

# TECHNICAL GUIDE

FIBER INFORMATION + FAQ + CARE & MAINTENANCE + WARRANTY

**DELOS™**

Custom Rugs & Carpets

AMERICAN MADE



JOURNEY MADE



# DELOS CONSTRUCTION & FIBER INFORMATION

AMERICAN MADE

TUFTED USING ROBOTICS FOR CONSISTENCY & SPEED WITH  
HAND-FINISHED DETAIL BY LOCALLY SKILLED CRAFTSPEOPLE

## Constructions Offered

Robotically tufted constructions ensure consistency, precision, and speed while allowing for hand-finished detail. Natural rubber latex backing provides exceptional durability; construction does not require an edge finish due to superior latex performance.

## Available Edge Finishes

- Fused
- Self hem
- Micro serged
- Binding

## Accessible Edge

A beveled edge at a 1:2 ratio that is designed for ease of mobility in high traffic scenarios.

## Synthetic Fiber Options

pH range for cleaning solutions: 5.5-10.0

### ECONYL® Solution Dyed Nylon

- 100% regenerated nylon yarn is made from fishing nets, spent carpets and other nylon waste that has been collected around the world.
- Available in 144 solution dyed colors from the Delos pom folder, including 25 in-stock neutrals for expedited projects.
- There are 32 additional colors available within our yarn partner's global collection that are available upon request.
- UV stable and sun fade resistant.

### ECONYL® Dyeable Nylon

- 100% regenerated nylon yarn is made from fishing nets, spent carpets and other nylon waste that has been collected around the world.
- Does not achieve the same UV stability as the available solution dyed ECONYL® nylon yarn offering.

## Natural Fiber Options

pH range for cleaning solutions: 5.5-8.0

### Classic and Fine Classic New Zealand Wool

- New Zealand wool is the brightest whitest wool, therefore it dyes brilliantly and offers sheen due to high lanolin content.
- New Zealand wool has the longest staple length, which means fewer fiber ends need to be spun together to create yarn. As a result, shedding is significantly reduced.
- Due to its ability to provide sound absorption, wool rugs and carpets make sense for open spaces where noise may be an issue.
- Delos follows the New Zealand Animal Welfare Act of 1999, ensuring humane shearing practices.
- Available in 144 colors from the Delos pom folder, including 25 in-stock neutrals for expedited projects.

### Indo Striae Wool

- European wool blend; coarser than New Zealand wool.
- Created by adding varying shades of undyed gray wool in the spinning process to create a variegated appearance for a hand crafted look.
- Medium to lighter shades dye best; dark dyes may obscure its striae effect.

### Small Felted Wool

- Can be tufted for higher traffic environments.
- Large and larger felted wool yarns are not warrantied for commercial use.

### Silk Wool

- A 50/50 blended yarn of silk and New Zealand wool.
- Luxurious sheen with a soft hand.
- It is recommended that customers provide color references that display sheen for custom dyeing.
- Both wool and silk are inherently sustainable, natural, and biodegradable.



Journey Made, Woven, Savile Row Collection, Design: Cutter, Colorway: Gris

JOURNEY MADE

TUFTED, LOOMED, & KNOTTED WITH HAND-FINISHED DETAIL

Facility in India is **SA8000 certified**, ensuring socially responsible practices.

## Constructions Offered

- High density tufted
- Microloop
- Tibetan knot (150, 100, & 60 knot)
- Loomed
- Soumak (80 knot)
- Flatweaves

## Constructions that Require Latex

- High density tufted.
- Microloop (*Other constructions have pile naturally tied in and do not require latex.*)

## Constructions that Require Serged Edges

All Journey Made constructions.

## Synthetic Fiber Options

pH range for cleaning solutions: 5.5-10.0

### PET (Polyethylene Terephthalate)

- Made from 100% post consumer waste that includes water bottles. Inquire for documentation verifying the yarns 100% post consumer waste content.
- Durable and stain resistant.
- 2,000 square foot minimum order for custom colors. Review current color offering online.

