

Sunbrella Horizon

Product Specifications

PROPERTY	SPECIFICATION	TEST METHOD
Material Content	100% Vinyl with Knit Polyester Backing	
Fabric Weight	720 g/m ²	ASTM D3776
Width	137 cm	NTC 228
Thickness	1.20 – 1.60 mm	NT 8.2.4-032 Test N°1
Bond Strength Adhesion of Vinyl Film to Fabric Warp	>38.41 N/cm	ASTM D751
Bond Strength Adhesion of Vinyl Film to Fabric Filling	>38.41 N/cm	ASTM D751
Colour Reading	<0.8 ΔE CMC Units	NT 8.2.4-013
MD Stretch (Warp)	Pass	SAE J855 (NT 8.2.4-058 Test N°1) (55% - 80%)
AMD Stretch (Fill)	Pass	SAE J855 (NT 8.2.4-058 Test N°1) (25% - 50%)
Antimicrobial Pink Strain Resistance	0 Grading	ASTM E1428-15 (No Stain)
Resistance of Synthetic Polymeric Material to Fungi	0 Rating	ASTM G-21 (No Fungal Growth)
Antifungal Activity Assessment on Textile Materials	Pass	AATCC 30, Test III (No Growth)
Resistance to Growth of Mold on the Surface of Interior Coatings in an Environment Chamber	10 Rating	ASTM D3273-12 (No Defacement)
Non-Phthalate **	<1000 ppm	CPSC-CH-C1001-09.3
Colourfastness	4+ Grading	SAE J 2527 @ 1500 kJ
Colourfastness	4+ Grading	AATCC 169 Option 3@ 2200 kJ
Lightfastness/Colourfastness to Light		AATCC TM16
Cracking	5 Grading	AATCC 8 (Wet and Dry)
Abrasion Resistance – Wyzenbeek	200,000 Cycles	ASTM D4157-07 (CFFA-U-@01E 2012) Duck #10 (Heavy Duty)
Abrasion – Martindale	0.3% After 100,000 Cycles	EN ISO 12947-3 – Textiles – Determination of the abrasion resistance of fabrics by the Martindale method – Part 3: Determination of mass loss (ISO 12947-3: 1998) – Test Series D
Tear Strength MD	8.16+ Kgs	ASTM D 2261
Tear Strength CD	4.54+ Kgs	ASTM D 2261
Volatility	Complies (Actual = 1.0%)	ASTM D1203-03 (CFFA 18) (<8% Weight Loss)
Cold Crack	Pass	Federal Test Standard 191A 5874 (CFFA 6 2007) @ -20F
W-Flex	25,000 Cycles	FLTM BN 102-02 N or ASTM D2097-03 (CFFA 10) (No Cracking, Whitening, Cracking or Separation of Coating from Backing)
Heat Aging	<3.0 ΔE CMC Units	LP-463LB-13-01 7 days @85C
No. 302 Burn Test	Pass	MVSS302
California Technical Bulletin #117	Pass	TB117-2013 (Meets Class 1 Requirements)
IMO	Pass	2010 FTP Code – International Code for Application of Fire Test Procedures – Resolution MSC.307(88): Annex I – Fire Test Procedures Part

8 – Test for Upholstered Furniture: Cigarette and Small Flame Ignition

British Standard 6852	Pass	2006 – Methods of Test for Assessment of the Ignitability of Upholstered Seating by Smouldering Cigarette and Flaming Ignition Sources
UFAC	I Class	UFAC Fabric Classification Test Method 1990 Cigarette Ignition Resistance of Fabric Intended for Use in Upholstered Furniture
Australian/New Zealand Standard	Ignitability Index: 16 (Range 0-20) Spread of Flame Index: 0 (Range 0-10) Heat Evolved Index: 1 (Range 0-10) Smoke Developed Index: 5 (Range 0-10)	AS/NZS 1530.3-1999 Methods for Fire Tests on Building Materials, Components and Structures Part 3: Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release
ASTM E84	B Class	ASTM E84-19b Surface Burning Characteristics of Building Materials
CFFA11	No Evidence of Whitening, Crazing or Separation of Coating from Backing after 25,000 Cycles	ASTM D 2097-03 Standard Method of Flex Testing of Finish on Upholstery Leather after ASTM D 1239-07 Standard Test Method for Resistance of Plastic Films to Extraction by Chemicals CFFA 11 – After 14 days of Hydrolytic Stability Exposure at 85°C
Scuffing	No Evidence of lifting, peeling or excessive scuffing after 200 cycles	SAE J365 MAY2012 Method of Testing Resistance to Scuffing of Trim Materials
Conditions to Avoid	Avoid use of steam	Steam should not be used on Horizon during fabrication to remove wrinkles and creases or during use. Dry heat can be used. Always test a patch in an inconspicuous place
GREENGUARD	Pass	UL 2818 GREENGUARD Standard for Building Materials, Finishes and Furnishings. UL 2821 GREENGUARD Test Method for Building Materials, Finishes and Furnishings. California Section 01350
Prop-65	No Labeling Required	
REACH	Compliance	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

