

# Sunbrella Horizon

## Product Specifications

| PROPERTY   | SPECIFICATION                          | TEST METHOD   |
|--|--|---|
| Material Content   | 100% Vinyl with Knit Polyester Backing |   |
| Fabric Weight  | 720 g/m <sup>2</sup>                   | 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  | 4+                                     | AATCC 169 Option 3@2200kJ and SAE J 2527 @ 1500kJ   |
| 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 5852           | 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)<br>Spread of Flame Index: 0 (Range 0-10)<br>Heat Evolved Index: 1 (Range 0-10)<br>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 36 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](http://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](http://www.bluskyproducts.com.au).