## Natural Fiber Options

pH range for cleaning solutions: 5.5-8.0

### Classic and Fine Classic New Zealand Wool

- New Zealand wool is the brightest whitest wool, therefore it dyes brilliantly and offers sheen due to high lanolin content.
- New Zealand wool has the longest staple length, which means fewer fiber ends need to be spun together to create yarn. As a result, shedding is significantly reduced.
- Due to its ability to provide sound absorption, wool rugs and carpets make sense for open spaces where noise may be an issue.
- Delos follows the New Zealand Animal Welfare Act of 1999, ensuring humane shearing practices.
- Available in 144 colors from the Delos pom folder, including 25 in-stock neutrals for expedited or dyed-to-match projects.

### Indo Striae Wool Blend and Indian Wool

- Budget friendly and durable with a hand crafted feel.
- Indo striae is created by adding varying shades of undyed gray wool in the spinning process to create a variegated appearance.
- Sheds least in a loop construction.

# FAQ: FLATWEAVE & SOUMAK

## What is PET (Polyethylene Terephthalate)?

PET is valued for its durability, sustainability, and versatility. Derived from 100% post-consumer waste including recycled plastic bottles, PET offers an eco-friendly alternative without sacrificing performance. On average, about six water bottles are used per square foot of rug. Please inquire for documentation verifying the yarn's 100% post-consumer waste content.

PET fibers provide a soft, luxurious hand that rivals natural fibers while maintaining exceptional strength and resilience.

## How Are Flatweaves Made?

Flatweave rugs can either be made from PET or wool and are crafted much like fabric, woven on looms where vertical warp and horizontal weft threads are interlaced. These rugs are reversible and for this reason, Delos attaches removable labels, with sampling receiving latex labeling.

## How Do You Fix Loose Yarn?

The face of a flatweave rug is formed where the yarn is woven into itself, eliminating the need for fiber encapsulation for stability. This construction makes flatweaves naturally double sided.

For commercial wear, stitch distance should not exceed 1/8" to 3/8" in length. Think of it like tightly woven braided hair that holds its shape for days, versus a loose bun that quickly unravels. Over time, fibers may begin to peek up with regular wear and vacuuming. Simply trim the fibers with scissors—without risk of fraying.

## Attic stock is recommended so rugs can be rotated or replaced as needed to maintain appearance.

## Can Flatweave Rugs Be Exposed to Sunlight?

The PET yarn used in Delos flatweaves is batch dyed, not solution dyed. While highly durable, fading will occur over time with prolonged sunlight exposure.

## How Is a Flatweave Rug's Edge Finished?

Due to the nature of these constructions, the material will fray if cut. To prevent this, each flatweave rug is finished with hand-serged edges, where craftspeople wrap yarn around the edge

using a needle—similar to an overcast or whip stitch in fabric finishing. The intended up side can be understood by feeling the serging along the edge to determine the side with the higher rise. In order to alleviate the rise, rugs can be reverse hand serged by request.

If the serging becomes cut, apply a small amount of glue to prevent further fraying.

## Is a Rug Pad Necessary?

Flatweaves require proper airflow for drying, which is why waffled pads are essential. Using a rug pad not only provides cushioning but also prevents mildew by allowing moisture to evaporate. Mildew can occur if organic matter and moisture remain trapped beneath the rug.

**Note: Flatweave rugs installed without a warranted pad will void warranty coverage.**

## How Can I Remedy EdgeLift on Flatweave and Soumak Rugs?

Flatweave and soumak constructions, like woven fabrics, may curl at the edges due to moisture, temperature shifts, or uneven flooring. To address this, use a premium double-sided tape

**Tip:** Regularly inspect the tape and ensure the rug is properly cleaned and thoroughly dried after any exposure to moisture for longevity.

## How Do You Maintain These Rugs?

Vacuum regularly using the suction setting and brush attachment only. Avoid using a beater bar, as it can distort the weave's tautness and cause yarn to break.

