

# Cleaning Wool Carpet, Oriental Rugs & Area Rugs



**BRIDGPOINT  
SYSTEMS**

Featuring Bridgpoint Wool Rug Cleaning Products

## WOOL HISTORY

Wool is one of the oldest fibers used by man, with uses dating back over four thousand years. Wool rugs have been unearthed that date back to around 400 BC. It is still universally considered one of the finest face yarns available for rugs and carpet.

Most wool used in carpeting comes from sheep, but wool can refer to hair of other animals such as goats (cashmere or mohair), alpaca, llama and Vicuna. Wool from sources other than sheep is only likely to be seen in smaller rugs.

When we think of wool, we may picture fluffy white sheep. However, wool is seldom true white but is off-white to cream or even yellowish. It can also be darker colors, even black.

Wool fiber is composed of three layers.

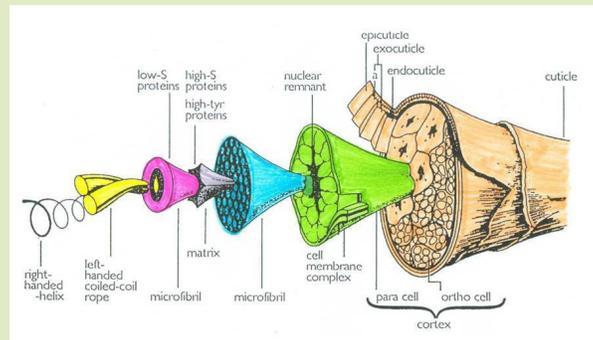
1. The outer layer is the epidermis or cuticle which is a tough layer of scales that overlap each other. In wool that has been more highly processed, more of the scales have been knocked off.
2. The cortex is fibrous and makes up the bulk of the fiber.
3. The inner core is called the medulla. This is a soft layer that consists of tubes through which the fiber once received nourishment.



Segment of woven carpet found in Payzyrk Siberia and dated to 5th century BCE. It is now displayed in the Hermitage museum in St. Petersburg Russia.

## What makes wool such a desirable fiber?

- **Hides Soil** - Wool has excellent soil hiding capabilities. Wool will not exhibit or show soil as much as other fibers. The reason for this is that wool is an opaque fiber (as opposed to synthetics which are translucent). In addition wool doesn't refract and reflect light like synthetics. The naturally dull appearance and scaly nature of the epidermis hides soil. This can become a negative because wool can be very soiled before it appears dirty. This can lead to postponing necessary vacuuming and cleaning.
- **Resilient** - Wool is very strong, elastic and resilient. Wool face yarn in a well-constructed carpet will stand up to the heaviest traffic and still look beautiful. (Notice the carpet in most casinos and finer hotel lobbies and hallways). This is due in large part to a natural crimp in the wool similar to a coiled spring. There is a relationship between the crimp and how fine the wool. Fine wool such as that from Merino sheep may have up to 100 crimps per inch, while the coarser wools have much fewer crimps.
- **Works Well With Dyes** - Wool holds dye to the core of its fiber. You may see rugs in museums with brilliant colors, which are well over a hundred years old. This bond with dye also explains the difficulty of removing any stains that include dyes or coloring agents.
- **Good Absorbency** - Wool absorbs water to over 30% of its weight without even feeling wet to the touch. Wool may seem dry and still be very damp. Don't assume wool is dry because it feels dry. The moisture that wool holds contributes to it being flame retardant. Absorbency means that wool reacts well to a number of dye types and techniques. Keep in mind, this means easy staining and slower drying, also.
- **Soil Release** - Wool responds very well to cleaning as moisture makes the fiber swell and release dry particle soil.
- **Resists Static Electricity** - The moisture content of wool conducts electricity. Any static charge does not build-up in one place but is distributed over a wide area.
- **Flame Retardant** - Wool is naturally flame retardant. The moisture naturally attracted and held by wool makes the fiber self-extinguishing. Burning wool does not produce toxic gases as many synthetic fibers do. In many areas fire codes require the use of wool carpet in the entry and exit areas of certain public buildings as well as passenger trains and aircraft.





