

PROTOCOL # 401 - N

PATIO & BEACH UMBRELLA

Performance Test	Test Method	Samples	Requirement	Rating (Section or exec. Summary which failed items can be referenced)
LABELING				
Labeling / Packaging Review	FPLA 16 CFR 500 & 19 CFR 134	All Samples	Should be legibly marked with the following information: <ul style="list-style-type: none"> Distributor's name, trademark or other means of identification of the manufacturer or packer & address (City, State & Zip) Product identification Net quantity of the contents in terms of weight, measure or numerical count (Metric & US Standard) or a combination so as to give accurate information and facilitate value comparison by the consumer Country of origin (if imported) 	
Instructional Literature/ Assembly Instruction (Needs to be provided – Lab HOLD if not provided)	Visual Check	All Samples	Information and instructions shall provide safe use, or proper assembly or both, and proper maintenance. Shall be legible and easy to read.	<input type="checkbox"/> Provided <input type="checkbox"/> Verified <input type="checkbox"/> Not provided
Verify Label Claims	Visual Check	All Samples	The labeling must comply and valid with all claims.	
Import Permit (For Natural Materials Only) If Applicable	US Department of Agriculture Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ)	All	<p><u>Product shall not have prohibited materials present per US Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ).</u></p> <p><u>Documentation and/ or proper permit(s) for specific product shall be supplied along with Testing Request form and samples.</u></p> <p><u>Permit information may be found at: https://www.aphis.usda.gov/wps/portal/aphis/home/</u></p> <p><u>It is the vendor's responsibility for the compliance to relevant requirements.</u></p>	
Adult Tracking Label: **If space limitations exist, contact Kohi's Quality Assurance & Product Integrity teams to discuss minimum required information (MR.QA.PI@kohis.com)	Kohi's Requirement	All	Pass/Fail: Kohi's Assigned Factory Number Manufacture Date (Month/Year) UPC #	
PHYSICAL CHARACTERISTICS				
Overall Dimension (LX WXH)	Std. Measure (in/cm)	3 Samples	Max. +5% / -0% of claimed dimension. Record actual data if there is no claim.	Claim: Actual:
Fiber Content	AATCC 20/20A	1 Sample	Single fiber only; no tolerance 2 or more fibers blend: ± 3% max.	
Seam Strength	ASTM D1683-11a	1 Sample	30 lbs. / In.	
Seam Slippage	ASTM D434-95	1 Sample	30 lbs. / In. @ 1/4 In.	
Water Repellency Characteristics:			Not required on mesh fabrics – note mesh in test results column.	
Repelling (Spray Test)	AATCC 22	2 Samples	Min. 90 rating.	
Storm Test	AATCC 35	2 Samples	Shall not absorb more than 1.0 gm. of water through fabric (5 minute, 3 ft.)	
Fabric Weight (Oz. / Sq. Yd.)	ASTM D3776	1 Sample	As approved / as claimed / products specifications/as measured (+5% / -0%)	
CONSTRUCTION QUALITIES				
Kohi's Workmanship Review	Visual Check /Actual Use	All Samples	<ul style="list-style-type: none"> All components shall be provided as claimed and shall not be deformed or fractured. All hardware shall be provided All welds shall be smoothly finished and free from pits and splatter All components shall not contain any burrs or sharp edges (test by touch or sight) Product shall not contain any loose components or unsecured fastening where rigidity is required 	
PERFORMANCE				
Flammability	16 CFR 1610 & 1500.44	1 Sample	Fabric material - Class 1 flammability Solid material - Burn rate <0.1"/sec.	
Operability	Actual Use	1 Sample	No loss of serviceability after 100 open/close cycles.	
Attachment Strength (Handle/Wire Tip)	Visual Check / Actual Use	1 Sample	Shall withstand Min.25 lbs. pulling force.	
Spring Force At Handle	ASTM F963 (Mod.)	1 Sample	Compression force to activate the spring mechanism shall not exceed 5 lbs.	
Assessment Of Potential Finger Entrapment	EN 581-1 Section 5	1 Sample	<p>There shall be no accessible holes in the ends of tubular components with a diameter between 7 mm to 12 mm and with a depth more or equal to 10 mm.</p> <p>The bottom of tubular legs in contact with the floor shall be closed or capped, however, holes in them are allowed as long as they are not between 7 and 12 mm.</p> <p>Distance between two externally accessible parts relative to each other shall not be between 7 to 18mm when under the body weight (Shear and squeeze point).</p>	