## How Do You Spot Clean?

Blot spills immediately using a moist white cloth. Do not rub, as this can spread the stain or damage the fiber.

Cleaning solutions should have a pH range of 5.5-10.0. Always test cleaning solutions on the back of the rug before applying to the front.

Avoid harsh cleaners, excessive soap, or aggressive scrubbing. For light cleaning, use a solution of equal parts white vinegar and water, or a mild dish soap mixture. For stubborn stains, professional cleaning is recommended.



Journey Made, Flatweave, Design: Enid, Colorway: Wheat

# WARRANTY: FLATWEAVE & SOUMAK

**Filing a Claim:** Contact Delos at **877.988.5595** to file a **claim under limited warranty**. Sales Representatives may be involved for inspections if available.

**Warranty Coverage:** Delos rugs are warranted against manufacturing defects for one (1) year from the original purchase date. **Photos of manufacturing defect are required for claims to be processed.**

**Maximum Liability:** At its discretion, Delos may repair or replace a rug without charge. Dealer rug cost constitutes the maximum liability Delos will consider on any claim.

**Receiving Rugs:** Customer or warehouse of receipt are required to inspect for claimed defects, inspecting packaging upon delivery. **Do not sign for damaged packaging. Photos of shipping defects are required for claims to process.**

**Color Variations:** From dye lot to dye lot, Dyed PET colors may vary with a tolerance of  $\pm 5\%$ . To ensure project color matching, all rugs using the same colors should be ordered at the same time.

**Pattern and Size Tolerance:** Size tolerance is  $\pm 3\%$  and slight pattern irregularities are normal in hand-made items.

**High Traffic Wear Requirements:** For commercial wear, stitch distance should not exceed 1/8th to 3/8th of an inch in length.

**Cleaning:** Topical treatments and cleaners must be approved by CRI (carpet-rug.org) in order to maintain warranty.

Vacuums must be CRI approved, (carpet-rug.org) and used as suction only to maintain warranty.

**Storage Requirements:** Rugs stored improperly will not be considered for warranty coverage.

**Rug Creases:** Creases caused by prolonged folding will not be considered for warranty coverage.

**Exclusions:** Delos will not honor third party claims caused by negligent cleaning application or actions.

# FAQ: TUFTED, KNOTTED, & LOOMED

## Why is a Rug Pad Necessary?

A quality rug pad extends the life of your carpet and provides additional benefits:

- Adds cushioning and comfort underfoot.
- Promotes airflow, which aids in quicker drying
- A barrier to protect flooring beneath.
- Improves slip resistance.

Delos offers custom cut, dual sided rug pads (soft side for hard surfaces, rough side for carpet), cut 1" smaller than the rug perimeter for an additional charge. These pads are warranted for use over radiant panel heat. Delos rug backing scores 0.73 dry and 0.70 wet for coefficient of friction—exceeding the typical requirement of 0.60 or higher. For guestroom projects, Delos can attach rug pads.

## Can I Fold a Rug to Get It Up an Elevator?

Yes, larger rugs can be folded to fit in an elevator for transport. Once delivered, they should be unfolded and rerolled onto their original cores if not installed immediately. Keeping a rug folded for too long can cause permanent crease lines, which can only be minimized through professional steaming.

## What is the Proper Way to Store Area Rugs Before Installation or Attic Stock?

Rugs and carpets should be wrapped to protect against soil, dust, moisture, and contaminants. Store rolls horizontally on an off-ground, flat surface in a climate-controlled, cool, and dry environment. Do not stack more than 2-3 rolls high. To control humidity, operate the AC fan and allow for ventilation with open windows or doors for up to 72 hours. Inspect rugs every few months for pests, mold, or mildew, and periodically unroll them to allow for air circulation.

## How Often Should I Vacuum My Carpet?

Routine vacuuming with a CRI-approved Gold or Silver Level vacuum is essential to maintain carpet appearance and longevity. Vacuum slowly—approximately two feet per second—and make three to five passes over the same area. For taller felted shag, cut pile, or loop carpets, avoid brush agitation and instead use the vacuum hose to prevent damage.

