, reliability and quality, AFC is a consummate supplier. Add to those qualities their flexibility, innovative abilities and knowledgeable customer service staff with a "can do" attitude, you have a company that makes doing business a truly pleasurable experience."*

AFC Customer



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