**There are also a few potential negatives issues with wool.**

- **Expensive** - This arises mainly from the processing cost, the cleaning, and the preparation, weaving or manufacture etc., rather than the actual cost of the raw material.
- **Fiber Distortion** - Wool is prone to distortion by excess agitation such as jet streaks and wand marks. This is particularly pronounced under heated conditions. To help prevent this kind of distortion, a cleaner using HWE should turn the temperature down to about 150 or 160 F (at the carpet) on a wool cut pile carpet and be sure that the grooming takes place almost immediately after the cleaning process.
- **Stains Easily** - Due to its absorbency and ease of dyeing, wool is also easily stained by wine, Kool-Aid® and other acid dyestuffs. Remember that absorbency is the same quality that makes wool so desirable as far as dye acceptance and obtaining the beautiful rich colors that you often find in wool carpets and oriental rugs.
- **Chemical Sensitivity** - Wool is sensitive to excessive alkaline chemicals with prolonged exposure. This exposure will tend to make wool brittle and somewhat discolored. Some of the epidermis may be lost. This shortens the useful life of the carpet. Following cleaning, wool fibers should be left at a pH between 4.0 and 8.5. Cleaning agents with a pH above 8.5 may be applied to wool for short periods of time, rinsed and neutralized. Of greater importance is the pH the fibers are left at following cleaning.
- Wool is sensitive to any oxidizers especially chlorine laundry bleach, such as Clorox. Over time, chlorine bleach (Sodium hypochlorite) will completely dissolve wool.
- **Fuzzing** - Remember that fuzzing can be a source of problems because wool only comes as a staple yarn and excess agitation can cause that fuzzing effect.

**Grades of Wool** – Wool is not simply wool. There are several kinds and grades of wool. The quality of the wool is judged by the variety of sheep from which it came, fiber diameter, crimp, color, and staple length and strength. Fiber diameter (thinner is better) is the single most important wool characteristic determining quality and price. Finer wool is softer while thicker wool can be more durable. The finest diameters are usually reserved for garments while medium to coarse grades are used for carpet and rugs. Short lengths of wool fiber are called linters and are lower quality. The longer lengths are called worsted wool and are more likely to be used in clothing than in rugs or carpets.

Hill	Mountain	Naturally Coloured	Lustre
<i>Beulah, Hill Radnor, Griststone, Lank etc. &amp; Cheviot pictured below.</i>	<i>Blackface, Swaledale, Rough Fell etc. &amp; Welsh Mountain pictured below.</i>	<i>Black Welsh, Herdwick, Shetland Moorit etc. &amp; Jacob pictured below.</i>	<i>Lincoln Longwool, Wensleydale, Devon &amp; Cornwall Longwool etc. &amp; Bluefaced Leicester pictured below.</i>
			
30 - 33	35+	30 - 35+	26 - 35+
			
<i>Fine tweeds, apparel, flannels &amp; carpets</i>	<i>Hand knitting, tweeds &amp; carpets.</i>	<i>Carpets &amp; knitwear.</i>	<i>Fine lustrous yarn, knitwear, carpets &amp; woven apparel.</i>

## INTRODUCTION

Wool carpet can be found in high-end residences as well as large hotels, casinos, and other commercial facilities. In other words the type of clients most carpet cleaners seek out. If you focus on rugs or include rugs, success will depend in part upon your ability to intelligently discuss their valuable rugs. Few rug owners / rug lovers will trust their hand-made rugs to someone they view as only a carpet cleaner. It is not necessary to know the origins of a rug in order to properly clean it. But knowing such things will certainly increase your potential client’s confidence level in you and your services.

Specific identification of a rug’s origins is beyond the scope of this procedures guide. While there are some rug cleaning instructors who would try to convince you that you need to become an expert in rug weaving and travel the world to really understand how to clean rugs, the truth is, if you can tell the difference between natural and synthetic fibers, understand something of the rug’s construction and have a little background in the chemistry of cleaning, you are most of the way there. The purpose of this comprehensive rug cleaning procedures guide is to fill any gaps that would hold you back from getting started as a rug cleaner. We will attempt to make sure you can identify basic facts that affect cleaning. It is critical to identify a few basic characteristics of any area rug you clean. You should be able to identify the face fiber, the backing or foundation yarns, the color stability of the fiber, the construction type of the rug, and the overall condition of the rug and fringes before the rug is removed from the house.

