MAJILITE USER'S GUIDE

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THE MAJILITE CORPORATION
NYTEK® PRODUCTS USER'S GUIDE

This user's manual and installation guide will help you use NYTEK® products as easily and effectively as possible. Our tips and suggestions are based on laboratory tests, actual fieldwork, and the most customer relevant recommendations. While there may be exceptions, we encourage you to refer to this publication as a general guide for all your upholstery applications.

Please contact us if you need more information than this manual provides. If desired, we can arrange a personal consultation to help resolve any difficulties.

Thank you for selecting NYTEK® to enhance the beauty of your designs and products. We are confident it will meet and exceed your expectations and give your customers years of satisfied use.

MAJILITE CORPORATION
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IMPORTANT FACTS ABOUT NYTEK® PRODUCTS

Similarities to Natural Leather

- NYTEK® absorbs moisture, resulting in expansion and greater elasticity.
- To achieve optimal results, use the same upholstery methods and techniques as used for leather. Most upholstery applications are a skilled craft rather than an exact science.
- Like natural leathers, errors cannot be covered up during the upholstering process. Operators need time and patience to learn the techniques unique to our products.
- Proper prepping is critical to achieve the best results. Because of the smooth finish and weight of the cover, flaws and errors made during the prepping process may show by not filling out the cover properly or from telegraphing.

Basic Information about Stretch

- Stretch in the width direction is greater and easier to manipulate than stretch in the length.
- Stretch is not uniform with all colors and is greater with lighter colors than with darker ones with less dye penetration.

Grain and Nap

- Please consider the direction of the design when cutting patterns, such as with NYTEK® Products like MOCCASIN, BABY OSTRICH, CANE, etc.,
- The nap of NOVASUEDE® is a non-directional design.

Time and Process Requirements

- Calculate the same sewing time allowances as needed for natural leather or a fabric pattern match. Although NYTEK® is easier to work with than natural leather, operators may need time to develop the techniques to work as quickly as they do with other upholstery fabrics of a similar grade.

Static Electricity

- NYTEK® Products easily generate static electricity**,** which is an early warning indicator of dry conditions in the shop. Increasing the humidity levels should help control this.

Orienting Patterns Properly

- When sewing cut pieces together, orient the patterns on the roll to accommodate the stretch in relation to the design.
- Clearly mark the optimal orientation on the patterns and follow it consistently.

ABOUT OUR PRODUCTS: THE NYTEK® ADVANTAGE

Emulating leather from their appearance to their cell structure, NYTEK® products work like leather but are much thinner, more durable, and as soft as the finest kid glove leather.

Natural leathers run from 45 to 65 square feet per hide with a 33% standard scrap factor due to barbwire scars, bug bites, and a variety of other defects that produce unpredictable yields, and inconsistent quality. The usable portion of natural leather will be inconsistent in thickness, stretch, and hand depending where it is cut on the hide. All these factors translate into a very expensive product.

NYTEK® products come in 45-50 yard rolls of 100% usable cover. Coloration is very consistent from roll to roll. Surface wear, care, and maintenance also are superior to natural leather. No exotic or domestic animals are used to manufacture NYTEK® designs.

NOVASUEDE®

Distinctive and unique NOVASUEDE® possesses the luxurious hand of fine kid suede and the soft surface feel of Nubuk leather, offering exceptional performance, comfort, durability and an elegant appearance. This specially engineered product is both lightweight and inherently strong and is an ideal material for upholstery seating, wallcovering and panel applications.

To produce NOVASUEDE®, super fine nylon microfibers, one thousand times finer than silk, are intricately formed into a triaxial matrix that simulates the natural structure of leather. This microfiber matrix formation results in a soft and pliant material that is stronger than leather on a strength to weight ratio.

The multidirectional surface fibers give the product its distinguishing tracking effect. Billions of micropores within the NOVASUEDE® matrix transmit air and moisture vapor, allowing for complete breathability. NOVASUEDE® feels cool in the summer and warm in the winter.

NYTEK®

NYTEK® has the elegant appearance and touch of fine, soft glove leather with the durability and inherent stain resistance achieved through advanced technology.

The Majilite Corporation has successfully applied the same space-age chemistry used to develop bullet-proof glass and high performance aircraft components to fiber and textile engineering to produce the outstanding characteristics of the materials in the NYTEK® collection.

The nylon fibers in NYTEK® are laid down in a three-directional axis similar to the natural structure of collagen found in leather, resulting in superior durability. One ounce of this nylon microfiber would be long enough to wrap around the equator several times.

NYTEK® is remarkably comfortable to sit on during any season. Its porous structure breathes by transmitting moisture vapor through billions of tiny micropores. Excess heat is dissipated in the heat and retained in the cold.

The intrinsic strength of NYTEK® makes Majilite products tear and puncture resistant, thus creating a material with considerable versatility. NYTEK® products can be used for upholstery, desk inlays, or wall and panel applications. Because of Majilite's special finishing system, the colors stay fresh, not fading or losing its beauty over time.

MAJILITE

PHYSICAL PROPERTIES

Material	ACTION FINESSE	AMBIANCE	ATTACHE	BABY CANE	BABY OSTRICH
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	9.5 oz/sq yd, 320 g/m²
Thickness	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	30 mils; 0.8 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Finesse and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Ambiance and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Attache and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Baby Cane and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Baby Ostrich and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	BOMBAY	BRUSHED FINESSE	BURNISHED METAL	CANE	CHARM
Composition	Polyester Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	9.8 oz/sq yd, 330 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	10 oz/sq yd, 340 g/m²
Thickness	24 mils; 0.6 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	33 mils; 0.85 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	35 lbs x 25 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)
Grab Tensile Strength	130 lbs x 130 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	NA	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 5 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Weather-O-Meter (Xenon Arc, SAE J-1960), 1140 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	NA	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	NA	Furniture upholstered with Brushed Finesse and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Burnished Metal and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Cane and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Charm and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	CHINCHILLA	COURIER	DECO	DESTINY	DISTINCTION
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	10.3 oz/sq yd, 350 g/m²
Thickness	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	33 mils; 0.85 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/m2: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/m2: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/m2: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/m2: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/m2: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Chinchilla and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Courier and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Deco and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Destiny and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Distinction and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	DRIZZLE	ECHO	ELEGANCE	FINESSE	FORTUNA
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	11 oz/sq yd, 375 g/m²	8.8 oz/sq yd, 300 g/m²	10.3 oz/sq yd, 350 g/m²
Thickness	28 mils; 0.7 mm	28 mils; 0.7 mm	38 mils; 1.0 mm	28 mils; 0.7 mm	33 mils; 0.85 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	35 lbs x 35 lbs ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	90 lbs x 90 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	90 lbs x 90 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	NA	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Drizzle and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Echo and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	NA	Furniture upholstered with Finesse and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Fortuna and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	GLAZED FINESSE	GRANDEUR	HAMMERED METAL	LEGACY	LINEA
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²
Thickness	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Glazed Finesse and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Grandeur and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Hammered Metal and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Legacy and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Linea and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	LUMINA	METALLIC PARAGON	METALS & PEARLS	METALLIC RAINDROP	MILLENIUM
Composition	Polyester Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	9.8 oz/sq yd, 330 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²
Thickness	24 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	3 lbs x 25 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)
Grab Tensile Strength	130 lbs x 130 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	NA	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 5 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Weather-O-Meter (Xenon Arc, SAE J-1960), 1140 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	NA	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	NA	Furniture upholstered with Metallic Paragon and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Metals & Pearls and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Metallic Raindrop and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Millenium and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	MILLWORK	MOCCASIN	MOSAIC	NOVASUEDE	NUANCE
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/134-137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	9.5 oz/sq yd, 320 g/m²	8.8 oz/sq yd, 300 g/m²	5.8 oz/sq yd, 197 g/m²	8.8 oz/sq yd, 300 g/m²
Thickness	28 mils; 0.7 mm	30 mils; 0.8 mm	28 mils; 0.7 mm	N/A	28 mils; 0.7 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 3-4/Dry4-5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	35 lbs x 35 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	90 lbs x 110 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	90 lbs x 135 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	N/A	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 5 cycles) Class 4-5/Little to no color change	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Light Stability (AATCC Method 16A-82) Class 4-5/40 hrs. min. • Water (AATCC 107-1981) Class 4-5 • Perspiration (AATCC 15-1979) Class 4-5) • Dry Cleaning (AATCC 132-1979) Class 4-5	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	N/A	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-A	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Millwork and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Moccasin and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Mosaic and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Can also be treated to meet many international flammability codes.	Furniture upholstered with Nuance and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	OVATION	OVATION PLUS	PANACHE	PASSPORT	PONY
Composition	Nylon Fiber Matrix	Polyester Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	9.8 oz/sq yd, 330 g/m²	8.8 oz/sq yd, 300 g/m²	10.8 oz/sq yd, 365 g/m²	8.8 oz/sq yd, 300 g/m²
Thickness	28 mils; 0.7 mm	24 mils; 0.7 mm	28 mils; 0.7 mm	33 mils; 0.85 mm	28 mils; 0.7 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs (ASTM D-1117-80)	35 lbs x 25 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	130 lbs x 130 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	NA	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 5 cycles) Class 4-5/Little to no color change	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Weather-O-Meter (Xenon Arc, SAE J-1960), 1140 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	NA	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Ovation and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	NA	Furniture upholstered with Panache and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Passport and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Pony and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	PRESTIGE	PRESTO	RADIANCE	RAINDROP	REFLECTION
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Polyester Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	9.5 oz/sq yd, 320 g/m²	9.5 oz/sq yd, 320 g/m²	8.8 oz/sq yd, 300 g/m²	9.8 oz/sq yd, 330 g/m²	8.8 oz/sq yd, 300 g/m²
Thickness	30 mils; 0.8 mm	30 mils; 0.8 mm	28 mils; 0.7 mm	24 mils; 0.6 mm	28 mils; 0.7 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 25 lbs (ASTM D-1117-80)	30 lbs x 25 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	35 lbs x 25lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	130 lbs x 130 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	NA	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	AATCC-23, 5 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Weather-O-Meter (Xenon Arc, SAE J-1960), 1140 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	NA	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Prestige and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Presto and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Radiance and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	NA	Furniture upholstered with Reflection and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE
PHYSICAL PROPERTIES

Material	REPTILE	SATCHEL	SHIMMER	SONIC WAVE	SPLENDOR
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Polyester Fiber	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	9.5 oz/sq yd, 320 g/m²	10.3 oz/sq yd, 350 g/m²
Thickness	30 mils; 0.8 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	43 mils; 1.1 mm	33 mils; 0.85 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	15 lbs x 10 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	55 lbs x 45 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	110 lbs x 80 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16, Option 3, 120 hrs) Class 4-5/Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	NA	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Reptile and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Satchel and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Shimmer and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	NA	Furniture upholstered with Splendor and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	STARLITE	STATURE	STATUS	STELLAR	TECHNO
Composition	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	8.8 oz/sq yd, 300 g/m²	10 oz/sq yd, 340 g/m²	8.8 oz/sq yd, 300 g/m²	12.2 oz/sq yd, 410 g/m²	8.8 oz/sq yd, 300 g/m²
Thickness	28 mils; 0.7 mm	33 mils; 0.85 mm	28 mils; 0.7 mm	38 mils; 0.95 mm	28 mils; 0.7 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 AATCC-8-1988)
Trap Tear Strength	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)
Grab Tensile Strength	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	Furniture upholstered with Starlite and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Stature and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Status and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Stellar and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Techno and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