## Which Vacuums are Allowed (to Prevent Voiding the Warranty)?

Only vacuums approved by the CRI's Seal of Approval (SOA) Testing Program at the Gold or Silver Level are recommended. Approved upright vacuums should feature dual motors, where the brushes and suction operate independently.

**Note:** Vacuums with beater bars are not recommended, as they may damage certain fibers and constructions.

## How Can I Keep Interior Carpets Contaminant Free Once Installed?

Use and maintain walk-off mats at all hard-surface entryways. 94% of soil indoors is tracked in from outside, so at least six footsteps (18-20 feet) of matting is required for effective soil removal.

## What Do I Do When Yarns Sprout?

It is normal for individual yarns to occasionally rise above the surrounding pile. These pile sprouts can be safely clipped with scissors without concern of fraying or further pulling.

## How Can I Remove Furniture Indentations?

Indentations in wool carpets can often be lifted by applying gentle steam.



American Made, Tufted: Wildwood Design Series, Design: Relic, Colorway: Quarry

# RUG CLEANING GUIDE: TUFTED, KNOTTED, & LOOMED

The Institute of Inspection, Cleaning and Restoration Certification (IICRC) provides guidelines for proper carpet cleaning frequencies, emphasizing that maintenance affects not just appearance and durability but also public health. Carpets trap dust, allergens, and pollutants that can harm indoor air quality, so regular cleaning helps preserve carpet life and promotes healthier indoor environments.

Carpet Owner/Maintainer			Professional Carpet Cleaner/Restorer	
Traffic Soil Rating	Vacuuming	Spot Cleaning	Interim Maintenance (Between Restorative Cleanings)	Restorative Cleaning
Light <500 foot traffic per day	1 to 2 X per week	Daily or as soon as spots are noticed	1 to 3 X annually	1 to 2 X annually
Medium (moderate) 500-1000 foot traffic per day	Daily in traffic areas Overall 3 to 4 X per week	Daily or as soon as spots are noticed	3 to 6 X annually	2 to 4 X annually
Heavy 1000-2500 foot traffic per day	Daily in traffic areas Overall 4 to 7 X per week	Daily or as soon as spots are noticed	6 to 12 X annually	3 to 6 X annually
Very Heavy >2500 foot traffic per day	1 to 2 X daily in traffic areas Overall 7 X per week	Daily or as soon as spots are noticed	12 to 52 X annually	6 to 12 X annually

*Note: Although these are generally followed traffic-rating guidelines, users of this information should be aware that the condition of every building differs in traffic, soiling rates and usage. Common sense, experience and good judgment help dictate the best carpet maintenance program. Each individual facility should be assessed based on use, climate and desired appearance level.*

# CARE & MAINTENANCE: TUFTED, KNOTTED, & LOOMED

## Warrantied Cleaning Solutions

Cleaning agents must be approved through the Carpet & Rug Institute's Seal of Approval (SOA) Testing Program. pH levels, provided throughout this pamphlet, ensure safe use for various fibers while preventing color loss or residue buildup. Approved cleaning agents can be found at carpet-rug.org and must also be Woolsafe Approved, which can be verified at woolsafe.org.

Before applying any cleaning agent, always pretest a small area for colorfastness. Use a cold, damp white cloth to wick stains initially—blot, do not rub, to avoid fiber distortion. This is especially important with felted products, where yarns are formed through soap, heat, and friction, making them more sensitive to aggressive cleaning.

## Avoid Harsh Cleaners

Using cleaners with pH levels outside IICRC recommendations can strip wool of its natural lanolin, reducing stain resistance and causing previously cleaned areas to attract soil more easily. Harsh hard-surface cleaners or equipment should never contact carpet fibers, as they may cause bleaching or permanent damage.

## Proper Maintenance Plan

Long-term carpet performance and appearance retention rely on a structured program that includes:

- Interim maintenance
- Deep cleaning
- Drying
- Preventative maintenance

## Interim Maintenance

A high production, fast drying process performed between restorative cleanings. Requires CRI-approved Gold or Silver Level equipment. Frequency depends on traffic levels, location, and exposure to soiling.