You may find that the more you learn about rugs, the more you love them. You will want to get an in-depth understanding of where they were woven and the culture of the people who make rugs. This will add to your own personal satisfaction and help your business succeed.

## WHERE TO CLEAN

Installed wool carpet obviously would be cleaned on-location at the client’s home or business. But what about rugs? Should they be cleaned on-location or at your facility? Are automated plants the preferred method for cleaning rugs?

There will be times when cleaning rugs on-location is the only practical option. The rug may be too large to remove and transport to your plant. Furnishings placed on top of a rug may make it impractical to move. Sometimes it will simply be the client's strong preference that the rug remains in the home. The value of the rug and/or the customer's budget may dictate something less than a transporting to your facility for a thorough dusting, cleaning, drying and return transportation. The construction of a rug may not make it a suitable candidate for immersion cleaning or automated system to flush out soils.

Some experts consider an automated system such as the Mor system to be the most complete and thorough cleaning for all rugs. Other experts prefer the additional personal touches that are provided by non-automated immersion cleaning. Whatever method is used, cleaning is better than not cleaning! Do not over-look the benefits of on-location cleaning simply because you have a preference for another method. On-location cleaning will remove some soils and improve the appearance of rugs.

We highly recommended that, when possible, area rugs, especially Oriental Rugs and investment textiles be cleaned in-plant rather than on-location since it offers more of a controlled environment. While this cleaning procedures guide will cover some on-location procedures, as you progress and grow your rug cleaning business, you will find it almost necessary to design an "in-plant" operation, whether it is in a large warehouse or in your garage.

There is also a large market for on-location cleaning. Consider this analogy. Rugs, like cars are a significant investment. But that investment can vary from several hundred dollars for a vehicle that provides "transportation" and not much else to luxury car worth many tens of thousands of dollars. Most are somewhere in-between these two extremes. Some car owners will demand and pay for a detailed hand-cleaning, wax, polish and related services. But many car owners settle for a good cleaning, perhaps an automated drive-thru. There is a market for both services. So with rugs, the value the owner places on his rugs (either monetary or sentimental) and his budget may lead him to get the best possible cleaning or he may settle for a good cleaning. Your efforts to educate your clients and prospective clients will play a role in their decision making.

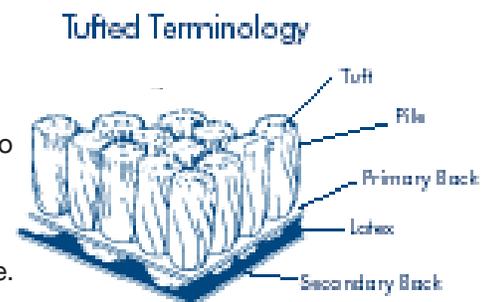
All the products in the Bridgepoint rug cleaning line have been formulated to work well when cleaning on-location, in-plant, at your shop and with automated systems.

## CARPET CONSTRUCTION

### Tufted

There are four components to tufted carpet - face or pile yarns, primary backing, latex adhesive and usually a secondary backing.

Primary backing is most commonly made of woven polypropylene but can also be a natural fiber such as jute. Face yarns are inserted through the primary backing and held in place by a latex adhesive. The adhesive also adheres the secondary backing to the primary backing. In addition to latex, these adhesives also contain various amounts of filler material such as calcium carbonate. This is the most common construction method for all installed carpet.



### Woven carpets and rugs

Woven carpet comprises only 1% of all installed carpet. But, it is an important 1% since potential for shrinkage, browning and bleeding exists. Preserving the installation is key to controlling shrinkage. If the installation is not secure enough to withstand the pull of a carpet that wants to shrink, stay tacking or other steps can be taken to reinforce the installation.

Woven construction begins with a foundation of warp yarns that run the length of the carpet interlaced with weft yarns that run across the width. Cotton is frequently used for the warp yarns while jute and cotton are commonly used for the weft yarns. Pile yarns are knotted or looped around the foundation yarns. A latex backcoating may be added to hold pile yarns in place and increase dimensional stability.