MAJILITE

PHYSICAL PROPERTIES

Material	UNDERGLASS	VINTAGE	VISTA	WEATHERED METAL	WOVEN FINESSE
Composition	Polyester Fiber	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix	Nylon Fiber Matrix
Width	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm	54 inch/137 cm
Weight	9.5 oz/sq yd, 320 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²	8.8 oz/sq yd, 300 g/m²
Thickness	43 mils; 1.1 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm	28 mils; 0.7 mm
Cleanability Code	S/W	S/W	S/W	S/W	S/W
Wear	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*	100,000+ double rubs Wyzenbeek Wire screen (ASTM D-4157-82)*
Crock	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)	Wet 5/Dry 5 (AATCC-8-1988)
Trap Tear Strength	15 lbs x 10 lbs (ASTM D-1117-80)	30 lbs x 30 lbs ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)	30 lbs x 30 lbs (ASTM D-1117-80)
Grab Tensile Strength	55 lbs x 45 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)	100 lbs x 100 lbs (ASTM D-5034-90)
Seam Strength	110 lbs x 80 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)	100 lbs x 100 lbs (ASTM D-1683-90A)
Resistance To Urine	(ASTM D-543) No Staining	NA	(ASTM D-543) No Staining	(ASTM D-543) No Staining	(ASTM D-543) No Staining
Colorfastness: Gas fumes	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change	(AATCC-23, 3 cycles) Class 4-5/Little to no color change
Colorfastness: I	• Fadeometer Test (AATCC-16, Option 3, 120 hrs) Class 4-5/Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change	• Fadeometer Test (AATCC-16A-90, 100 hrs) Class 5/No color change • Weather-O-Meter (Xenon Arc, SAE J-1885), 225 kj/^{m2}: Little to no color change
Colorfastness: II	• Sulfide Staining (ASTM D-1712-89) No staining	NA	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining	• Sulfide Staining (ASTM D-1712-89) No staining
Flammability Class I	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989	UFAC/NFPA 260-1989
Flammability Pass	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E	California 117 Section E
Flammability Class A Rated	NA	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**	Tunnel Test: (ASTM E84)**
Flame Compatibility	NA	Furniture upholstered with Vintage and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Vista and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Weathered Metal and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.	Furniture upholstered with Woven Finesse and constructed with other suitable components can comply with Cal 133. Can also be treated to meet many international flammability codes.

*Failure in Wyzenbeek abrasion was defined as wear to expose the microfiber.

**Tested as NYTEK with sheeting backing by adhered method.

STORAGE AND HANDLING

Storing and Hanging

- Store in a moist, climate-controlled environment to allow for maximum stretch and flexibility. Avoid extremes in humidity or temperature.
- Keep NYTEK® products in their delivery box before they are used.
- Avoid standing rolls on their ends or overcrowding rolls in storage bins, which can create bunching, wrinkling or pressure marks.

Preventing Exposure to Foreign Materials

- During processing, prevent dirt or foreign objects from adhering to the backside of NYTEK® products, which may leave pressure marks or bumps visible on the face.
- In winter the material is more susceptible to static and dirt because of dry conditions.

Removing Wrinkles and Pressure Marks

- Use steam or heat to remove wrinkles and pressure marks.
- Try either technique on a small swatch first to establish the appropriate temperature.
- For steam, use a hand held steamer or flat iron with a damp, clean white cotton presser cloth between the iron and the material's backside. Steam is less likely to cause burning.
- A heat gun or flat iron can be used to generate dry heat, which is best for removing stubborn wrinkles.

SUMMARY

For Best Storage Results:

Do

• Store in a climate-controlled environment that is not too dry and helps the material retain moisture.

• Keep the backside of the material clean and unexposed to dirt and other contaminants.

• Use steam or dry heat to remove wrinkles and pressure marks.

Don’t

• Stand rolls on their ends.

• Overcrowd rolls in storage bins, which causes bunching and wrinkling

• Expose the backside to static or dirt.

CUTTING

Before Cutting

- Run a test sample of each design to see how the material is going to perform and that the pattern and layout are correct.
- Expose NYTEK® products, especially NOVASUEDE®, to humidity prior to being cut to allow the micro-fibers to absorb moisture and expand.
- Keep cut goods in a humid state throughout the upholstery process.
- Prevent static electricity by increasing the plant's humidity levels. However, placing grounded metal strips on the cutting table should discharge the energy as it develops.

Pattern Development

- Test the pattern by evaluating the upholstered product in both humid and dry environments.
- If the fabric is loose fitting or sagging in humid conditions, then cut down the pattern.
- Replace patterns as often as required to assure their accuracy, always referring to the master pattern.
- Correctly fitting the patterns while the cover is in an expanded state will negate the effects of humidity in the future.
- Apply steam to a test cover and tailor the cover to fit the job.
- Remove the test cover and allow the moisture on it to dry.
- Deconstruct the cover; the dry state is the size to use for the master pattern.
- Model the subsequent patterns from the test cover.

Orienting Patterns Properly

- Orient the patterns properly based on the stretch requirements.

Preventing Drag

- Drag or clinging occurs if the material is not laying out smoothly on cutting surfaces.
- Drag can be reduced by top coating the tables with Teflon adhesive-backed films laminated to the work surfaces. Many upholsterers use Kraft underlay papers. The Singer Sewing Company (www.singerco.com), Material Concepts (www.materialconcepts.com), Cansew Inc., (www.cansew.ca) and M.J. Foley Company (www.mjfoleyco.com) sell these and other surface treatments. Call Technical Services if additional assistance is needed.

Cutting the Fabric

- Cut entire orders from the same roll of fabric or dye lot.
- Make sure the material has time to settle back into its natural state if the material has been stretched. Putting Kraft papers between layers should facilitate this.
- Use a fine felt or ballpoint pen or a sharp carbon pencil to mark the backside of the cover.
- Keep precise markings on pieces to be sewn together to prevent later problems.

Precision, Multi-Layer and Single Layer Cutting

- Multi-layer cutting works best with a straight blade cutter equipped with an automatic sharpening device to reduce friction between the blade and cutting edge. Avoid slippage by not over stacking.
- Use any single layer cutting method preferred by the shop.
- Blade speed should be no higher than 1600-3200 rpm to avoid fusing the edges together because of knives over-heating.

Notches

- Notches may need to be cut in the selvages to help prevent puckering or bunching during sewing and upholstery.
- Make notches either in the pattern or during sewing.

SUMMARY

Before Cutting

• Run a test sample.

• Understand how stretch and the fabric pattern will affect the design and layout.

• Cut in a climate-controlled environment.

• Orient patterns properly.

• Prevent drag.

During Cutting

• Cut the entire order from the same dye lot.

• Insert notches in the selvages to prevent puckering or bunching.

• Mark precisely.

SEWING

Before Sewing

- Run a sample of each style before running an entire job to see how the material is going to perform and to make sure the patterns are correct.
- Calculate the same sewing time allowances for NYTEK® products as allowed for natural leather.
- Allow machine operators time to develop the techniques necessary to work efficiently with NYTEK® products, which are easier to work with than natural leather.

Similarities to Natural Leather

- NYTEK® absorbs moisture, resulting in expansion and greater elasticity.
- To achieve optimal results, use the same upholstery methods and techniques as used for leather. Most upholstery applications are a skilled craft rather than an exact science.
- Like natural leathers, errors cannot be covered up during the upholstering process. Operators need time and patience to learn the techniques unique to our products.
- Proper prepping is critical to achieve the best results. Because of the smooth finish and weight of the cover, flaws and errors made during the prepping process may show by not filling out the cover properly or from telegraphing.

Machine Requirements

- Shops may use any brand name light industrial sewing machine that satisfies their production needs. Both walking foot machines, which prevent puckering, or flat foot machines produce excellent results.
- Each shop should determine how to set thread tension and foot pressure. For best results, keep as loose as possible.

- Fine feed dogs provide the best results and do not damage the surface of the covers.

Reducing Drag

- Use a Teflon presser foot and laminate adhesive-backed Teflon film to the machine table and bed.
- Majilite can add backing material to our products. Contact us for recommendations and pricing.

Needle and Thread Sizes

- Use a Schmetz Nm 120, normal round point needle with a Nymo size D nylon thread. The sewing machine model determines the needle length.
- Thread should move freely through the eye of the needle and the needle should make a hole in the cover large enough for the thread to pass through without dragging and causing wrinkling, gathering or puckering. Needles with cutting points are not advised.
- Thread and needle size must match. Threads often are selected by size, color, and appearance. Nylon threads will perform better with NYTEK® Products than other thread fibers. Properly sized thread should fill the hole created by the needle.
- Needle holes in the cover are permanent, just like with natural leather.

Stitches Per Inch, Seam Allowance, and Notches

- Seven to eight (7 to 8) stitches per inch is adequate. Five to six (5 to 6) stitches per inch is common for decorative topstitching. The industry standard for seam allowances is three-eights to one-half (3/8″ to ½″) inches.
- Seams often need to be trimmed after being sewn for proper tailoring and to prevent telegraphing through the cover.
- Wetting the seams with hand steamers, spray water bottles or wet rags will help the two covers stretch and work together.
- Cut sufficient notches into the seam allowances to prevent

puckering and other defects during sewing. Pattern notching tools work well for this and can be purchased through the Singer Sewing Company, Cutters Exchange, M.J. Foley Company, and other manufacturers.

SUMMARY

- Run a sample before cutting the entire job.
- Sewing time allowances will be similar to what is required for leather.
- Use brand name light industrial sewing machines.
- Utilize various techniques to control drag.
- Follow specified seam allowances and stitch requirements.

UPHOLSTERY

Basic Information about Stretch

- Stretch in the width direction is greater and easier to manipulate than stretch in the length.
- Stretch is not uniform with all colors and is greater with lighter colors than with darker ones with less dye penetration.

Grain and Nap

- Please consider the direction of the design when cutting patterns, such as with NYTEK® Products like MOCCASIN, BABY OSTRICH, CANE, etc.,
- The nap of NOVASUEDE® is a non-directional design.

Seam Allowances

- Trim excess selvages to prevent them from showing through the cover or creating bunching or wrinkling.
- Add notches to eliminate gathering of selvages under the cover.

Wrinkle Removal and Moisture

- Remove wrinkles by pulling the excess cover taut in all directions. Mist steam or water on the back of the cover to assist in this process.
- If excessive wrinkles are present, check for correct pattern size, accurate orientation of the patterns in relationship to the stretch of the goods, proper fillers and a correctly sewn cover.
- Use foam to provide enough support to keep the cover filled for a tight look.

