

Advanced Flexible Composites

DuraFlow® Mesh (27 Series) and UV Resistant Mesh Fabrics (28 Series)



Description

The DuraFlow® Mesh Fabrics (27 & 28) provide exceptional performance in applications serving a variety of industries. These fabrics are manufactured from proprietary woven substrates that have been heavily coated with PTFE. The resulting products are significantly stronger, more wear resistant, and have better airflow for faster curing and drying. AFC's UV Resistant Mesh Fabrics (28 Series) have all the benefits of the 27 Series Mesh Fabrics, but with the added benefit of UV protection. AFC's DuraFlow® Mesh Fabrics are unsurpassed in their surface, strength, and airflow characteristics, and thus provide the ultimate performance for drying and curing applications.

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).

DuraFlow® PTFE Coated Fabric Characteristics

DuraFlow® 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%). DuraFlow® Fabrics have received USDA approval for food processing and handling, and are FDA compliant (21 CFR177.1550). In addition, the DuraFlow® 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

Food Products:

- Curing, drying, smoking of poultry, meat, fish and vegetables
- Dehydration of poultry, meat, fish, vegetables, and fruit

Building Products:

■ Manufacture of vacuum laminate

Other Applications:

■ Manufacture of abrasive wheels

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



DuraFlow® Fabric Design Guide (Mesh)

1. Select Material Style (from table below)

Product ID	Color	Nominal Thickness inches	Window Openings inches	Weight <i>lbs/sq yard</i>	Tensile Warp lbs/in	Tensile Fill Ibs/in	Full Widths inches
27-30	Tan	.030	5/32	0.98	311	541	85, 126
27-31	Tan	.031	1/16	0.88	450	400	85
27-34	Tan	.034	3/32	0.82	200	250	85
27-37	Tan	.037	1/16	1.00	230	200	85
27-48	Tan	.048	3/16	0.97	359	454	85, 145
27-50	Tan	.060	1/4	1.00	454	316	85
28-30	Black	.030	5/32	0.98	311	541	85
28-31	Black	.031	1/16	0.88	450	400	85
28-48	Black	.048	3/16	0.95	359	454	85
28-50	Black	.060	1/4	1.00	454	316	85

^{*} 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:

- a. Full Width: Full width fabrics are available in the above widths and are ordered by lineal yard or lineal meter.
- b. 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 inch.

 Slit fabrics are available in 18 and 36-yard rolls.

 (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: 18 or 36 yard (16.5 or 33 meter) rolls

Full Width Design Example:

Material Style-27-48, Full Width at 85 inches, Length at 50 yards

Slit Roll Design Example:

Material Style-27-48, Width at 12 inches, Length at 36 yards

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 DuraFlow® Advantage. Let AFC prove to you that it **Provides Value Beyond Price.**

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.

Disclaimer: All figures

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.



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