



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

Advanced Flexible Composites

DuraStick® Industrial Tapes (220 Series)



Description

The DuraStick® Industrial Tapes utilize DuraFab® Industrial Fabrics but have the added benefit of an adhesive on one side. These tapes are manufactured from woven fiberglass substrates, possess an optimal PTFE content, leave a minimal fabric impression, and have a proprietary silicone or acrylic adhesive system. Because of the glass reinforcement, this series of tape is resistant to "cold-flow," a characteristic inherent in pure unsupported PTFE films, these tapes are an excellent choice when cut-through, load carrying, or harsh industrial environments require the unique surface characteristics of PTFE. As AFC's most popular and versatile tape series, DuraStick® Industrial Tapes provide the highest value to customers by offering an excellent balance of heat transfer, release, and flexibility.

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 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 Tape Characteristics

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.

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.

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 (Industrial Series)

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 Strength (lbs/sq inch)	Maximum Operating Temperature	Full Width (In.)	Slit Roll Length(s) (Yards)
220-03A	Acrylic	0.003"	0.0020"	45	56	350°F (177°C)	39.5	18, 36
220-05A	Acrylic	0.005"	0.0020"	50	100	350°F (177°C)	39.5	18, 36
220-06A	Acrylic	0.006"	0.0020"	50	100	350°F (177°C)	39.5	18, 36
220-03S	Silicone	0.003"	0.0020"	40	56	500°F (260°C)	39.5	18, 36
220-03PN	Silicone	0.003"	0.0020"	40	56	550°F (260°C)	39.5	18, 36
220-05P	Silicone	0.006"	0.0025"	45	100	550°F (260°C)	39.5	18, 36
220-06S	Silicone	0.006"	0.0025"	45	100	500°F (260°C)	39.5	18, 36

*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:

- 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". (For slit roll availability contact AFC.)

3. Select Your Width:

- Full Width: the above table reflects the respective available product widths
- Slit Width: inches or millimeters

4. Select Your Length:

- Full Width: lineal yards or meters in any length required
- Slit Width: see above table

Full Width Design Example:

Material Style-220-05P, Full Width-39.5", Length-55 yards

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
- 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



Advanced Flexible Composites

(800) 334-9372
 (847) 658-3938
 FAX (847) 658-3593
 www.afconline.com
 e-mail: sales@afconline.com