Bagging Prevention: Moisture and Humidity

- Moisture will absorb into the micro-fiber matrix of NYTEK® products, especially NOVASUEDE®, resulting in expansion and greater elasticity similar to natural leather.
- To prevent bagging, the cover needs to be exposed to an adequate

amount of humidity, the cutting patterns should be properly sized and the cover needs to be pulled tight. Be sure to use adequate and appropriate cushion filling materials.

- NYTEK® products should be exposed to humidity before and after being cut to allow for expansion as their micro-fibers absorb water. If the shop is not climatically controlled to regulate humidity, steam the cover well both during pattern development and upholstering. Correctly fitting the patterns and placing the cover properly in an expanded state will negate the effects of humidity in the future. All excess bagging or stretch should be eliminated at this time.

Why Bagging Occurs After Upholstering

- The covers were sewn and/or applied loosely in low humidity conditions. Bagging occurs after the cover sets for a few days and the temperature and humidity have increased dramatically.
- Bagging also can occur if the cushion breaks down. NYTEK®, like leather, is not totally elastic. It should be properly supported to prevent “puddling.” Puddling is a special type of bagging or sagging that occurs on the chair seat. It is a mark remaining after the sitter rises, but the chair’s foam does not recover. The material on the chair now looks too big because the cover is not properly supported, e.g., like a director’s chair. The upholsterer needs to properly support the cover material with foam or springs to prevent this.

Drag

- The backside of NYTEK® products tend to grab or cling to foam.
- Apply a thin layer of spun polyester fiber batting over the foam to reduce drag.
- Spray slickeners can be used to reduce drag and are available through most upholstery supply houses. Avoid slickeners containing silicone that can disburse small particles into finishing areas. Some shops are reporting success using talcum powder on exposed foam surfaces. Steaming or misting water onto the back

of the cover also may help. Excess wrinkles should be pulled out while the cover is expanded.

- Majilite can add a backer to NYTEK® products to provide a slicker surface during the manufacturing process. Contact Majilite for feasibility and pricing.

Cushion Construction

- Specify appropriate cushion filling materials.
- The back of the cover tends to cling to foam so placing something between the cover and the foam will reduce this problem.
- If the cover creeps on the cushion during sitting, it will resist returning to the proper position if it is restricted from sliding freely. Add a layer of spun polyester fiber batting to remedy this problem.
- Avoid bonded polyester batting, which sets at low temperatures and doesn't spring back quickly, and shows unattractively through the covers.
- Foam quality also is a factor in the performance of the cushion; 3 lb/ft^3 HR foams achieve the best results. 1.8 lb/ft^3 foams are frequently used as a cost saving measure but they must be able to fill out the cover and retain the shape of the cushion.
- There are a number of products designed to be used as cushion fillers. As with natural leather, any bunching or wrinkling of materials under the cover may telegraph through and be visible on the surface. NYTEK® products can also be backed with a variety of materials. See APPLICATIONS**.**
- Vent cushions for proper functioning.

Vents

- Air exchange should occur quickly and freely when the cushion is used so air does not become trapped, which prevents the cushion from functioning properly. A poorly vented pillow will seem hard when it is first sat on and will usually be noisy as it expends the trapped air. After someone leaves the seat, a poorly vented cushion will appear deflated and take time to recover.

- Include air evacuation holes or panels when constructing cushions or pillows to allow for the free movement of air caused by the compression and expansion of foam.
- Add a complimenting breathable fabric in the zipper boxing for double-faced cushions. Many manufacturers only face one side of the cushion and use a complimenting fabric for the bottom and back, which should negate any airflow problems.

Slipping Cushions

- Loose pillows have a tendency to slide. NYTEK® products like FINESSE® have a smooth finish that will slide freely against itself or a similar surface.
- Using a complimenting cover that has more grip or friction on the underside of the cushion and/or the deck of the seat should restrict this. Cushion ties are frequently used on loose pillow seat construction. Other NYTEK® products like NOVASUEDE® are naturally resistant to sliding. Someone slipping out of the seat is symptomatic of underlying problems with the cushion construction and/or the relationship of the pitch between the seat and back.

Staple Cutting of Material

- This can occur if the plunger extends beyond the tip of the staple gun when it is discharged during a tight pull or bridged cover.
- Try eliminating any bridging of the cover and regulate the air down on the gun. The staple plungers on the staple guns also can be trimmed shorter so they are flush or just shorter than the nose of the gun.

Regulating With Heat or Steam

- Carefully make adjustments with heat or steam after upholstering. Spun polyester fiber batting used in cushion padding will melt easily if exposed to heat. Adhesives used in prepping may also release under heat.
- High temperature heat guns should be used carefully and sparingly

to shrink small wrinkles out of the cover. Experiment with pieces of scrap first. Steam may be most effective when applied to the backside of the cover to give it more stretch prior to application, making it easier to pull tightly.

Mistakes

- Holes and cuts cannot be repaired. To avoid future problems, use experienced operators to work on complex designs.
- Re-upholstering involves the same skills as general upholstering and the same cautionary measures should be followed.
- Expedient short cuts will produce unsatisfactory results. This can include trying to upholster over existing covers, not refurbishing or replacing worn or broken down padding or fillers, not carefully inspecting the job for foreign materials, not removing old tacks or staples, and not repairing substrate materials.

Vertical Panels

- Back vertical panels with Majilite's light weight polycotton sheeting backer or foam/tricot backer. They help provide stability and prevent sagging in humid conditions. Stapled covers should be pulled down as tightly as possible. Steaming the cover first is recommended.
- If the operator wants to glue the cover to the panel, please refer to the section on DIRECT LAMINATION and/or the section on PANELS AND WALLCOVERING that appears later in this guide.

SUMMARY

- Expose cushions to humidity to prevent bagging.
- Apply slickeners and a thin layer of spun polyester fiber to prevent drag.
- Use proven techniques in cushion construction.
- Include air evacuation holes or panels when constructing cushions or pillows.

TIPS FOR USING NOVASUEDE®, FINESSE® AND NYTEK® AS WALLCOVERING

- Majilite provides a light-weight polyester/cotton sheeting backer for wall applications. Backing provides dimensional stability that helps prevent seam separation, minimizes the risk of wallpaper paste bleed through, and allows NYTEK® products to be used with standard adhesives and hanging techniques.
- Experienced installers should test a small sample to see how the fabric hangs.
- Use recommended vinyl adhesives such as standard or heavy-duty vinyl premixed cement. Refer to the manufacturer's instructions for use and suitability of the adhesives.
- Prepare all surfaces as directed by the adhesive manufacturer and inspect them for foreign objects or contamination.
- Ensure complete surface coverage on all glued areas to achieve proper bonding; missed area will blister.
- Smooth by hand after laying material to ensure 100% bond and to work out bubbles.
- Double cut seams using ***sharp*** blades.
- Lightly brush as required.
- If a padded effect is desired, use NYTEK® products backed with a Majilite foam. Please refer to the MARINE LINER INSTALLATION section.
- For applications requiring direct cementing to wood, fiberglass, aluminum, and other materials, please refer to the DIRECT CEMENT METHOD section.

SUMMARY

- Use Majilite backers.
- Employ experienced installers.
- Use recommended vinyl adhesives.
- Prepare surfaces and ensure complete coverage.
- Smooth by hand and double cut seams.
- Lightly brush.

NOVASUEDE®, FINESSE® and NYTEK®
DIRECT CEMENT APPLICATION

Direct cement application is used for components with molded shapes such as cowls, dashboards, door panels, and horizontal surfaces like desktops and tables made of laminate, chipboard, aluminum, and fiberglass.

This procedure applies to NYTEK® products with and without Majilite's foam/tricot, knit, or sheeting backings. **I**f installing as a wallcovering with standard vinyl wall cements, please see the section on TIPS FOR USING NOVASUEDE®-NYTEK® AS A WALLCOVERING.

- Inspect all surfaces for foreign materials and defects and prepare them according to the adhesive's instructions. For instance, particleboard is porous and may need to be sealed, primed, or doubled adhesive coated.
- Use either a spray contact adhesive or one that can be brushed to coat substrates such as laminate, chipboard, and aluminum. Brushing wets the coated surface well.
- Only use a spray adhesive on NOVASUEDE® or NYTEK® to keep the adhesive on top of the fibers and not push it through to the face through brushing.
- Thoroughly cover both surfaces with adhesive**.** Missed areas or places where there are voids or gaps in the adhered material may swell and bubble when exposed to high humidity.
- Contact adhesives must be appropriate for the specific application and the material to which they will be applied; i.e. aluminum, wood, etc. The container label, technical literature, or adhesive manufacturer should provide that information.
- Some water-based adhesives swell NYTEK® products, making the cover difficult to handle. Run samples and contact the adhesive dealer for further guidance.
- Do not use pressure sensitive adhesives that tend to creep with

time and can result in thumb printing, loss of bond, or wicking of the adhesive up to the face of the material.

- After applying adhesive to the substrate and NYTEK®, allow the solvent to evaporate and laminate the material before the adhesives open times have expired.
- Start at the center of the piece and work out to the edges to stick the cover down. To get extra stretch at difficult corners, apply a little steam to the face of the NYTEK® as it is being stretched.

STRETCHWALL AND PANELS

Solid Panels: Cemented

For solid, smooth panels, apply NYTEK® without backing with contact cement following the suggestions in the DIRECT CEMENT APPLICATIONS section of this User's Guide.

For wood, gypsum board or other compatible substrates, use standard water-based wallcovering cements with NYTEK® with the polycotton sheeting backing. Follow the suggestions in the WALLCOVERING section.

Solid Panels: Upholstered

For a padded look, follow the stretch and staple and/or direct cement method using the foam/tricot backing as described in the MARINE APPLICATIONS section.

For a padded look without foam tricot backing, the panel should be upholstered using techniques discussed in the UPHOLSTERY section. The foam padding is glued to the panel and covered with a Dacron or other appropriate batting.

Not Recommended

- Gluing the NYTEK® directly to the foam may cause spots to appear where the adhesive coverage is low, resulting in areas where the foam to NYTEK® bond is low. These low bond areas may bubble in high humidity.
- Using too much adhesive will saturate the foam and result in thumb printing where the foam takes a permanent set after compression.
- Upholstering over foam alone is also not recommended. The cover will not sufficiently compress the foam, especially in the center of a large panel. Batting, however, is compressed by the stretching of the cover during upholstering and will push back the cover to help keep it tight and smooth.

- The NYTEK® cover must be stretched tightly and evenly over the panel before stapling in the back, especially with large panels. Ideally, the NYTEK® should be steamed or misted on the back, making it easier to stretch. After upholstering, the NYTEK® will contract and tighten with less humidity in the panel.
- Foam tricot backing can be used to help stabilize NYTEK® for applications where padding will not push the cover.
- Knit backed NYTEK® is an alternative. NYTEK® without backing is not as stable in humid conditions as the backed materials, but has been stretched over open panels.
- Stretching the NYTEK® is extremely critical in these applications since the cover will not be pushed out and kept smooth by battings and foams.
- The NYTEK® should be steamed or misted lightly on the back and then stretched evenly as much as possible in both directions to avoid wrinkles. The cross machine direction generally has more stretch than the machine direction.
- Attach the NYTEK® securely after stretching, remembering that it will contract and get very tight in a dry environment. If the clips in the panel are inadequate, the tension produced by this contraction could pull the NYTEK® out of the clip or track. Stretching the NYTEK® in a humid environment will help it remain tight in these conditions.