Rugs may be machine woven or hand-woven. There are several ways to identify if a rug is machine made. If the rug was woven on a machine, the rows of knotted yarns will be very even. If you may be able to see that the yarns are wrapped around weft threads, this is another indication of machine made. Hand-woven rugs will have face yarns that are knotted around the warp threads. Machine made rugs generally have labels firmly attached to the backing and have lower pricing. The fringe of a hand-woven rug is almost always an extension of the warp yarns. When a fringe is present on a machine-made rug it is often sewn on to the end of the rug. The foundation of a machine-made rug is generally stiff while the hand-woven counterpart will be more flexible. The stiffness or flexibility of the rug will also be affected by the materials used and the possibility of depressed warp (for hand-made rugs).



The rows of knots and the edges of a machine made rug will be more uniform than a hand knotted rug.

Installed carpet that is woven may be done by any of these three methods of weaving.

### Velvet

The velvet is the simplest weave. Pile yarns looped around the foundation yarns give the back a bumpy appearance. A latex backcoat is frequently applied. A velvet may shrink in either or both directions, but is likely to shrink more in the width. The backcoating helps resist shrinking.

### Woven Terminology



### Wilton

Wiltons are similar to the jacquard weave in upholstery. Yarns that are not part of the pattern on the face of the carpet can be found in backing. Up to five different colored yarns may be used in the pattern and be visible in the backing of the carpet. (There are a few products where additional colors may be used.) The yarns in the backing contribute to making Wiltons a very durable style.



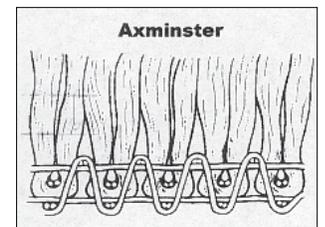
Wilton with natural fibers in the backing can shrink in both length and width. Hand seaming of Wilton carpet is mandatory or the seams may pull open as the carpet tries to shrink.



Wilton edge and back view Notice yarns that are not seen as part of the pattern on the face can still be seen in the backing.

### Axminster

Pairs of thick weft cords give the Axminster a distinctive ridged or ribbed appearance. The ribs run across the width of the goods. Axminster will roll easily in the length or warp direction but is difficult to roll width-wise. Natural fiber Axminsters love to shrink in the length but will not shrink across the width.



Axminster weave. Note the ribbed appearance of the back and the use of many colors.

## RUG CONSTRUCTION

Rugs may be either machine made or hand-made. Hand-made rugs may be woven or “gunned” rugs which are tufted by hand using a tufting gun. They may also be custom made by sewing or seaming portions of tufted rugs together to form a design. Construction method is most easily identified from the back of the rug.

Braided rugs are easily identified. Be sure to check for places where broken threads are allowing sections of the rug to separate. These can be sewn back together as a simple repair. Also watch out for the filler material. If it is colored paper, it can bleed onto the face. A small knitting needle can be pushed in between yarns to check for the hidden material.

Look for seaming tape and / or hand sewing (perhaps secured with hot melt glue). Custom rugs may need to be rolled inside-out and not rolled tightly to avoid breaking any seams. Carefully check the integrity of seams during inspection. Many of these rugs will not stand up to vigorous agitation.

The face yarns of a gun tufted rug will be secured by a latex adhesive on the back. This may be covered by a layer of cloth such as muslin or monk’s cloth. If instead of seeing the reverse side of the pattern on the front, you see cloth covering the back, it is most likely tufted. Odor is a potential problem with tufted rugs. If you detect any sour or unpleasant odor in the backing, expect that exposure to moisture during cleaning will only make this worse. Latex breaking down due to age, poor quality or for other reasons can also be an issue. Less experience rug washers should avoid immersing or over-wetting latex coated rugs.

The back of a woven rug will look like the design on the front.