## Deep Cleaning

The process of extracting entrapped soils and residues using CRI Gold or Silver Level equipment. Deep cleaning typically involves higher moisture levels, lower production rates, and slower drying times.

## Recommended Deep Cleaning Method

Hot water extraction (steam cleaning) is the recommended method for 100% wool, wool/nylon blends, and 100% nylon.

- Apply a pre-spray with a pump-up sprayer at the recommended rate.
- Agitate with hand brushing or mechanical brush action.
- Perform hot water extraction with one spray pass followed by two dry passes.
- Follow IICRC S100 Standard and Reference Guide for Professional Carpet Cleaning.
- Wool requires pH 8.0 or below for spotters, pre-sprays, and in-tank solutions.
- Never mix cleaning solutions beyond the recommended dilution rates.
- **CAUTION: The rotary action of the spin bonnet or any other rotary brush may distort the yarn pile. Therefore, the bonnet method is not recommended by Delos for rug and carpet maintenance and will void all warranties.**

## Professional Cleaning

**Visit [iicrc.org](http://iicrc.org) or call 360.693.5675 to get connected with certified firms and technicians.**

## Air Flow for Drying

Carpets must be completely dry before foot traffic resumes. Use the HVAC system in combination with portable air movers to accelerate drying. Rug pads also help promote airflow and faster drying.



American Made, Tufted: Traverse Design Series, Design: Castello

# WARRANTY: TUFTED, KNOTTED, & LOOMED

**Filing a Claim: Contact Delos at 877.988.5595 to file a claim under limited warranty.** Sales Representatives may be involved for inspections if available.

**Warranty Coverage: Delos rugs are warrantied against manufacturing defects for one (1) year from the original purchase date. Photos of manufacturing defect are required for claims to be processed.**

**Maximum Liability:** At its discretion, Delos may repair or replace a rug without charge. Dealer rug cost constitutes the maximum liability Delos will consider on any claim.

**Receiving Rugs:** Customer or warehouse of receipt are required to inspect for claimed defects, inspecting packaging upon delivery. **Do not sign for damaged packaging. Photos of shipping defects are required for claims to process.**

**Color Variations:** From dye lot to dye lot, wool and silk wool colors may vary with a tolerance of  $\pm 5\%$ . ECONYL® nylon fibers are extruded, providing more consistency. To ensure project color matching, all rugs using the same colors should be placed on order at the same time.

**Pattern and Size Tolerance:** Project Managers must be notified when carpets are being made for insets. To ensure proper fit, running coverage for insets is suggested. Size tolerance is  $\pm 3\%$  and slight pattern irregularities are normal in hand-made items.