MARINE LINER INSTALLATION GUIDELINES

NOVASUEDE® and FINESSE® are made of NYTEK®, a specially engineered nylon fiber matrix. These luxurious materials are very much like natural leather, not just in the way they look and feel but in the way they react to atmospheric conditions.

NYTEK®, like leather, will expand and contract slightly with changes in moisture content, although it will not retain much water. It regulates absorbed moisture so that it never holds more than 8 to 10 percent of its own weight.

NYTEK® products with a Majilite foam/tricot knit package are more dimensionally stable to changes in atmospheric conditions. The 1/8" foam package is the most common construction and is the standard for headliners and panels with most major manufacturers and custom refurbishers. The foam/tricot package increases acoustical properties and gives a more luxurious padded effect. It will also mask defects and soften rough surfaces.

For best results, NYTEK® products should be installed in a humid environment. With more moisture, NYTEK® is easier to work with it and will remain tighter after installation. These fabrics are softened by moisture, making them more elastic and easier to stretch. Additionally, the fabrics are in their most expanded state when moist and by pulling them tightly, they will get even tighter as the moisture decreases. They will then remain unaffected with future changes in moisture level.

Controlling atmospheric conditions in a production environment may not always be practical. Many installers keep a humidifier or steamer in the installation area. Installers can also use a water spray bottle and apply it to the backside of the material (even on the foam back) during installation.

This technique can be used if conditions are dry or whenever a tight, crease-free wrap around a tough curve or corner is desired.

In order to create a tight appearance, pull the NYTEK® product as tightly as practically possible. Also be sure to pull evenly to avoid rippling. Since NYTEK® has such high tensile strength, installers should not worry about pulling too hard.

For a stretch and staple overhead, we recommend keeping the spacing between ribs to 24 inches or less to prevent sagging. To achieve even tension, follow these steps:

1. Tack or staple the material to one end of one rib or batten. Pull the material the length of the batten down to the other end to the maximum stretch possible and tack down this end.
2. Lightly mist the back (foam/tricot) side of the material with water. Restretch from one end and staple. Staple along the rib without further stretching.
3. Starting on one end, stretch this material straight across to the other rib or batten and staple. Use appropriate leather stretching tools for maximum stretch. Water mist if conditions have dried the material. As the material dries it will further contract and tighten.

Use a good quality clear spray contact adhesive for cementing to a flat surface. For cement bonding to wood or other porous surfaces with water-based cements, back the NYTEK® to a Majilite sheeting.

The information contained in this guide is based on laboratory tests and actual field experience. The suggestions are intended as an installation guide only without guarantee. Since applications will vary, the exact method of installation is beyond our control. It is the buyer's responsibility to assess the suitability of these products for the specific application.

AIRCRAFT INSTALLATION GUIDELINES

NOVASUEDE® and FINESSE® are made of NYTEK®, a specially engineered nylon microfiber matrix. These luxurious materials are very much like natural leather, not just in the way they look and feel but in the way they react to atmospheric conditions.

NYTEK®, like leather, will expand and contract slightly with changes in moisture content, although it will not retain much water. It regulates absorbed moisture in such a way that it never holds more than 8 to 10 percent of its own weight.

To avoid sagging problems, we recommend installation by direct cement method. NYTEK® materials should be adhered to solid continuous surfaces that have been properly prepared according to the manufacturer's instructions for the adhesive being used. The adhesive should be a contact, solvent type that is recommended for the material to which it will be applied, (i.e. aluminum, etc.).

- Apply the adhesive by spray gun to both the NYTEK® and the panel. Spray a light to moderate coat in each direction.
- Allow the solvent to evaporate and recoat each piece. Apply enough coats to assure complete coverage of both the NYTEK® and the panel.
- Laminate the NYTEK® to the panel within the recommended open time as specified by the adhesive manufacturer.
- Roll or press the fabric by roll or other convenient means to assure good contact between the two surfaces.
- It is important that both the NYTEK® and the material to which it is being adhered are thoroughly covered by adhesive. Missed areas or places where there are voids or gaps in the adhered material may swell and bubble in high humidity.

- Do not use pressure sensitive adhesives as they tend to creep with time and can result in thumbprinting, loss of bond, or wicking of the adhesive up to the face of the material.
- It is best to adhere the NYTEK® to the center of the piece and work out to the edges. To get extra stretch at difficult corners, apply a little steam to the face of the NYTEK® as it is being stretched.

For upholstered applications, we recommend that NYTEK® be stretched as much as possible in both directions. To achieve this, the material may be moistened by steaming or by conditioning and upholstering in a humid environment. NYTEK® has more stretch in the cross roll direction than in the roll direction. Pull evenly to avoid wrinkles. To help maintain a tight appearance, it is advisable to provide some push behind the cover from foam or appropriate battings that have been compressed during the upholstering operation.

We do not recommend NYTEK® for stretch and clip headliners unless backed by a Majilite approved backing.

If you have not used NYTEK® before or would like to evaluate it on your application prior to an installation, we have sample cuts available approximately 23" x 18" in size that we can send to you free of charge. Please contact your Majilite representative or call Majilite at 978-441-6800.

This information is based on laboratory tests and actual field experience. The suggestions are intended as an installation guide only without guarantee. Since applications will vary, the exact method of installation is beyond our control. It is the buyer’s responsibility to assess the suitability of these products for the specific application,

FLAMMABILITY

NOVASUEDE® and NYTEK® faux leather products pass the following flammability tests without additional flame retardant (FR) treatment:

- **Cal 117E**-Pass: Novasuede®, Nytek® (nylon and polyester microfiber composites)
- **UFAC/NFPA260**- Class 1: Novasuede®, Nytek® (nylon and polyester microfiber composites)

To meet other flammability specifications, it may be necessary to apply a flame retardant (FR) treatment to Novasuede® or Nytek®. Majilite can be treated to the following standards; please contact us with any questions:

- **ASTM E84**-(glue down method) Class A: Novasuede®/sheeting, Nytek® (nylon)/poplin
- **I.M.O. 652 (16), Sections 8.2 and 8.3:** Novasuede®, Novasuede®/knit, Novasuede®/sheeting, Novasuede®/FR foam and tricot, Nytek® (nylon and polyester microfiber composites), Nytek®/knit, Nytek®/sheeting, Nytek®/FR foam and tricot, Indoor/Outdoor
- **I.M.O. 653 (IMO Fire Test Procedure Code, Annex 1, Part 2 and Part 5):** Novasuede®
- **I.M.O. 653 (IMO Fire Test Procedure Code, Annex 1, Part 5 and Annex 2):** Nytek® (special construction, minimums required)
- **B.S. 5852, Part 1, Ignition sources #0 and #1:** Novasuede®, Novasuede®/knit, Novasuede®/sheeting, Nytek®, Nytek®/knit, Nytek®/sheeting
- **B.S. 5852, Part 2, Ignition source #5 (crib 5):** Novasuede®, Novasuede®/knit, Novasuede®/sheeting, Nytek®, Nytek®/knit, Nytek®/sheeting
- **EN 1021:** Novasuede®, Novasuede®/knit, Novasuede®/sheeting,

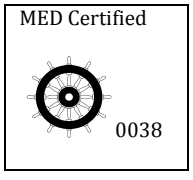
Nytek®, Nytek®/knit, Nytek®/sheeting

- **BS 476, Part 7, Class 1:** Novasuede®/sheeting, Nytek® (special construction)
- **FAR 25.853 (a) Appendix F Part I (a)(1)(ii)** (12 second vertical burn): Novasuede®, Novasuede®/knit, Nytek®, Nytek®/knit
- **MVSS302** Novasuede®, Nytek®

⊙ Denotes conformance to European Marine Equipment Directive (MED), modules B and D and is also available with Lloyd's Register "Certificate of Fire Approval"

Unless otherwise noted, Nytek® faux leathers are nylon microfiber composites.

Independent laboratories have tested sample lots of flame retardant-treated Novasuede® and Nytek® using the previously described methods. The test reports are available upon request. Majilite manufactures new orders using these methods, which undergo quality control testing. Majilite must acknowledge a customer request in writing before performing or certifying these tests on individual orders.



TECHNICAL BULLETIN 133 AND CALIFORNIA 133 NYTEK®

Since March 1, 1992, the state of California has required upholstered seating furniture sold for use in certain public occupancies (as defined in the bulletin) to meet the requirements of the State of California, Bureau of Home Furnishings and Thermal Insulating Technical Bulletin 133, better known as “Cal 133”.

The city of Boston, the New York/New Jersey Port Authority, and other city and state governments adopted Cal 133 as the standard for drafting their own legislation.

Cal 133 is a full-scale test involving a piece of furniture or a suitable mock-up. A suitable mock-up consists of a seat, back cushion and arms, if applicable, which are configured into a metal frame made of slotted "L" angle iron and slotted flat iron as described in the Cal 133 Technical Bulletin. The cushions will be constructed using the same methods and materials (cover, barrier, foam, threads, etc.) to be used in the final finished piece of furniture. The purpose of the mock-up is to give a predictable indication of how the furniture will perform in an actual chair test.

No cover material can pass Cal 133 since it is a composite, not a component test. It considers the effect of the individual components and their influence on each other as they relate to the design of the seating furniture being tested. The methods and materials that pass with one design may not pass on another.

Cal 133 does not specify fire barrier materials, however most manufacturers have reported that the best results are obtained when adequate fire barrier materials are used.

Fire retarding foams are not a requirement of Cal 133. In fact, no components are specified. The law's goal is the construction of safer furniture. Manufacturers have the flexibility to select their own methods and materials as long as their chair passes the test.

NYTEK® products are used successfully throughout the industry on Cal 133 furniture when used in conjunction with a suitable fire barrier and Cal 117 rated foam and other components.

The California Department of Consumers Affairs, Bureau of Home Furnishings and Thermal Insulation (BHFTI) has literature on barrier fabrics and foam components, Cal 133 question and answer booklets, and copies of the regulation. If you need assistance contact the following numbers or website:

The New York/New Jersey Port Authority: 212-435-7000

The City of Boston Fire Department Chemist Office: 617-343-3527

BHFTI – www.bhfti.ca.gov

For further guidance or for technical assistance, call Majilite at 978-441-6800.

CITY OF BOSTON

The City of Boston's BFD IX Component Test has been one of the toughest flammability tests for upholstery fabrics. It requires a vertical flame test with a large flame and a short after-flame time requirement. Because of Boston's reputation for tough fire standards, many specifiers request that upholstery fabrics pass the Boston test even though the fabric might not be used there.

Often a flame retardant compliance treatment would change the hand of the fabric and, in some cases, the color and texture. Some of these treatments were water-soluble and could be washed out, limiting their effectiveness. Sometimes a chair built with approved components (fabric cover, foam, etc.) did not perform well in a full-scale burn test.

