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 weathering resistance; low friction (second only to ice); superior release (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® PTFE Coated Tapes are engineered to retain the distinctive properties of PTFE; however, by adding a glass fabric to the matrix, AFC is able to obtain the added benefits of dimensional stability, durability, excellent tensile strength, and extremely low elongation (<1%). The addition of an adhesive on one side eliminates the need for mechanical fastening.

What is PTFE?
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DuraStick® PTFE Coated Tape Characteristics
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Typical Applications
- Packaging:
  - Poly bag manufacturing
  - Impulse/L-Bar sealing
  - Form fill and seal
  - Over wrapping (Tray packing)
  - Side and End sealing
  - Blister tray covers
  - Vacuum pack machines
- Food Products:
  - 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
- Electronics:
  - Slot-stick and commutator insulation
  - Slot liners, spacers, field and armature winding
  - Wire and cable insulation and protection
- Other Applications:
  - Manufacture of metalized balloons
  - Bearing pads/surface
  - Work surface covering
  - High-temperature masking

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

<table>
<thead>
<tr>
<th>Product ID</th>
<th>Adhesive System</th>
<th>Nominal Thickness (Substrate)</th>
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<th>Adhesion (oz/inch width)</th>
<th>Tensile Strength (lbs/sq inch)</th>
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<tbody>
<tr>
<td>220-03A</td>
<td>Acrylic</td>
<td>0.003&quot;</td>
<td></td>
<td>45</td>
<td>56</td>
<td>350°F (177°C)</td>
<td>39.5</td>
<td>18, 36</td>
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*P= High Performance Adhesive  N=No Liner

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

**Which Adhesive System is Best?**

**Acrylic**

DuraStick® Industrial acrylic tapes have a blue liner and are the best choice when the tape is to be applied to an ambient surface where the heat is applied to the fabric. Acrylic adhesives are aggressive (tacky) at lower temperatures, possess virtually an unlimited shelf life and operate over a narrower range of temperatures -100°F to 350°F (73°C to 177°C), but can handle the intermittent temperature required in impulse sealing.

**Silicone**

DuraStick® Industrial silicone tapes are furnished with a yellow liner and 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 crosslink 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. In addition, AFC offers a high performance silicone adhesive for applications with intermittent temperatures up to 550°F.

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

a. Full Width: Full width tape is available in the above width(s) and are ordered by lineal yard or lineal meter.

b. 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”.

(For slit roll availability contact AFC.)

**3. Select Your Width:**

a. Full Width: the above table reflects the respective available product widths

b. Slit Width: inches or millimeters

**4. Select Your Length:**

a. Full Width: lineal yards or meters in any length required

b. Slit Width: see above table

**Full Width Design Example:**

**Slit Roll Design Example:**
Material Style – 220-05P, Width 2”, Length – 18 yards

**Fabrication Capabilities**

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

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

**DuraStick® Tape Design Guide (Industrial Series)**

**1. Select Tape Style**

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

**Disclaimers:**

- All figures provided in the above table are based upon ASTM D 4969-97, the Standard Specification for Polytetrafluoroethylene (PTFE) Coated Glass Fabric. The above tensile values are based upon the ASTM D902 test method and are not actual values of AFC’s materials. The above tensile values are 80% of the figures provided in Table 6 of specification D579. AFC states that its actual tensile will be greater than the above material specification and that actual tensile values will be provided upon request. AFC measures adhesion according to ASTM D 3654/D 3654M, Standard Test Methods for Shear Adhesion of Pressure-Sensitive Tapes, and actual adhesion values will vary.

**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 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