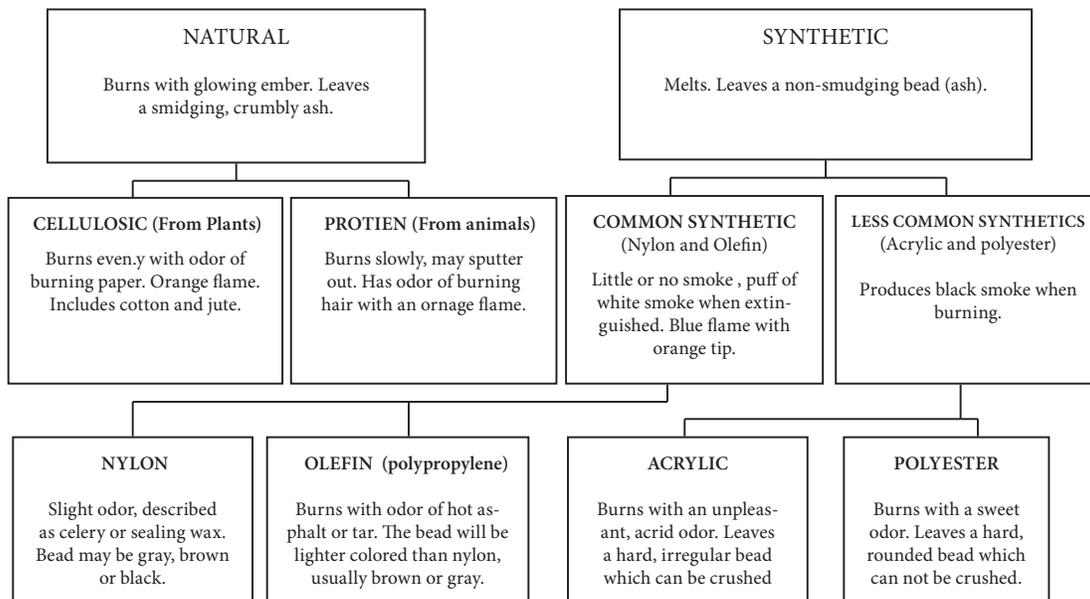


## RUG FIBER ID

Machine made rugs are often made of olefin. Hand woven rugs normally are constructed with natural fibers. The face yarns are most often wool or other animal hair, but can be silk, cotton, rayon or other materials. Watch out for Art silk or faux silk. These fake silks are actually viscose form of rayon, mercerized cotton or a blend. Foundation yarns will probably be cotton, but other fibers including jute and even silk may be seen.

With experience, you may be able to identify most yarns. Until then or if in doubt, find a loose fiber and do a burn test. A burn test chart follows.

FLOW CHART STYLE FIBER IDENTIFICATION CHART



## WOVEN CONSTRUCTION BASICS

Rugs are woven on looms. Warp yarns that will run the length of the rug are stretched between two beams. Weft yarns are interlaced across the warp yarns. Weft yarns may be heavy and stiff which forces the warp yarns to curve as the weft yarns are forced between alternate warp yarns. In other cases weft yarns are thin and pliable and follow a sinuous path around heavier warp yarns. Many rugs use both types of weft yarns.

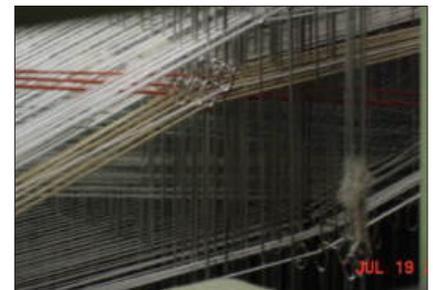
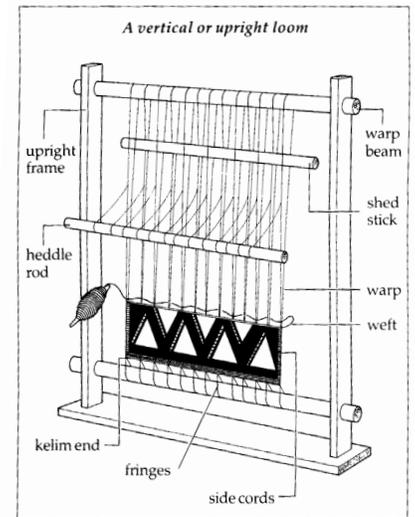
Lengths of the face yarn are tied around two adjacent warp yarns. In some cases, face yarns may be tied around 4 warp yarns to reduce the number of knots required and thus reduce labor.