The City of Boston discontinued component testing in January 1995. In its place, Boston adopted the Cal 133 full-scale burn test. Its emphasis has shifted to total chair performance in a fire and allows the chair manufacturer to select component combinations to successfully meet the test requirements.

NYTEK® products are used in the city of Boston by incorporating them into chairs designed to pass Cal 133. Often it is necessary to use a barrier fabric between the NYTEK® cover and the foam or fiberfill. Please refer to the section on Cal 133 and contact your Majilite representative if you have any questions.

Boston regulations differ in some respects from Cal133. They do not exempt buildings with sprinklers and then cover more occupancy use groups than Cal 133.

For more information on the City of Boston regulations, contact the Boston Fire Department, Chemist Office at 617-343-3527.
http://www.cityofboston.gov/fire/PGA.asp

NOVASUEDE® CLEANING INSTRUCTIONS

- NOVASUEDE®'s special technology allows for easy care and cleaning.
- Liquid spills tend to "bead up" on the surface; often all that is needed is quick action with a dry cloth to absorb the liquid.
- Remove dust deposits, prevent soil build-up, and keep the suede surface looking crisp and new with normal, regular vacuuming with a soft brush attachment.
- Novasuede can be cleaned and groomed with a Magik brush, Miracle brush, or similar lint removal brush.
- Use Scotch tape or a soft eraser to remove light stains and smudge marks.

Water-soluble Stains

- Water-soluble stains from coffee, tea, juice, soft drinks, milk, beer, wine, and other drinks can be removed by dabbing the affected area with clean water, mild soapy water, or a 50/50 solution of water and white vinegar.
- Blotting is always preferable to rubbing for stain removal.
- Remove excess soap or vinegar solution by dabbing with clean water and blotting with a clean cloth.
- Allow the material to dry naturally or dry quickly with a hair dryer using the warm setting.
- "Rings" noticed after drying are usually the result of some residual soap or cleaning solution remaining on the fabric and can be removed by cleaning again with water.

Non Water-soluble Stains

- Use a petroleum solvent such as naphtha (lighter fluid) or mineral spirits to remove non-water soluble stains such as grease, oil, and shoe polish.

- Dab the stained area with a clean cloth moistened with solvent and then blot with a clean, dry cloth. Repeat if necessary.
- Work from the edges of the stain toward the center to avoid enlarging it.
- Rubbing the area carefully with fine sandpaper usually can repair surface damage and minor cigarette burns.

Cleaning Removable Covers

- Machine wash separately, using the cool or warm water setting on the delicate cycle.
- Use mild detergent without pouring it directly onto the material and no bleach. Spin and tumble dry on a low setting, or spin and hang to dry in a shady area. Do not twist or wring.
- NOVASUEDE® covers also can be professionally dry cleaned using a clean perchloroethylene solvent and these settings: short cycle, tumble dry warm, steam followed by brushing to restore nap.

A wet extraction process, available through most professional cleaning services, is recommended to clean widespread dirt or for an overall cleaning of upholstered pieces.

Although NOVASUEDE® is spill resistant, supplementary treatments such as Scotchgard can be used for further protection. Test a sample to ensure that the texture or color of the material will not be affected.

Restoring the Nap

After cleaning, it is important to restore the nap by lightly brushing with a soft bristle brush after the NOVASUEDE® is completely dry. Regular routine vacuuming, immediate attention to accidental spills, and occasional brushing generally are all that is required to maintain the luxurious feel and appearance of NOVASUEDE®.

SUEDE STAIN REMOVAL INSTRUCTIONS

1. Remove as much of the stain as possible before applying cleaners. For dry stains, try brushing with a Magik or Miracle brush. Remove wet residue with a spoon, a butter knife or absorb with a soft cloth.
2. Select the appropriate cleaner according to the chart below.
3. Begin with the cleaner listed first, allowing the spot to dry.
4. If the stain remains, proceed to the next recommended cleaner.

STAINS	**CLEANERS**		
Coffee, Tea, Milk	1	2	3
Juice, Soft Drinks	1	2	3
Wine, Beer	1	2	3
Mustard	2	3	
Catsup, Chocolate	1	2	
Cooking Oil, Mayonnaise	1	2	3
Crayon, Lipstick	4	5	2
Urine	1	2	3
Blood	1	2	
Body Oils	1	2	5
Furniture Polish, Ink	2	5	
Grease, Shoe Polish, Motor Oil	4	5	2

CLEANERS

1 Cold to lukewarm, never hot, water.

2 Mix one teaspoon of a mild soap (Woolite®, Joy®, Ivory Liquid®, or Tide® powder) to a pint of cold or warm water.

3 Pure white vinegar mixed 50/50 with water. Use vinegar full strength for stubborn stains.

4 A petroleum distillate such as mineral spirits or naphtha.

5 A dry cleaning solvent such as perchloroethylene, or Blue Coral® “Dri-Clean” Carpet and Upholstery Cleaner in a clear plastic bottle with a spray trigger.

NOTE: Exercise proper care when using solvents or solvent cleaners since some are flammable. Read and follow the manufacturer’s directions and use with adequate ventilation while wearing protective gloves.

NOVASUEDE®: COMMONLY ASKED CARE AND CLEANING QUESTIONS

How should I take care of NOVASUEDE® furniture?

Periodic cleaning of airborne dust and dirt is the key to long life for carpets, draperies, and upholstery fabrics. Brush NOVASUEDE® with a soft nylon lint brush, similar to a Magik or Miracle brush, avoiding metal brushes or those with stiff bristles. Normal, regular vacuuming for a few minutes a week also will remove dust deposits, prevent soil build-up, and keep your NOVASUEDE® furniture looking fresh and new.

What about spills?

NOVASUEDE®'s microfiber structure causes many spills to "bead up" on the surface. Often all that is needed is quick action with a dry cloth to absorb the liquid.

What do I do about stains?

Don't be alarmed about a dried spill on NOVASUEDE®. The fabric easily "releases" most stains with normal cleaning techniques. Blot (if still sticky) or brush out (if dry) any excess staining material. Water-soluble stains can be removed by dabbing the affected area with mild soapy water using Woolite, Joy, Dove or any mild dishwashing soap. Avoid soaking the suede to prevent soap build-up; rather dab the stain with soapy water and blot with a clean cloth like a soft absorbent terry cloth towel. For more stubborn stains, brush with a soft toothbrush and blot. A 50/50 mixture of white vinegar and water is another good cleaning agent.

For non water-soluble stains such as grease, use a petroleum solvent (mineral spirits, naphtha, or a spot remover with perchloroethylene). Moisten a clean cloth with the solvent, dab the stained area, and blot with a clean dry cloth.

After cleaning, allow the suede to air dry or dry quickly on the warm setting of a hair dryer. Brush to restore the nap.

What do I do about rings?

"Rings" remaining after cleaning or drying usually are the result of some residual soap or cleaning solution remaining in the fabric. Even water can leave a ring of minerals, salts, dust or other contaminants. Rings or spots also may be areas where the suede microfibers have clumped together. Many rings can be brushed out.

For a more stubborn ring, try cleaning the area again with clear water using a sponge or soft clean cloth. A "feathering" technique (working from the center out) will help prevent the ring from reappearing. Blot as much of the water as possible with a dry towel. Quick drying with a hair dryer (or fan) set at the warm setting can help prevent ring formation. When dry, always brush to restore the nap.

What about stains or soiled areas too large to spot clean?

For large areas, a wet extraction process, available through most professional cleaning services, is recommended. These large stains also can be removed using a home wet vacuum system, such as a Bissell carpet cleaner with small upholstery attachment. Use a mild soap and cool to lukewarm water. Do not soak the suede. Spray and vacuum; lightly brushing if necessary. Use water to remove soap residue. Allow the suede to dry completely then lightly brush to restore the nap. Removable cushion covers also may be washed on a gentle cycle in a washing machine using cold water and Woolite followed by a cold rinse. Air-dry the suede or lightly tumble the cover in a dryer on a cool setting. Brush the suede lightly after drying.

Can I treat my NOVASUEDE® furniture with Scotchgard or other fabric protectors?

Professionals should apply Scotchgard, Fiberseal, Soilshield, and other commercial fabric protectors on NOVASUEDE® to ensure adequate and complete coverage. With any treatment, we recommend a preliminary test to make sure that the hand, texture, or color of the material will not be affected.

What are the advantages of using fabric treatment?

Good quality fabric treatments can enhance the water repellency and stain release characteristics of NOVASUEDE®. Many fabric protection applicators guarantee their products and provide care and cleaning guides for customers. Professional cleaners also can provide quick and timely local service. Buyers also might be more comfortable knowing a fabric treatment has been applied, especially one with a warranty.

“COLOR TRANSFER" FROM NOVASUEDE®

Color Transfer from Buffing Dust

Occasionally upholstery shops report a transfer of colored buffing dust from NOVASUEDE® to another fabric, usually occurring in warm weather when the upholsterer is more likely to pick up color on his hands, arms and shirt through sweat. However, dye bleeding might be suspected initially.

How Buffing Dust is Created

One of the final steps in manufacturing NOVASUEDE® is buffing its surface to achieve uniform fiber and nap length with a very fine abrasive which generates very tiny dust particles that are difficult to distinguish as individual particles. NOVASUEDE® dust on clothing may look like a dye bleed.

After buffing, the dust is vacuumed out of the NOVASUEDE®, but sporadically some dust can remain in a few yards within a bolt. Most furniture manufacturers simply blow off the dust with a stream of dry compressed air from an air hose at the final inspection just before wrapping for shipment. This also cleans off sawdust, metal shavings, or other types of airborne dust. Most of the dust on clothing can be removed with masking tape, a lint brush or washed and rinsed with cold water.

Infrequently an end user will think the fabric’s color is bleeding. Regular vacuuming and occasional light brushing with a soft bristle lint brush, similar to a Magik or Miracle brush, is recommended for normal maintenance of NOVASUEDE® regardless of buffing dust. Airborne dirt, dust, household sprays, and air pollution can settle on the suede during use.

NOVASUEDE® furniture also should be periodically "dusted" by vacuuming. Dirt can act as an abrasive, shortening the life of any fabric.

Foreign material may cause the nylon microfibers in NOVASUEDE® to cling together, reducing the "tracking" effect of the nap. Through regular use and vacuuming, the buffing dust should diminish to where it is no longer a concern.

Color Transfer from Dye Bleed

A dye bleed might cause color to transfer from certain dark colors of NOVASUEDE® (black, dark or bright reds, and purples) to lighter NOVASUEDE® colors or to other lighter fabrics or leathers. This can occur especially if the contrasting materials are washed together or if the suede becomes wet. A small amount of this dye bleed usually does not change the suede color, but it can stain other materials.

Therefore care should be taken in the selection of the combination of NOVASUEDE® colors used in the same piece when they will be cleaned or washed together. For example, a black or a wine NOVASUEDE® should not be used in appliqué with Gelato as some bleeding of the dye in the darker suedes will occur when the piece is washed. Care should also be taken when certain dark colors of NOVASUEDE® are used for throw pillows on light colored sofas, especially if the pillows may become wet during use.