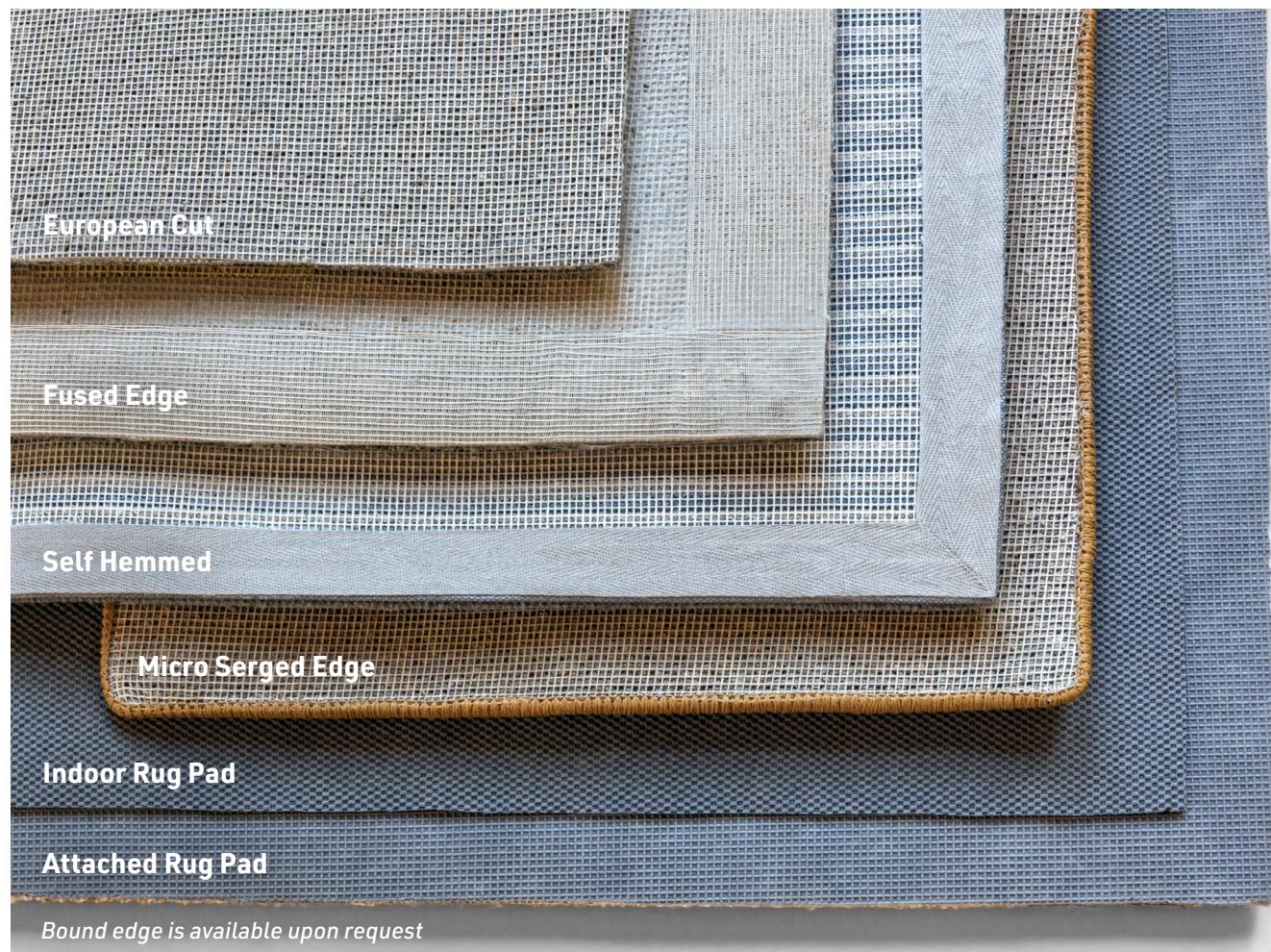
**Cleaning Treatments & Requirements:** Topical treatments and cleaners must be approved by CRI (carpet-rug.org) and Woolsafe (woolsafe.org) in order to maintain warranty coverage.

**Cleaning Equipment Requirement:** Equipment must be CRI Gold or Silver approved (carpet-rug.org). Failure to follow these requirements voids warranty coverage.

**Rug Creases and Storage Requirements:** Creases caused by prolonged folding or rugs stored improperly will not be considered for warranty coverage.

**Exclusions:** **Delos will not honor third party claims caused by negligent cleaning application or actions.**

## TUFTED BACKING & EDGE FINISHES



Quality shows through Delos' choice edge finishes and a backing that is hand troweled with a pure, high quality latex rubber with exceptional tuft bind and fabric-like pliability. This backing has been tested for slip resistance, achieving a coefficient of friction of 0.73 dry and 0.70 wet, both exceeding the industry standard requirement of 0.60 or higher. Clients may choose to add a rug pad to promote air circulation or to create an extra barrier that helps with cleaning and protection against spills and stains.

