



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

## Advanced Flexible Composites

# DuraFab® Industrial Fabrics (20 Series)



### Description

The DuraFab® Industrial Series is the workhorse of AFC's product line. It is the most extensive line of fabrics, serving a broad range of industrial and general-purpose applications. These fabrics are manufactured from woven fiberglass substrates, possess an optimal PTFE content, and leave a minimal fabric impression. As AFC's most popular and versatile fabric series, DuraFab® Industrial Fabrics provide the highest value to customers by offering an excellent balance between 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).

### DuraFab® PTFE Coated Fabric Characteristics

DuraFab® Fabrics 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%). DuraFab® Fabrics have received USDA approval for food processing and handling, and are FDA compliant (21 CFR177.1550). In addition, the DuraFab® fabrics can operate in temperatures from -400°F (-240°C) under static conditions and -100°F (-73°C) under dynamic conditions up to 550°F (288°C).

### 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:

- Non-stick baking, cooking and drying
- Food dehydration
- Smoking of meat and fish
- Flash-freezing meat, poultry and fish
- Oven and microwave liners for home and industrial kitchens

#### Printing and Textiles:

- Heat transfer presses
- Silkscreen table covers
- Fabric lamination
- Garment fusing

#### Polymer Processing:

- Vulcanizing presses
- Rubber curing presses
- Manufacture of filter media

#### Building Products:

- Manufacture of specialty wood-based products
- Vinyl window manufacturing

#### Chemical Processing:

- Tank seals and contaminant barriers
- Gaskets, membranes, seals & diaphragms
- Corrosion resistant chute, drum, and hopper liners
- Protective curtains and aprons

#### Aerospace, Communications & Military:

- Composite mold release/bonding
- Vacuum bagging

#### Other Applications:

- Insulation and protection
- Release sheets/separation materials
- Printed circuit board manufacturing
- Wire and cable insulation and protection
- Manufacture of metalized balloons

**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



# DuraFab® Fabric Design Guide (Industrial Series)

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

Product ID	Nominal Thickness <i>inches</i>	Weight <i>lbs/sq yard</i>	Tensil Warp <sup>1</sup> <i>lbs/in</i>	Tensile Fill <sup>1</sup> <i>lbs/in</i>	Edge Tear Warp <i>oz</i>	Edge Tear Fill <i>oz</i>	Full Widths <i>inches</i>
20-03	.003	0.25	56	32	13	9	40, 80
20-05	.005	0.46	100	96	28	25	40, 80*
20-06	.006	0.54	100	96	28	25	40, 80*
20-25	.025	1.50	520	472	225	225	62

\* Although material width is standard, additional lead-time may be required. Please note: Additional thicknesses and styles available upon special order.

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

- Full Width: Full width fabrics are available in the above widths and are ordered by lineal yard or lineal meter.
- Slit Width: Slit fabrics are available from 1/4" to the maximum width from the table and can be slit to the nearest 1/32". Slit fabrics are available in 18 and 36 yard rolls.  
(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: 18 or 36 yard rolls

### Full Width Design Example:

Material Style–20-05, Full Width–40 inches, Length–20 yards

### Slit Roll Design Example:

Material Style–20-10, Width 5 inches, Length–36 yards

**Disclaimer:** 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 D828* 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. Edge Tear values are based upon *ASTM D1424* (Elmendorf Tearing Test) and are average values that can 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

## Fabric Care

When handling, do not fold or crease the fabric. 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 fabric 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.

## Fabrication Capabilities

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

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

## Fabric Treatments and Specialty Coatings

AFC can specially treat its fabrics to provide an adhesive (tape), bondable, abrasion resistant, or static-dissipative surface. In addition, the company also specialty coats fabrics to meet specific application needs.

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



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