Other materials such as vinyls, natural leathers, and some synthetic leathers can extract dye from NOVASUEDE® when wet or in elevated temperatures. Vinyls and leathers contain oils that can extract dye from many textiles. Also, some natural and synthetic leathers have top finishes that can become soft and tacky when very warm, causing them to stick to other materials.

Evaluating Color Compatibility

- Before fabrication, NOVASUEDE® users should test color compatibility when using dark colors with lighter colored suede, fabrics or leathers.

- Wet a piece of the NOVASUEDE® thoroughly and squeeze out excess water. Put the fabric in contact with a piece of the light colored fabric or leather glass and insert it between two pieces of safety glass or other clean, flat water impermeable surface.
- Place a small weight on the top plate glass. After 24 hours, separate the NOVASUEDE® from the light colored fabric and note any color changes.
- For vinyls and natural or synthetic leathers, you should check for dye extraction by oils. Repeat the above procedure using dry NOVASUEDE® with vinyl or leather between plate glass, compressed with a small weight. Place overnight in an oven at 158F or 70C.

Please contact the company if you want Majilite to conduct the testing.

NOVASUEDE® STAIN REMOVAL:
WET EXTRACTION METHOD

Large dirt or stains on NOVASUEDE® may be too labor intensive to clean by spot cleaning. Removing ground-in or soaked-in stains by wetting and blotting is also not practical and is time-consuming.

The wet extraction technique, used by professional cleaners, is an alternative cleaning method. Individuals can use a Bissell carpet machine with a small upholstery attachment or a wet/dry vacuum. The cleaning technique involves spraying the suede with water and vacuuming the suspended dirt. The best technique to use with extraction equipment is to wet and vacuum in one motion rather than soak.

Remove dry dirt by brushing and vacuuming. Blot wet stains as much as possible. Excess dried stains should be scraped off with a spoon. Some materials may be partially removed by lightly applying and removing scotch tape.

Prepare a soap solution as follows:

- 1 gallon of water
- 1/4 cup Woolite
- 2 cup Vivid detergent with non-chlorine bleach

Transfer some of the soap solution to a 1-pint bottle equipped with a trigger or pump spray top similar to those used for many household cleaners.

Spray the soap solution onto the stained area. Lightly wet the area, but avoid over soaking. Brush the soap solution into the suede with a soft brush such as a soft toothbrush. Do not scrub or rub excessively. Lightly work the soap into the suede to soften the stain.

Extract the soap solution with cold water. Several rinses may be necessary. The suede will darken when wet and may mask the stain. To determine whether another washing is necessary, dry a small portion of the cleaned area with a hair dryer to determine if any of the stain remains. Once the stains have been removed, clean the entire panel or piece of furniture to maintain a consistent appearance. Allow the piece to dry at room temperature overnight, and then brush lightly to restore the nap.

CLEANING PROCEDURES FOR EMBOSSED NOVASUEDE® AND NOVASUEDE® PERF

- Clean EMBOSSED NOVASUEDE® and NOVASUEDE® PERF using the same procedures as the standard NOVASUEDE® line. Lightly brush and vacuum these materials regularly. Brush only with a soft bristle brush with the same stiffness as a soft toothbrush.

- Spots and stains can be removed using water or Woolite and water for water-based stains. Use mineral spirits or perchloroethylene for oil-based stains.

- Machine wash EMBOSSED NOVASUEDE® and NOVASUEDE® PERF in Woolite using cold water, a cold rinse and tumble dry only, then air dry. Lightly brush the nap once the suede has completely dried.

- Use extraction equipment for sofa and chairs.

- Avoid scrubbing, picking, or digging the suede surface when cleaning EMBOSSED NOVASUEDE® or NOVASUEDE® PERF. Doing so can pull some of the microfiber into the embossed areas or the individual perforations can reduce the overall embossed or perforated effect of the product. Let the soap and water or cleaning solvent loosen the stains, then remove them by blotting with a clean absorbent cloth.

- For further instructions, please refer to the sections NOVASUEDE®: COMMONLY ASKED CARE AND CLEANING QUESTIONS and PROCEDURE FOR REMOVAL OF STAINS FROM NOVASUEDE®: - WET EXTRACTION METHOD.

NOVASUEDE® CLEANING

INK

- Cleaning techniques will vary because different inks are composed of different materials.
- The chances for success are greater the sooner the ink spot is cleaned. Begin working with small areas, starting with the least visible area to test the cleaning technique's success.
- Blue Coral Dri-Clean Upholstery Cleaner has worked well in cleaning ink from NOVASUEDE®. It can be purchased at auto parts stores as either a clear liquid in a trigger spray bottle or as an aerosol, which is not as effective.
- Follow the directions on the bottle and use the dab and blot technique. Blue Coral Dri-Clean also can be used as a spot cleaner or as a soap for wet extraction. Blue Coral is manufactured by Blue Coral, Inc. Cleveland, Ohio 44105; 1-800-844-1080, Technical Assistance 1-800-416-1600.

NOVASUEDE® CLEANING

BLOOD

- Take appropriate precautions to prevent the spread of disease when handling blood or blood products.
- Most fresh blood stains can be removed with cold water
- For fresh blood, pat the stain with a cloth dabbed in cold water and then blot the stain with a clean dry cloth. Repeat the process until no more blood transfers to the cloth.
- Dried blood may be more difficult to soften and remove.
- Before washing, gently scrape the dried blood with a fingernail file or similar object. Avoid bruising the suede. Use a soft toothbrush to break up the blood, then use the cold water and cloth method discussed above.
- If water alone does not work, try a diluted solution of a mild soap such as Woolite, Joy, Dove, or Ivory in cold water.
- Do not use warm or hot water as it may set the blood into the suede.

NOVASUEDE® CLEANING

OIL AND GREASE

Oil and grease do not respond well to cleaning with water alone or even water and soap. Instead, dissolve the oil or grease with a solvent and blot.

Mineral Spirits for Oil Stains

Mineral spirits is a clear water-white solvent sold in hardware and paint stores, often as paint thinner for oil-based paints. A combustible liquid, it is a distillate of petroleum and has a mild odor similar to kerosene. Keep it away from ignition sources, use with adequate ventilation, and follow the manufacturer's label instructions. Avoid alcohols, ketones such as acetone, and nail polish removers.

Grease: Tougher to Dissolve

Try mineral spirits first to remove grease stains, then if necessary, perchloroethylene, which is a better grease solvent and dries fast. However, its strong odor and fumes can be a safety problem if the area is not well ventilated. Follow all manufacturer's label instructions and the Material Safety Data Sheet (M.S.D.S.):

- Before applying solvent to the stain, scrape off any excess grease or oil with a knife. If the grease is heavy and stiff, gently loosen it with a soft toothbrush.
- Being more fluid, oil may be partially blotted up with a clean dry cloth. Avoid spreading the stain.
- Wet a clean white cloth with solvent and dab the grease or oil stain with it.
- Quickly blot the stain with a dry portion of the cloth.
- Repeat this process several times until the stain is gone and the cloth shows no more oil is being picked up.
- Be careful not to over wet the stain with solvent, especially in the beginning of the cleaning process, because the stain will spread out as the solvent begins to dissolve it.

- If a ring remains after the spot dissolves, there is probably a small amount of stain remaining that has been pushed out to the edges of the wetted area. Rewet the spot with solvent and blot again with a clean cloth. Using a hair dryer on a warm setting, blow air across the spot. As the wet area shrinks, lightly brush it with a soft cloth or use your hand to feather out the boundary between the wet area and the dry, dispersing the ring.
- Stains such as shoe polish have oil soluble and water soluble components. They require cleaning with a solvent followed by soap and water.

NOVASUEDE® CLEANING

CHALK

Some upholsters use chalk to mark their patterns, which is easier to remove than ballpoint pens, china markers, and crayons. A soft, non-dusting variety of chalk, such as Crayola Anti-dust white chalk, will mark suede relatively easily. Occasionally, chalk may get on the face of the suede or chalk marks will need to be removed if the pattern is marked incorrectly.

For best results, brush the suede with a soft brush such as a soft toothbrush. The brush loosens the chalk and should be followed by brushing or fluffing the suede with a soft clean cloth to disperse it. In the upholstery shop, use clean dry compressed air from an air hose to accomplish this. Mineral spirits also are effective but are messier and more time consuming. Brushing suede also works.

NOVASUEDE® CLEANING

MASKING TAPE

Using Masking Tape to Clean NOVASUEDE®

- Masking tape can be used to clean NOVASUEDE® like a lint brush. However, it should only lightly touch the suede and then be removed.
- NEVER RUB THE TAPE INTO THE SUEDE or leave FOR ANY PERIOD OF TIME.
- NEVER USE TAPE TO MARK OR LABEL NOVASUEDE® IF THE TAPE WILL NEED TO BE REMOVED TO USE THE SUEDE.

Leaving Tape on NOVASUEDE®

There will be occasions when certain tapes will remain on NOVASUEDE® for a period of time, e.g., when a plastic cover is inadvertently taped to the chair's upholstery during packaging. Masking tapes have rubber adhesives that with time tend to increase their peel adhesions to the surface of the material to which they have been applied. So when the tape is removed, some of the adhesive remains on the surface of the material. With NOVASUEDE®, the tape may pull out some of the microfiber and raise the nap above the rest of the suede. The result may be a dark area where the suede does not track with the rest of the piece.

These rubbery adhesives do not clean well with soap and water. Even some of the more popular spray cleaners do little more than soften the adhesive and "chase" it around.

If masking tape has been applied to suede for a period of time, the tape will have established a good bond to the microfibers. If this is the case, *DO NOT PULL THE TAPE OFF THE SUEDE.* The best way to remove the tape safely is to soften the tape adhesive and then remove it and the tape at the same time. A minimum of adhesive will remain on the suede.

Mineral spirits is a clear water-white solvent sold in hardware and paint stores, often as paint thinner for oil-based paints. A combustible liquid, it is a distillate of petroleum and has a mild odor similar to kerosene. Keep it away from ignition sources, use with adequate ventilation, and follow the manufacturer's label instructions. Avoid alcohols, ketones such as acetone, and nail polish removers. It works well with clean white cloths to remove masking tape. Follow these instructions:

- Starting with a small piece of tape, wet a cloth with the mineral spirits and wet the edge of the masking tape at the bond line.
- The solvent will penetrate the suede, spread under the tape, and soften the tape.
- Using light tension, gently lift the tape and slowly pull it back to where the solvent spot ends, a quarter-inch at a time. You should feel the tape grab to the dry suede. *DO NOT PULL ON THE SUEDE!!!*
- Repeat the procedure until the tape has been completely removed.
- It is important to work with a small area at a time and to be patient.
- Over-wetting the tape with mineral spirits or leaving it too long on the suede after wetting will soften the adhesive too much. When the tape is removed, the adhesive will remain on the suede.
- Too little mineral spirits on the tape or too little wetting time will not allow the adhesive to soften adequately. When the tape is removed, some suede fibers also will be removed.
- If any adhesive remains after the tape is removed, wet it with mineral spirits, roll it into a ball and pick it off the suede surface. Avoid pushing it down into the suede.
- If the suede is dark or tacky, some adhesive may have been pushed into the microfiber. Wet the spot with mineral spirits and blot with a clean cloth. Brush the suede with a soft toothbrush. After drying, lightly brush the suede.

