

## 1.0 CARPET APPENDIX

### Talisman Mills

Envirelon and Envirotile are commercial carpet products made with face fibers from 100% recycled PET (Polyethylene Terephthalate). Envirelon is SBS (Styrene Butadiene-Styrene) latex-backed broadloom, while Envirotile is vinyl-backed carpet tile. Special colors, weights and designs are available in both products.

Product Category	Cut Pile Machined Pattern
Machine Gauge	.125
Yarn Identification	Resistron
Yarn Size and Ply	3.25 / 2Ply
Fiber Source	100% recycled Polyethylene terephthalate ( PET)
Dye Method	Skein Dyed
Primary Back	24 x 18 pic antistatic polypropylene
Secondary Back	Action Back
Stain Resistance	PET fiber is naturally hydrophobic, evidencing less than .05% moisture regain, thus inherently stain resistant. There are no open dye sites and therefore the fiber itself resists wet and dry stains. Under testing, it has shown superior resistance to such agents as ketchup, Kool-aid, red wine, cola, grape juice, mustard and blackberry jam.
Static Generation	Test # AATCC 134 shows electrostatic shock properties under 3.5 KV (below the level of human sensitivity)
Flammability and Smoke Tests	Passes methenamine pill test ( DOC FF1-70) Passes critical radiant flux test ( ASTM E-648-86) Passes smoke chamber test ( ASTM E-662-79)
Melting Point	The melting point of polyethylene terephthalate is 480 <sup>0</sup> F
Wear & Abrasion Test Results	Excellent results for the Tetrapod Walker and Taber Abrasion Tests.
Sun Fade Test Results	Passes AATCC method 16E ( Test of colorfastness to light under xenon arc.)
Ozone Fade Test Results	Passes AATCC method 129
Colorfastness	AATCC 16-E
Wear Warranty	10 Year

Specifications are derived from averages allowing for normal manufacturing variables in fiber, yarn, equipment, and temperature and may vary within normal industry tolerances.

Shading is an inherent characteristic of all fine cut pile carpets and does not constitute a manufacturing defect.

Chair pads are required under office chairs with roller casters to preserve appearance retention and to act as a deterrent to delamination.

For optimum sidematch and finished sea, appearance, this product should be installed with seams running at a perpendicular angle to major light sources. Walk off mats are recommended at outside entrances to help maintain the consistent appearance of the installation.

All construction options are suitable for direct glue-down installations.

When installing carpet over padding, a commercial grade pad with a minimum weight density factor of 14 lbs. must be used.

Construction Option	Envirelon 40	Envirelon 50
Tufted Yarn Weight	40 oz.	50 oz.
Stitches per 3 inches	39	48
Finished Pile Thickness	.250	.250
Finished Yarn Weight	38 oz per Yd	47 oz per Sq. Yd
Tufted Pile Height	.30	.30
Pile Density	5760	7200
Total Weight	76 oz.	86 oz.

## **Mohawk Industries, Inc**

Mohawk Industries, Inc with the introduction of their commercial carpet line made with Infinity™ nylon, ([The Infinity Nylon Story](#)) they are recognized as a leader in manufacturing high quality, environmentally preferable carpeting.

Polyester used in residential and a few commercial applications, polyester has good color clarity, colorfastness, and resistance to water-soluble stains. All of Mohawk's polyester yarn comes from their plastic bottle recycling facility. This "food-grade" PET Polyester fiber is considered to be better quality than "carpet-grade" polyester fiber. Because plastic beverage bottles are made with top quality PET (polyethylene terephthalate) resins as required by the US Food & Drug Administration, the recycled product is superior to lower grades of synthetic fibers used in making other brands of carpet yarns. PET bottles are sorted, ground into fine chips, and then cleaned. These chips are then melted and extruded into fiber and spun into carpet yarn.

Mohawk Industries, Inc commercial manufactures ten carpets that feature ColorStrand™, Infinity™ forever-renewable nylon, all with a recycled content of 25%.

The following links provide further information.

Tufted/Ultra Performance System Group Specifications  
[http://www.infinitynylon.com/usa/main/infocenter/tups\\_specs.pdf](http://www.infinitynylon.com/usa/main/infocenter/tups_specs.pdf)

Woven Group Specifications  
[http://www.infinitynylon.com/usa/main/infocenter/woven\\_specs.pdf](http://www.infinitynylon.com/usa/main/infocenter/woven_specs.pdf)

Woven Interlock Group Specifications  
[http://www.infinitynylon.com/usa/main/infocenter/wig\\_specs.pdf](http://www.infinitynylon.com/usa/main/infocenter/wig_specs.pdf)

Woven Jacquard Interlock Group Specifications  
[http://www.infinitynylon.com/usa/main/infocenter/wjig\\_specs.pdf](http://www.infinitynylon.com/usa/main/infocenter/wjig_specs.pdf)

Woven Velvet Group Specifications  
[http://www.infinitynylon.com/usa/main/infocenter/wvg\\_specs.pdf](http://www.infinitynylon.com/usa/main/infocenter/wvg_specs.pdf)

### **Shaw Contract Group**

The Shaw Contract Group manufactures EcoSolution Q™ that is a durable, solution dyed nylon fiber. This fiber contains a minimum of 25% post industrial and post consumer recycled material.