Delos' premium latex can be cleanly cut once dry without risk of fraying. For a more refined appearance, a woven tape can be fused into the latex to frame the backing while maintaining a flat profile. A self-hem finish—where the primary backing is wrapped around the secondary and framed with cotton tape—is more labor intensive and may extend production time. Orders of 50 or more rugs incur at \$0.50 per square foot upcharge for self hem. All edge finishes allow for a 45° beveled edge for easier mobility, except for the more rounded microserge and bound edge options.

## TUFTED, KNOTTED, & LOOMED BACKING & EDGE FINISHES



At Delos' Journey Made facility, the outermost edge of each hand tufted rug is meticulously hand serged after the primary backing has been wrapped around the secondary visible backing. In contrast, knotted and woven products are created by securing the warp and weft through hand tying, a process that eliminates the need for latex while still receiving a refined serged edge. Abroad, serging is performed entirely by hand. Skilled artisans loop yarn stitches around the rug's outer edge with a needle to prevent fraying and provide a beautifully finished appearance.

Delos also offers the option to apply latex to woven products domestically for enhanced stability on an as-needed basis.

# 8 COMMON PITFALLS TO AVOID WHEN ORDERING A CUSTOM RUG

## 1) Selecting the Wrong Fiber or Construction for the Job

Delos project managers proactively consider style, budget, delivery timelines, installation areas, and expected wear before recommending fiber and construction options. Not all designers' inspirational samples are appropriate for high-traffic environments. When needed, Delos designers can develop products inspired by these samples that will perform well while aligning with budget requirements.

## 2) The Product Ordered Does Not Match the Original Vision

Custom area rug orders can feel intimidating. To support accuracy and confidence, Delos recommends using 16" x 21" or 12"x12" strikeoffs before placing final orders. Strikeoffs allow for quick adjustments and help ensure that designers and clients feel secure about the final result.

## 3) Color Inaccuracies

When specifying dyed color for loop construction, clients should view the loop side of New Zealand wool poms, as loop coloration appears lighter depending on color intensity. Cut pile poms should be squeezed to view color more accurately. Blended undyed wools may vary slightly from batch to batch, and wool can take on a warmer tone when sheared during rainy seasons. In contrast, both loop and cut pile colors remain consistent in solution dyed nylon. Selecting color poms and reviewing strikeoffs in the actual installation environment is recommended, as lighting can significantly affect perceived color.

## 4) Coordinating New Zealand Wool Rugs in Open Floor Plans Do Not Match

Delos dyes each project individually unless in-stock colors are used. Color can vary  $\pm 5\%$  between dye lots. To achieve the best color match for coordinating New Zealand wool rugs, all rugs should be ordered at the same time so they can be drawn from the same dye baths. Solution dyed nylon remains consistent from lot to lot.

## 5) Insets Arrive Too Small for Installation Spaces

Custom rugs have a size tolerance of  $\pm 3\%$  due to canvas stretching during tufting as well as environmental factors like temperature and humidity. Project managers need installation requirements in advance to ensure rugs are tufted slightly larger, allowing installers to cut them precisely to the designated spaces upon arrival.

## 6) PET Flatweave Constructions are Too Loose for High-traffic Areas, and Yarn Begins to Peek Up

Designers sometimes provide handwoven samples or photo inspirations that require longer stitch lengths to replicate. Delos does not recommend using longer stitch lengths in hospitality environments where vacuum use is frequent. Flatweaves are produced on horizontal looms, with weft and warp woven together to form a stable, two-sided construction. Because this method requires no latex, rug pads are essential for stability, to prevent slippage, and to provide air flow for drying. As with any fabric-like weave, edges may curl in humid environments and may need to be secured with double-stick tape. Over time, woven yarns may pull or break and will require trimming. Attic stock is recommended for replacements when using this more affordable construction.

## 7) PET Flatweave Rug Developed Mildew

When PET flatwoven rugs are placed in moist areas such as covered atriums, breezeways, pavilions, verandas, or cabanas, they require waffled rug pads to promote airflow. If debris accumulates and the rug cannot remain dry most of the time, mildew can develop. Proper airflow and maintenance are essential.