NOVASUEDE® CLEANING

GLUES

Some upholsterers use fabric spray adhesives that may be sprayed onto foam, frame parts, or cardboard. Occasionally, a part covered with glue may bump up against a piece of furniture covered in NOVASUEDE® and some of the glue transfers to the suede surface.

Several solvents including perchloroethylene and mineral spirits can loosen adhesives without damaging the suede but require adequate ventilation. Perchloroethylene is fast drying but has a strong odor and can be a safety problem. If the solvent is flammable or combustible, keep it away from ignition sources. Follow the manufacturer's label instructions and all precautions. Consult the Material Safety Data Sheet (M.S.D.S.).

- Dab a clean white cloth in mineral spirits, getting it damp but not dripping wet.
- Dab the edge of the adhesive mark, wetting the adhesive and a small area around it.
- Lightly rub or brush the adhesive to get it to form a ball and roll off the suede.
- Avoid pushing the softened adhesive into the suede. After the adhesive is gone, brush the suede, still moistened with mineral spirits, with a soft brush to break up any residual adhesive and blot with a clean dry cloth.
- Mineral spirits dry slowly so it may be necessary to speed up the process by blowing warm dry air over the spot. If the spot appears dark when dry, there may be a little adhesive left in the suede. Rewet with mineral spirits, brush, and blot.
- Sometimes the mineral spirits may leave a ring. If this happens, lightly brush the ring with a cloth dampened with mineral spirits, then brush the suede lightly as you dry it with a hair dryer.

CLEANING INSTRUCTIONS
FAUX LEATHER MATERIALS

NYTEK®, a specially engineered nylon fiber matrix, is designed with a built-in stain resistant finish that will not wash or wear off and does not require a topically applied spray. The following simple cleaning methods will ensure the long-lasting beauty and elegance of these NYTEK® products.

Ordinary Cleaning

Ordinary dirt, smudges and water-soluble stains such as coffee, tea, juice, soft drinks, milk, beer, and wine can be removed with mild soap and water. Use a clean cloth or soft sponge to dab the stain with soapy water. Remove the soap solution by wiping the area with a cloth and clean water. Dry with a soft lint-free cloth or towel.

Stubborn Stains

Very stubborn stains or non-water soluble stains can be removed with a mild solvent such as naphtha (lighter fluid, paint thinner). Lightly wipe the stain with a clean cloth moistened with solvent. Blot the area with a dry cloth and dry.

Ink and Magic Marker Stains

Many ink and magic marker stains can be removed using a solution of one part Wisk detergent and one part rubbing alcohol. Dab lightly with a moist cloth, but do not rub. As the ink loosens, blot the area with a dry cloth. Repeat if necessary. Rinse with a cloth dampened in clean water, and dry with a soft cloth.

Commercial Installations

For general cleaning of commercial installations, use mild soap and water. Avoid using cleaners containing abrasives or bleach. Disinfectants can be used provided they are evaluated beforehand. Technical bulletins

outlining specific cleaning and disinfecting procedures for NYTEK® products used in health care applications are available.

NON-SUEDE CLEANING INSTRUCTIONS

To Remove Stains:

1. Select the appropriate cleaner according to the chart below.
2. Begin with the cleaner listed first and allow spot to dry.
3. If stain remains, proceed to the next recommended cleaner.

STAINS	CLEANERS	
Coffee, Tea, Milk	1	
Juice, Soft Drinks	1	
Wine, Beer	1	
Mustard, Catsup, Chocolate	1	
Cooking Oil, Mayonnaise	1	2
Crayon, Lipstick	1	2
Urine, Blood	1	
Body Oils	1	
Ink	3	
Grease, Shoe Polish, Motor Oil	2	1
Furniture Polish	2	1

CLEANERS

1 *Mild soap (such as Joy, Dove, Ivory or other hand-dishwashing liquids) and water.* Use a clean cloth or soft sponge to dab the stain with soapy water. Remove the soap solution by wiping the area with a cloth and clean water. Dry with a soft lint-free cloth or towel.

2 *Mild petroleum solvent such as naphtha (lighter fluid) or mineral spirits (paint thinner).* Lightly wipe the stain with a clean cloth that has been moistened with solvent. Blot the area and allow to dry.

3 *One part Wisk detergent and one part rubbing alcohol*. Dab lightly with a cloth that has been moistened with the solution. Do not rub. As the ink loosens, blot the area with a dry cloth. Repeat if

necessary. Rinse with a cloth dampened in clean water and dry with a soft cloth. Ballpoint pen ink can be removed with Maji-Clean Ink Sticks that are available through Majilite.

NOTE: Exercise proper care when using solvents or solvent cleaners. Some solvents are flammable. Read and follow manufacturer's directions on labels. Use with adequate ventilation and wear protective gloves.

CARE AND CLEANING GUIDE FOR NYTEK® PRODUCTS USED IN HEALTH CARE APPLICATIONS

NYTEK® faux leathers are used in dental chairs, examination tables, hospital furniture, and other health care products that should be cleaned and disinfected frequently. Majilite has evaluated several cleaners/disinfectants and recommends the following:

Cleaning: Wipe the NYTEK® with a mild soap and water solution using a soft clean cloth or sponge. Avoid cleaners containing abrasives. Rinse with clean water, dry with a soft cloth or towel.

Disinfecting with bleach: Clean the faux leather of gross filth (loose dirt and debris). Prepare a bleach solution at the desired concentration up to 10% (5000ppm available chlorine). Use an EPA registered product whenever possible and follow the manufacturer's label instructions. Spray to wet the surface with the bleach solution. Allow it to remain for no longer than 10 minutes. Thoroughly rinse with clean water. Allow to dry before use.

Disinfecting: The following products are acceptable based on testing: Dilute as directed and apply according to the manufacturers label instructions.

PRODUCT	TYPE	MANUFACTURER
Birex se	Phenol	Biotrol International
MaxiSpray	Phenol/Glutaraldehyde	Henry Schein
Omni II	Phenol	Certol International, Inc.
Precise Hospital Foam cleaner	Phenol	CalTech Industries, Inc.
ProSpray & ProSpray Wipes	Phenol	Certol International
Sporicidin Antimicrobial Solution	Phenol	Contec, Inc.
Sporicidin Antimicrobial Towlettes	Phenol	Contec, Inc.

Procide Spray	Phenol	Certol International, Inc.
Cetylcide II	Quaternary compounds	Cetylite Ind. Inc.
Madacide IFD	Quaternary compounds	Mada Medical Products, Inc.
Cavicide	Quaternary compounds 17% isopropanol	Metrex Research Corp.
Maxi Spray Plus	Quaternary compounds 17% isopropanol	Metrex Research Corp.
Sani-Cloth Plus	Quaternary compounds 10-12% isopropanol	PDI
Sani-cloth HB	Quaternary compounds	PDI

Majilite does not include Iodophors, such as Biocide, Wescodyne, ProMedyne and Iodofive, on the acceptable list at this time due to concerns about possible staining of the NYTEK® surface.

The company does not recommend use the following products on NYTEK®:

- Alcohols such as isopropyl alcohol and ethanol
- Products with levels of alcohols above 20% such as: Coe Spray II "The Pump," DisCide Ultra Disinfectant Spray, Citrex Hospital Spray Disinfectant, Super Sani-Cloth, DisCide Ultra Towelettes, Lysol, Lysol II, Lysol Professional

Majilite does not endorse any particular product's specific ability to clean and/or disinfect; we only verify that the approved products have been shown not to harm the NYTEK® finish. Our evaluations were based upon the disinfectants as currently formulated and may not reflect possible future reformulations or modifications by the manufacturers.

Majilite continues to examine the effects of various commercial disinfectants on NYTEK®. Our laboratories are available to test specific products upon a customer's request.

The NYTEK® faux leather collection includes: Action, Attaché, Baby Ostrich, Brushed Finesse, Burnished Metal, Cane, Courier, Deco, Destiny, Finesse, Glazed Finesse, Grandeur, Metals & Pearls Finesse, Moccasin, Nuance, Panache, Pearl Raindrop, Prestige, Satchel, Starlite, Vista etc.

NYTEK® CLEANING

REMOVAL OF BALL POINT PEN INK FROM NYTEK® FAUX LEATHER

Cleaning ink stains varies because different inks are composed of different materials. However, clean any ink spot as soon a possible to increase the chances of removal. Begin working with small areas, starting with the least visible area to test the cleaning technique's success.

Majilite's Ink Removal Stick is designed for removal of ink, lipstick, and other stains. It can be used on any of our faux leather products. It is not recommended for NOVASUEDE®. Use the stick as directed on the label. Rub some onto the stain, wait thirty seconds and remove the stain with a clean cloth. Repeat if necessary. For stubborn stains, allow the Ink Removal Stick gel to remain on the material overnight. Ink Removal Sticks can be ordered from Majilite Customer Service for a nominal fee at 978-441-6800.

In place of the stick, use the following procedure with common ingredients:

1. In a small cup, mix one-part full-strength Wisk detergent with one part rubbing alcohol, which is commonly composed of 70% isopropyl alcohol and 30% water.
2. Wet a small portion of a soft white cloth and apply the cleaning solution to the ink stain and blot up the stain. Do not rub. Blot the cleaning solution with a dry cloth and repeat step 2 several times to extract as much of the stain as possible. This will keep the ink from spreading unnecessarily.
3. Dab a soft or medium bristle toothbrush into the cleaning solution and gently brush the stain in a swirling motion. As the ink loosens, blot the cleaning solution with a dry cloth and repeat step 3 until the stain is gone (usually about 3 or 4 times). Use the least amount of solution possible and clean and dry in several steps

rather than saturate the NYTEK® material and attempt to extract the stain all at once.

4. Extract the cleaning solution from the NYTEK® with a damp cloth. Several rinses will be necessary to extract all the soap. Wisk has a characteristic blue color and may impart a blush tinge to lighter colors but this will disappear as the Wisk is extracted with a damp cloth.
5. Allow the fabric to air dry or dry with a hair dryer on a warm setting.
6. Check for residual soap evidenced by a bluish color or a soapy feel. If necessary, repeat steps 4 and 5.

For general cleaning, use water and a mild soap such as Woolite following the manufacturers directions.

NYTEK® CLEANING

BLOOD

- Take appropriate precautions to prevent the spread of disease when handling blood or blood products.
- Most fresh blood stains can be removed by wiping with a damp cloth or sponge with cold water
- For fresh blood, pat the stain with a cloth dabbed in cold water and then blot the stain with a clean dry cloth. Repeat the process until no more blood transfers to the cloth.
- Dried blood may be more difficult to soften and remove.
- Before washing, gently scrape the dried blood with a fingernail file or similar object. Avoid bruising the suede. Use a soft toothbrush to break up the blood, then use the cold water and cloth method discussed above.
- If the water alone does not work, try a diluted solution of a mild soap, such as Woolite, Joy, Dove, or Ivory, in cold water.
- The rest of the blood should flake off fairly easily once some is removed. Follow the washing with an appropriate disinfectant.
- Do not use warm or hot water as it may set the blood stain into the suede.