A row of knots is tied across the width of the rug. Then one or more weft yarns are inserted. The wefts and the knots are pounded down close together to hold the face yarns in place. When only one weft yarn is used between each row of knots, it is called single wefted. Looking at the back of a single-wefted rug, short sections of the warp yarn will be exposed and you may notice them form a diagonal repeat when viewed from the back.

Two types of knots are commonly used but these are not the only types of knots used. The Turkish knot is also known as a symmetrical knot. The Persian knot is also known as a Senneh knot or an asymmetrical knot. When the ends of the Persian knot are pulled tightly, alternating warp yarns will be lifted. When viewed from the back side, every other warp yarn is hidden. This is called a depressed warp. As a result the knots can be closer together, the rug will be thicker and more durable than if all the warps were laying flat in the same plane.



Vertical loom in a city rug weaving shop.



Detail of shed area of a mechanical loom.

Depressed warps are common with asymmetrical knots but can also be found in rugs woven using symmetrical knots.

The symmetrical Turkish tends to be associated with rugs woven in Turkey, the Caucasus region and western part of Iran while the Persian knot is associated with central and eastern Iran (Persia), Afghanistan, Pakistan and areas east of the Caspian Sea. However, people migrate and carry their methods with them. So, the type of knot used is at best one element that may help identify the origin of a rug.

When the rug is completed, the warp yarns will be cut from the beam and gathered together to become the fringe.

A flat strip with no face yarns may be left at the ends of a rug near the fringe. This flat woven area is called a kilim strip. (NOTE: There are various spellings of kilim.) Some rugs may be flat woven throughout their length. The colors of the weft yarns form the pattern. Kilim can also refer to a type of flat woven rug.

Rugs may be woven on portable looms used by nomadic tribes or they may be woven on more permanent looms in villages or factories in cities. Larger and more stable looms allow for weaving knots closer together to create finer patterns. Geometric patterns are characteristic of tribal rugs while curvilinear and delicate floral patterns are more likely to be seen on rugs woven in cities.

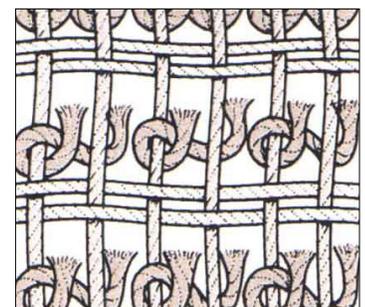
Coarseness of the wool or other fibers used, the number of knots per square inch (how close the knotted yarns are packed together), the pattern, colors of weft threads, and edge treatments are some of the indicators used to assist in determining a rug's place of origin. Frequently a rug is woven in one location but uses styles or design elements from another location. In such cases a rug is called by the place of origin followed by the style, for example an Indo-Persian rug is made in India using Persian design.



Symmetrical knots (orange) and asymmetrical knots (red) demonstrated on a double wefted foundation



Symmetrical knots on a single wefted foundation.



Asymmetrical knots (opening to the right) on a double wefted foundation.

## DESIGN ELEMENT TERMINOLOGY

It is good for a rug washing tech to be familiar with basic terminology of rug design. The main color used as the background in the body of the rug is called the field. There may be a central pattern that is sometimes repeated on a smaller scale in other portions of the rug. This central pattern is a medallion. A rug may have corner brackets, also known as spandrels in each corner of the field.

Around the edges are one or often more borders. When there are multiple borders, the wider one is referred to as the main border and narrow borders adjacent to it are called guard borders.

Geometric patterns, stylized flowers and animals are among the common designs incorporated into rugs. The Tree of Life is a pattern repeatedly used with many variations. Not all patterns are symmetrical. The rug may have a directional element such as a mihrab which represents an arched opening or a niche in a wall indicating the direction the rug should be turned when used by a Muslim for prayer.