## 8) Rugs Were Damaged in Transit, But the Warehouse Signed for Them Without Inspecting the Packaging

It is critical that the receiving warehouse understands the importance of inspecting packaging upon delivery. Once a warehouse signs for a shipment as undamaged, liability transfers from the freight carrier, and Delos is no longer able to file a damage claim. Signing without reviewing its condition removes the option to hold the carrier responsible for transit-related damage.



Journey Made, Flatweave: Java Collection, Colorway: Nitro

# SERVICE, RECYCLING, & SHIPPING



## Room Designation Service

Delos provides the service of labeling individual rugs with direct installation notes based on provided information like space designation and rug orientation, floor and room number. Tags are tied onto rug corners with wire.



## Packaging & Responsible Recycling

All carpets larger than 8'x11' are shipped in secure packaging for ease of installation.

Journey Made carpets are packed in recycled wooden boxes that can be further recycled into mulch at a landfill or transfer station. American Made carpets ship in tubes. Many warehouses reuse these tubes for future installations. Delos will ship back customers' tubes upon request. Cobs for rolling can be recycled along with cardboard boxes. Delos uses recycled paper for printed Lookbooks with FSC certification indicated on back covers.



## Efficient Pallet Shipping Solution

Delos can stack guestroom carpets on pallets, securely wrapped in recycled and recyclable shrink wrap. Shipping guestroom projects in this manner streamlines installation, reduces plastic use, minimizes the risk of transit damage, and significantly lowers freight costs.

Delos reuses and recycles cardboard boxes, cardboard tubes, and spools. Delos recycles plastic yarn spools and plastic wrap, and encourages customers to recycle plastic wrap.

**Visit [plasticfilmrecycling.org](http://plasticfilmrecycling.org) to find a location near you.**

# PRODUCT TESTING

## Custom House

Delos is a custom house specializing in bespoke area rugs and carpets. Our project managers provide expert guidance in selecting the right constructions based on style, budget, delivery needs, installation area, and expected wear.

## Ocean Faring Vessels

Delos is not currently IMO certified through the U.S. Coast Guard for ocean-faring vessels. IMO certification for marine carpet is based partially on the smoke and toxicity test outlined in IMO FTP Code Part 2, which references ISO 5659-2 for smoke density and toxic gas analysis. This test measures the optical density of smoke and the presence of gases such as carbon monoxide and hydrogen cyanide to ensure safety thresholds (e.g.,  $\leq 500$  for flooring) are not exceeded.

For marine environments, Delos can coordinate ISO 5659-2 smoke density testing upon request.

## Testing Library

Delos maintains a comprehensive library of available testing documents. If a project requires specific tests not included in our library—or constructions developed to meet unique performance needs—additional time may be required to create samples and complete third-party testing.

## Common Rug & Carpet Testing Explained

Hexapod Test Simulates wear using a rotating drum and a six-legged metal ball to evaluate appearance retention. After a defined number of revolutions (e.g., 12,000 for commercial or 4,000 for residential), texture and color changes are compared to standardized scales to determine durability.

Pill Surface Flammability Test (ASTM D2859) Also known as the methenamine tablet test, this standard simulates a dropped lit cigarette to assess flammability. To pass, the burned area must remain at least one inch from the edge of the metal frame in 7 out of 8 tested specimens.

Radiant Panel Test (ASTM E648) Measures flame spread resistance by determining a carpet's critical radiant flux (CRF)—the minimum heat needed to sustain burning. Higher CRF values indicate stronger flame resistance.

Smoke Density Test (ASTM E662) Evaluates the amount of smoke produced when a material burns or smolders. Results are expressed as specific optical density; lower values indicate less smoke production. Most applications require results below a threshold of approximately 450.

# SOURCES



## The Carpet and Rug Institute • Wools of New Zealand • IICRC • Honeywell

If there are any questions concerning the care and maintenance of Delos rugs or carpet, please contact Delos at 877.988.5595 or a local Delos representative.



**DELOS™**

Custom Rugs & Carpets

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American Made,  
Tufted: Traverse Design Series,  
Design: Rialto