Please see our discussion of disinfectants in the section on CARE AND CLEANING GUIDE FOR FINESSE® IN HEALTH CARE APPLICATIONS.

NYTEK® CLEANING

PAINT

Wet Paint: Water Based:

Blot up as much of the wet paint as possible; avoid spreading it. Wash the material with warm soapy water, then follow with warm water to remove the soap residue. Use a soft toothbrush to extricate paint worked into the valleys of the leather grain. Do not scrub the material; rather use a soft swirling motion to loosen the paint.

Wet Paint: Oil Based:

Blot up as much of the wet paint as possible; avoid spreading it. Wet a soft cloth or sponge with mineral spirits and wipe up the paint residue. Mineral spirits is a clear water-white solvent sold in hardware and paint stores, often as paint thinner for oil-based paints. A combustible liquid, it is a distillate of petroleum and has a mild odor similar to kerosene. Keep it away from ignition sources, use with adequate ventilation, and follow the manufacturer's label instructions. Avoid alcohols, ketones such as acetone, and nail polish removers.

Several cleanings may be necessary to remove the last of the paint and to avoid a hazy or chalky appearance on the NYTEK® surface once the solvent has evaporated. In the final cleanings, be sure to use a new, clean cloth to avoid transferring paint back to the NYTEK® surface.

Dried Paint: Water Based or Oil Based:

If the paint has dried, work on small areas. Wet the paint with mineral spirits. The mineral spirits will help to loosen the dried paint from the NYTEK® surface. The dried paint must be gently scraped off using a fingernail or a fingernail file to get under the edge of the paint.

NYTEK® CLEANING

MASKING TAPE

One of the side effects of masking tape being left on NYTEK ® for a period of time, e.g., when a plastic cover is inadvertently taped to a chair's upholstery during packaging, is that some of the adhesive remains on the surface of the material after removal. These rubbery adhesives do not clean well with soap and water or spray cleaners.

Cleaning the Tape Adhesive

- Remove as much adhesive as possible by applying fresh masking tape to the affected area, rubbing it lightly, and then pulling it off rapidly.
- The new tape will not form a strong bond to the NYTEK® surface, but will stick to the adhesive residue on it and will pull some of it off.
- Working with a small area at a time, wet the edge of the adhesive with a clean white cloth with mineral spirits.*
- Gently roll the adhesive into a ball and pull it off the NYTEK® surface.
- After the adhesive has been removed, clean the affected area with mineral spirits and a new clean white cloth. Wipe off any excess and allow the piece to air dry. Some adhesive remains if the affected area still feels sticky or has a hazy appearance. Repeat the process until the NYTEK® is restored to its original color and gloss.

** Mineral spirits is a clear water-white solvent sold in hardware and paint stores, often as paint thinner for oil-based paints. A combustible liquid, it is a distillate of petroleum and has a mild odor similar to kerosene. Keep it away from ignition sources, use with adequate ventilation and follow the manufacturer's instructions. Avoid alcohols, ketones such as acetone, and nail polish removers.*

NYTEK® CLEANING

WHITE-OUT, LIQUID PAPER OR SIMILAR CORRECTION FLUIDS

Wet White-Out

Correction fluids will dry in one to two minutes, so quick action is necessary. If the White-Out is still wet, blot it with a cloth, sponge or paper towel. Avoid spreading.

Dried White-Out

Rub masking tape on the dried spot, pulling it off quickly. Push the tape down into the grain with the wooden handle of a kitchen utensil . Repeat three or four times until White-Out no longer transfers to the tape.

To clean a large spill or several spots:

- Work with a small area or one spot at a time.
- Dip a soft toothbrush into mineral spirits,* shake off the excess, and brush the remainder of the stain in a circular motion. The White-Out will fade as it begins to dissolve.
- Blot it up quickly with a clean, dry soft cloth to avoid spreading. Several cleanings may be necessary to remove all of the White-Out and to avoid a hazy or chalky appearance on the NYTEK® surface once the solvent has evaporated.
- In the final cleaning, use a new, clean cloth to avoid re-transferring the White-Out. If necessary, lightly scrape the last of the White-Out from the valleys of the leather grain with fingernails.
- Allow to air dry. If odor is a problem, wash out the mineral spirits with soapy water or a dilute solution of Woolite or a mild dishwashing liquid.

**Mineral spirits is a clear water-white solvent sold in hardware and paint stores, often as paint thinner for oil-based paints. A combustible liquid, it is a distillate of petroleum and has a mild odor similar to kerosene. Keep it away from ignition sources, use with adequate ventilation, and follow the manufacturer's instructions. Avoid alcohols, ketones such as acetone, and nail polish removers.*

NYTEK® CLEANING

GLUES

The chemical composition of glues varies widely and it may not be possible to remove every glue from NYTEK® products. For water-based or rubber-based (in petroleum solvent) glues, the following procedure may be helpful:

- Working with a small area, wet a clean white cloth with mineral spirits.*
- Wet the edge of the adhesive with the mineral spirits, and gently roll it into a ball, pulling it off the NYTEK® surface.
- After the adhesive has been removed, clean the affected area with mineral spirits on a new clean white cloth.
- Wipe off any excess solvent and allow the piece to air dry. If the affected area still feels sticky or has a hazy appearance, then some adhesive remains.
- Repeat the process until the NYTEK® is restored to its original color and gloss.

**Mineral spirits is a clear water-white solvent sold in hardware and paint stores, often as paint thinner for oil-based paints. A combustible liquid, it is a distillate of petroleum and has a mild odor similar to kerosene. Keep it away from ignition sources, use with adequate ventilation, and follow the manufacturer's instructions. Avoid alcohols, ketones such as acetone, and nail polish removers.*

TOPICAL FINISHES: SCOTCHGARD AND TEFLON:

Majilite does not recommend using stain treatment products like Scotchgard or Teflon on any of the finished leather grains of the NYTEK® line. Refer to the CARE AND CLEANING section on NOVASUEDE® for a discussion of these finishes.

These finishes change the fabric fibers' surface tension by coating them with a Teflon fluorocarbon resin or silicone that prevents dirt and liquid spills from penetrating. The resin is applied via a spray, pad, or other similar process. When the volatiles evaporate, the respective resins are left behind, coated onto the fabric fibers.

NYTEK® products already have an inherently stain resistant finish. Liquids bead up on them and are easily wiped up. Coating this finish with these topical finishes will not cause water to bead up more. Also the Teflon resin will not penetrate through the leather finish to coat the nylon microfibers.

NYTEK® Does Not Need Vinyl Dressings and Leather Conditioners

Since NYTEK® does not contain oils or plasticizers like leather or vinyl, it does not "dry out" or become stiff with time. It is not necessary to apply anything to its surface to "restore it." Periodic cleaning with soap and water and sensible care and use are all that are needed.

Proper Cleaning Methods for NYTEK's® Gloss and Simulated Leather Surface

One of NYTEK's® most appealing features is how it mimics leather's gloss and surface feel. Plus it's easy to clean with water and a soft cloth or sponge. If necessary, use a dilute solution of a mild neutral soap such as Woolite, or a hand dishwashing liquid like Joy, Ivory Liquid, or Dove. Then rinse the cloth in warm water, wipe the material and let it air dry. Once dry, the original look and feel of the material should be restored.

NYTEK® does not need special products like Armor All to restore its surface since it does not contain oils or plasticizers that make it "dry out" or become stiff with time. While our laboratory studies have not shown them to be damaging to NYTEK®, they alter the gloss and surface feel of the material, diminish its similarity to leather, and make it feel more like plastic or vinyl.

REPAIRING CUTS

Although resistant to most punctures and tears, there may be rare occasions when NYTEK® grains are cut or bruised through abuse or an accident. Because of the high tear strength of NYTEK® products, the cuts don't tend to spread but can be difficult to repair. Tape inserted behind the cover to hold the thin material in place and close the cut will show as an outline or ridge, known as " x-raying."

Leather repair experts can remedy the problem if the cut or bruise has not penetrated the nylon microfiber. They can be found on the Internet and or through a referral from a leather upholsterer. They will apply waxes and other coatings to match the color, grain, and gloss of damaged NYTEK® products.

IS BACKING NECESSARY?

NYTEK® products have good tensile and tear strength without backing. However for some of NYTEK®'s applications, backing such as foam tricot may facilitate easier installation and provide softness, acoustical properties, and additional thickness. Polycotton sheeting backing may be used to reduce stretch. Foam tricot or knit provides dimensional stability in high humidity. All backings are made to order and add a week or two to the delivery.

STANDARD BACKINGS

Poly/cotton Sheeting

NOVASUEDE® and all faux leather NYTEK® products being used for wallcovering applications where standard or heavy duty water based wall cements are applied can be backed with a polyester/cotton plain weave sheeting. This takes out the stretch and provides dimensional stability. Without the backing, the NYTEK® could be stretched during hanging and then shrink after the adhesive dries, resulting in seam separation. The cement used to adhere the sheeting to the NYTEK® also reduces the tendency of the nylon microfiber matrix to absorb the wall cement. Refer to the discussion in the WALLCOVERING section of this guide.

Poly/cotton sheeting backed NYTEK® also can be used in direct contact cement applications when there are no rounded or complex shapes involved and where maximum stretch is necessary. The polycotton sheeting firms the hand of the NYTEK®, so it is generally not recommended for upholstery applications.

1/8 Inch Foam and Tricot

The standard backing for a marine headliner is 1/8 inch polyurethane foam with a nylon tricot knit. The foam has acoustical properties and a soft cushiony feel. The tricot knit supports the foam and provides a smooth,

slippery surface to slide across a plywood panel when covering, and prevents the foam from grabbing the wood and bunching when stretching the material. Together the foam and tricot help stabilize the NYTEK® in high humidity. If a customer wants foam padding under NYTEK® for a headliner application, the installer should not glue NYTEK® to their own foam. Spots can form if there is low bond of the cement causing bubbles in high humidity conditions. If too much cement is applied, it could saturate the foam resulting in thumbprinting. Majilite uses a special process to ensure a strong bond between the foam and the entire roll of NYTEK®.

NYTEK® products with foam tricot can be used in stretch and staple applications and must be stretched properly. Please see the suggestions in the MARINE APPLICATIONS section of this User's Guide. These backings also can be used in direct cement applications with contact cements. Please refer to the suggestions in the DIRECT CEMENT APPLICATION section of this User's Guide.

1/16 Inch Foam and Tricot

Constructed the same as the 1/8 inch foam but thinner, this backing can be used similarly. A thinner package may be necessary due to space constraints, such as tightly fitting panels. A thinner foam will have less tendency to form folds or creases on tight concave curves.

1/4 Inch Foam and Tricot

This version is available for special applications where a thicker material is desired. It also is constructed the same way as the 1/8 inch package.

Cotton Knit

A cotton knit backing is available for special upholstery and other applications. It provides dimensional stability while still allowing plenty of stretch.

NOVASUEDE® and NYTEK® products are used primarily in upholstery applications that generally do not need backing. Consult a Majilite representative to determine whether a knit backing is advisable for a particular project.