Eco Solution Q™ summary

- Nylon 6 fiber with at least 25% recycled content from post-industrial and post-consumer waste.
- Equal in performance and quality to other solution-dyed, branded commercial fibers.
- Engineered for the commercial market: Colorfast, easily maintained, and resistant to bleach.
- Available in over 200 color options.
- Versatile:
  - May be tufted into any carpet type or configuration.
  - May be paired with any type of backing.

Completely sustainable: When Eco Solution Q™ nylon is combined with EcoWorx™ backing, 100% recyclable carpet is produced. In cradle-to-cradle sustainability, backing and yarn face are separated, broken down, and reprocessed. Backing becomes more backing, and yarn becomes more yarn.

EcoWorx™ summary

The industry's first 100% non-PVC, sustainable backing system

- Thermoplastic compound containing no chlorine to off-gas in a fire and no phthalate plasticizers to migrate into the environment.
- Equal to or better than PVC backing in all performance categories.

- 40% lighter weight than PVC, lowering transport costs and carbon monoxide emissions.
- Extremely low in VOCs (exceeds protocols for Green Label Certification under CRI's Indoor Air Quality Program), available with a low-VOC releasable adhesive.
- Class I fire rated, rating for smoke generation far superior to PVC.
- Available on any modular tile or six-foot style with no upcharge, no minimum, and no overage; standard on the Bookends Modular collection.
- Offered with a high-performance Lifetime No-Failure Warranty.
- 100% recyclable into more EcoWorx™ backing through granulation and return to the extrusion process.

For complete sustainability, combining EcoWorx™ backing with Eco Solution Q™ fiber produces a 100% recyclable carpet

The following links are for example specifications.

Green Spec - Broadloom

Product guide specification

Example: Shaw Contract Oceania Sargasso Broadloom Carpet

[Green Spec Broadloom](#)

Green Spec - Tile

Product guide specification

Example: Shaw Tile Envy Modular Carpet

[Green Spec Tile](#)

This link provides Shaw Contract Group's Tile Products by recycled content in descending order of Recyclability/ Sustainability.

[Tile products by recycled content](#)

This link provides access to Shaw's information center

[Shaw Contract Group Information Center](#)

## **Collins and Aikman Floorcoverings**

Collins & Aikman Powerbond ER3™ products have these multiple environmentally sustainable attributes: energy, source and waste reduction; indoor air quality; recycling program and recycled content—including 100% recycled and infinitely recyclable.

Collins & Aikman Floorcoverings has a fully operational, commercial recycling program to bring back its own and similar competitive carpet products to be recycled back into carpet and other value added products. 100% of the material brought back is recycled. The resulting recycled-content products perform as well or better than the products they replace and are cost equivalent.

The overall recycled content ranges from 31% to 50%. The recycled-content products have the same performance warranties and identical pricing as the non-recycled products. An independent third party, Scientific Certification Systems, has certified the recycled content levels.



Quantity discounts are available per style per order as follows:

Order Size	Discount
\$50,000 - \$150,000	4%
\$150,001 - \$300,000	5%
\$300,001 - \$500,000	6%

Minimum order: none  
 Delivery Time: 6–8 weeks

Samples can be viewed on web site at [Powerbond Showroom](#)

## 2.0 DISCUSSION

Carpet Tile is environmentally preferable to carpeting in commercial buildings because damaged or stained carpet tiles can be replaced individually, without having to replace carpeting on an entire floor. Carpet tile works well with access flooring.

The 45<sup>th</sup> Space Wing facilities Plan for Cape Canaveral Air Force Station and Patrick Air Force Base recommends within design standard 55 “Interior Standards” the following carpet materials as their standard interior finishes or approved equal.

Manufactured by Collins and Aikman

Carpet Neutral Scheme #1

Odyssey – 14519 – Aurora  
 Savanna – 46703 – Berber  
 Monet – 19008 – Spring Barley

Carpet for special locations such as Wing Suites, Conference Rooms and Commander Offices.

Habitat – 57001 – Conserve

Habitat – 57002 – Conserve

Habitat – 57003 – Conserve

Carpet Neutral Scheme #2

Corinth – 56010 – Moholy-Nagy

Corinth – 56007 – Van Der Rohe

Medical Scheme

Monet – 19015 – Utah Sky

Centers Scheme (Youth Center, Child care center, Education Center, etc.)

Corinth – 56009 – Gropius

Infinity – 55023 – Crystal Grey

Due to the manufacturer's and variety of products listed within this appendix it will be necessary to follow the links to the manufacturers for current product information, technical specifications and costs.

All the above companies are registered suppliers to the U.S. General Service Administration (GSA). The Internet address for GSA is <http://www.gsa.gov>.