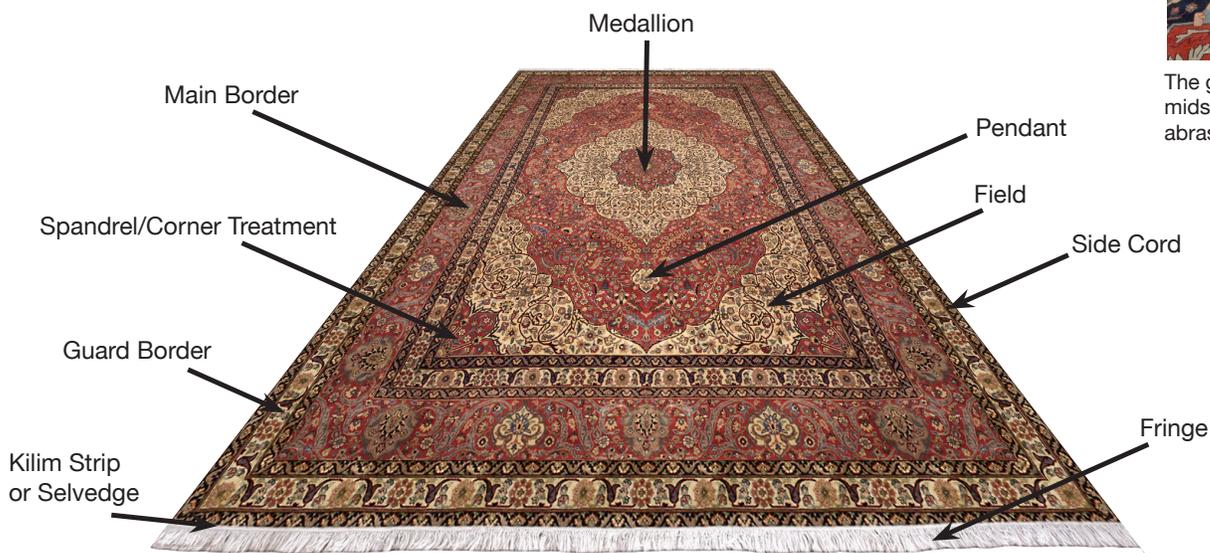
Should the weaver run out of a particular color yarn while making the rug, he or she may reach for another skein of yarn supposedly of the same color but from a different dye batch. When the use of that color continues, the change in shade is often noticeable. This is called abrash. It is not a defect but a characteristic of the rug. In some cases it may even be done intentionally to give the rug character.



Kashan Persian rug with a Tree of Life pattern



The gray/blue color in the midst of the beige field is abrash.



## PRECLEANING INSPECTION PROCEDURES

### CARPET INSPECTION (Installed Wall-to-Wall)

Installed wool carpet accounts for well under 1% of all residential carpet in the United States. Carpet may be tufted or woven. Most wool carpets are woven using the Wilton method, but may also be woven by velvet or the Axminster processes. Carpet manufactured by these different methods reacts differently to moisture.

Be sure your inspection includes these points:

- Soil level
- Use an awl and knee-kicker to turn back the carpet in a corner. Identify the construction and the backing material. This will prepare you for potential issues such as shrinkage and cellulosic browning.
- Pre-existing conditions including stains that may require special attention; discolorations or color loss; damage;
- Secure installation. The carpet should be firmly on the tackless strip. The tackless strip should be secured to the subfloor. If the installation is not secure, shrinkage forces can pull the carpet loose from the wall, possibly ripping the backing on the pins in the tackless strip.
- Seams are properly constructed and not damaged. Shrinkage forces can pull apart poorly constructed seams.
- If the carpet is of more than one color, check for pre-existing color bleeding and the potential for colors to bleed or crock.

## RUG INSPECTION

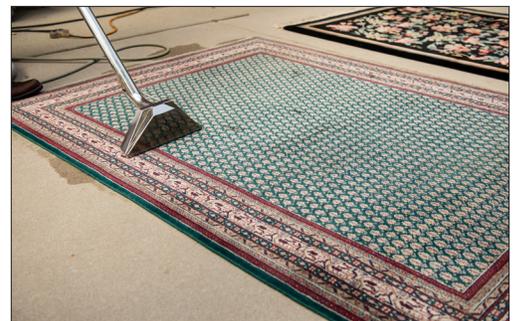
Both for cleaning on-location or at your plant, begin with a detailed inspection of each rug. Document your findings with photographs showing the entire rug and close-ups of any potential problem areas. A pre-printed form with room for rug description check boxes can be helpful and save time. No list could include all the possible issues you might encounter, but the following list covers many key points.