** Phthalates tested

- Di-n-butylphthalate (DnBP) (CAS No. 84-74-2)
- Benzyl butyl phthalate (BBP) (CAS No. 85-68-7)
- Di-n-hexyl phthalate (DnHP) (CAS No. 84-75-3)
- Di-n-octyl phthalate (DnOP) (CAS No. 117-84-0)
- Diisononyl phthalate (DINP) (CAS Nos. 28553-12-0, 68515-48-0)
- Diisodecyl phthalate (DIDP) (CAS Nos. 26761-40-0, 68515-49-1)
- DI (2-ethylhexyl)phthalate (DEHP) (CAS No. 117-81-7)

- UV Exposure:** Sunbrella Horizon is manufactured with highly UV-Stable pigments, making them resistant to fading and the degrading effects of sunlight.
- Storage:** Store rolled in a clean dust and moisture free environment.
- Characteristics:** Sunbrella Horizon is designed to be effortlessly cleaned, stain resistant, waterproof, fade and UV resistant. Engineered to withstand the damaging effects of sun, rain, snow and humidity. Its four-way stretch and recovery properties prevent misshaping and puddling, while its exceptional softness ensures long lasting comfort and performance. Suitable for interior and exterior applications. Available in over 30 colours and 2 embossed patterns. Sunbrella Horizon's proprietary top coat ensures exceptional bacterial stain-resistant performance and protection against pink stains while being mold and mildew resistant. Resists cold cracking and brittleness in temperatures as low as -7°C.
- Cleaning:** Most messes can be cleaned with a clean, dry towel. Do not use abrasive cloths or cleaners to avoid surface damage. For regular cleaning and maintenance please consult the cleaning guide available from www.bluskyproducts.com.au.

Fabrication Tips:

APPLICATION	NEEDLE TYPE	THREAD SIZE (TEX)	NEEDLE SIZE	THREAD TYPE	STITCHES/INCH (SPI)
Marine/Outdoor	ROUND	70	20	Solution-Dyed Polyester	6 - 7
Marine /Outdoor	ROUND	90	20 - 22	Solution-Dyed Polyester	6 - 7
Marine/Outdoor	ROUND	90	16 - 20	PTFE	6
Furniture	ROUND	40-70	16 - 20	Nylon	6 - 8

*Note: These are recommendations only. Needle size will vary depending on machine used and the sewer

- Use solution-dyed polyester or PTFE thread.
 - If needed, use a polyurethane-based adhesive.
 - Diagonal stitching is recommended, without going over the needlework.
 - Pattern and seam allowances should be considered.
 - Seam tape is recommended.
 - Polyurethane Foam: If used, foam should be new and treated to inhibit fungal growth to pass ASTM G-21
 - (CFFA - 120), ASTM E1428 and AATCC 147 (CFFA -300) standards.
 - Plywood: If used, plywood should be treated to be mildew and rot resistant.
 - To prevent moisture build-up, keep product and substructure ventilated.
 - We DO NOT recommend using steam on Sunbrella Horizon to remove wrinkles and creases. Dry heat can be used.
- Always test a patch in an inconspicuous place.

Warranty:	5 Years	Loss of strength or colour due to normal usage and exposure, and resistance to mildew and atmospheric chemicals.
	3 Years	Pink bacterial staining.
	3 Years	Replacement costs to pay for the re-upholstery and/or trim up to \$60 per Lm of product.

Additional Warranty information can be downloaded from www.bluskyproducts.com.au.