Colorfastness To Light	AATCC 16.3	1 Sample	Min. Class 3.5. Record actual data at 40/60/100 hrs.	
Effects of Extreme Temperature/Humidity *Resistance To Corrosion (Metal components)	Kohl's TM 30 ASTM B117-11 G85 (Mod.)	1 Sample 1 Sample	24 Hours @ 0° F (-18°C) and 24 Hours @ 95% RH/120° F (49°C). No failure. Shall withstand 24 hours in 1% salt spray (fog) with no major visual change or corrosion. Modification = % of salt spray	
*Cross-cut Adhesion (Plating & Surface Coating)	ASTM D 3359-09e2 (Mod.)	1 Sample	Cut 2 in. cross - hatch pattern on surface of plated and/or painted area. Plating and/or painted surface must remain affixed. Trace peeling or removal along incision or at their intersection is accepted. Modification= Scope expanded	
*Moisture Content (%) (Wood Only):	Std. Measure	1 Sample	Should not exceed 12 % for wood based materials only.	
#Claim Verification (if Claimed)	Visual Check / Actual Use	1 Sample	All designs and features must conform to actual claim.	Claim:
*Tech Pack Verification (Needs to be provided – Lab HOLD if not provided)	Visual Check / Std. Measurement	1 Sample	Verify all claims mentioned in Tech Pack File	<input type="checkbox"/> Provided <input type="checkbox"/> Verified
ANALYTICAL				
*Lead In Scrapable Surface Coating	CPSC-CH-E1003-09	1 Sample	≤ 90 ppm (0.009% by weight) (CPSA – 16 CFR 1303)	
PFAS Supplemental Protocol	Refer to Protocol 1600	All Samples	All samples shall be reviewed against the requirements of PFAS Supplement Protocol to determine if additional testing or labeling is required	

Protocol Version	Description of Change	Revised by / Date	Approved by / Date
401 – 0	Initial Release	CY Chan Feb 10, 2004	Roger Mayerson Mar 08, 2004
401 – 1	Updated for – Flammability and Light Fading.	Simon Leung June 21, 2004	Roger Mayerson July 01, 2004
401 – A	Added 19 CFR 134. Added Instruction Manual/Assembly Instruction. Added Overall Dimension. Added Effects of Extreme Temperature/Humidity Test. Added Cross-cut Adhesion Test. Added Wood Moisture Content Test. Updated Flammability Testing Requirements Deleted Durability of Folding Mechanism Test. Deleted Squeeze and Shear Point Test. Deleted Use & Abuse test. Price Adjustment. Changed protocol number from 401-2 to 401-A, price adjustment	Simon Leung April 1, 2010	Ro Jain April 1, 2010
401 – B	Changed the Test Method for Lead in Scrapable Surface Coating from ASTM to CPSC. Changed the Permissible Limit to ≤ 90 ppm.	Simon Leung September 15, 2011	Ro Jain September 15, 2011
401 - C	Updated sample size	John Wong Mar 26, 2013	Ro Jain Apr 15, 2013
401 - D	Added Tech Pack Verification	John Wong Oct., 7, 2013	Ro Jain, Mar. 7, 2014
401 – E	Updated lead and resistance to corrosion tests pricing	Candy Chan Jul 30, 2014	Jeetendra Shelatkar Aug. 4, 2014
401- F	Renamed all in-house methods	Birkoff Chen Sep 4, 2014	Jeetendra Shelatkar Oct 27, 2014
401-G	Removed “Light Fading” test which was duplicate	Harry Nie Dec 1, 2015	Elizabeth Armstrong Dec 1, 2015
401-H	Updated AI & Tech pack testing results/rating	Elizabeth Armstrong March 14, 2016	Jeetendra Shelatkar March 14, 2016
401-I	Updated test methods seam strength, seam slippage, spring force, CF to light and resistance to corrosion	Elizabeth Armstrong May 11, 2016	Elizabeth Armstrong May 11, 2016
401-J	Added Fabric Weight	Elizabeth Armstrong Jan 17, 2019	Elizabeth Armstrong Jan 17, 2019
401-K	Added import permit req & adult tracking label	Elizabeth Armstrong April 22, 2019	Elizabeth Armstrong April 22, 2019
401-L	Removed “not provided from tech pack, removed the “data only” from the adult tracking label	Elizabeth Armstrong June 4, 2020	Elizabeth Armstrong June 4, 2020

401-M	Added PFAS Test Line, updated email for Adult Tracking label requirements, Adult Tracking label is now a pass/fail requirement	Kevin Makocy March 18, 2022	Kevin Makocy March 18, 2022
401-N	Removed year from ASTM F963 test	Violet Nelson / Feb 2024	