- Identify how the rug is constructed
- Identify fiber content for face yarns and backing yarns.
- Check for potential bleeding. There are several variations of dye tests. Many cleaners dampen a clean white terry cloth spotting towel with their cleaning solution and apply this to an area (preferably on the back of the rug) that includes each color dye. Place a weight on the cloth and allow it to remain until dry. Check for any color transfer to the cloth. Any spot that may have been contaminated with pet urine should be considered suspect and tested.
- Look for evidence of pre-existing conditions that can contribute to cleaning related challenges. This would include previous color bleeding or migration, holes or tears, water damage, pet urine, moth or insect damage, overly white fringe that indicates use of bleaches that weaken cotton fringes, residues from previous cleanings can be indicated by high pH reading of the face yarns and/or ability to generate foam when a small area is wet down with distilled water and agitated.
- Check for and note any repairs to the rug or fringe.
- Look for variation of color between the face and backing of the carpet. This could indicate the use of a chemical treatment that might weaken dyes or fibers.
- If the fringes appear brown or if the rug has an overall yellow or brown cast, it may have been subjected to a tea wash which is a process to mute bright colors and make the rug seem to be older than it really is. The tea wash is essentially a dye that will wash off during cleaning changing the color appearance of the rug.

## PREPARE YOUR WORK SPACE

When cleaning on-location, you will need to select and prepare an appropriate work space. The surface you work on needs to be clean & dry and one that will not be harmed by moisture, your prespray or other cleaning agents. Surrounding surfaces and furnishing must be protected from overspray. Make sure the surface and surrounding areas will not bleed color if wet. Weather permitting, garage floors, driveways and patios may be ideal areas for cleaning rugs if they are clean and free of oil and grease.

You will need room for the rug, your cleaning apparatus and room to maneuver as you clean. Avoid working in cramped quarters. Knocking over a vase with your vacuum hose, nicking the paint on baseboards with your wand or other accidents can quickly suck any profit out of a job.



Always keep white, cotton towels handy to wipe up any cleaning solution overspray which may get on other surfaces. Make sure there is adequate air flow for drying and ventilation. Can the rug remain in your work space or will you need to move it somewhere else while it dries? Damp wool rugs can be heavy and difficult to move. It will need to dry in an area that is not open to traffic, especially children and pets until the rug has dried.

Pre-Inspection Sheet		Technician:													
Date:		Address:													
Name:															
Home:															
Cell:		Email:													
Work:		Pick Up & Delivery: Yes / No					Client Present At Inspection: Yes / No								
rug type	color	size	sq ft	cost	total	pad	cost	protector	cost	d/o	cost	wrap	cost	total	
#1															
#2															
#3															
#4															
#5															
#6															
pre-existing fringe condition	#1	#2	#3	#4	#5	#6	notes								
Bleach Rot/Dry Rot															
Browning/Stains															
Corner Separation/Wear															
Different End Finishes															
Excessive Wear															
Loose/Unraveling															
Rug Colors Run Onto Fringe															
Tassel Loss															
Tea-Wash															
pre-existing rug condition	#1	#2	#3	#4	#5	#6	notes								
Abrash															
Brittle Handle															
Browning/Yellowing															
Colors Run															
Curled Edges/Corners															
Dry Rot															
Edge Damage															
Excessive Soil															
Excessive Staining															
Furniture Stains/Crush Marks															
Insect Damage/Infestation															
Irregular Shape															
Latex Odor/Decay															
Luster Wash															
Mildew/Mold															
Odor															
Painted/Touched Up															
Prior Repairs															
Rips, Cuts, Holes															
Shading/Pile Disturbance															
Spot Cleaned At Home															
Sunlight Damage/Fading															
Tea Wash															
Traffic Lanes															
Urine/Fecal/Vomit Staining															
Water Stains															
Wear															
White Knots															
<b>By signing here, I certify that I have read, agree to, and accept the conditions as determined upon inspection:</b>															
<b>Signature:</b>										<b>Date:</b>					



## On-Location Cleaning Procedures

### All Rugs Dry Soil Removal

1. Prior to wet cleaning, remove as much dry soil as possible from the rug utilizing a vacuum (with a beater bar) or portable rug dusting unit such as the Rug Badger.

### Colorfast Wool and other Natural Fibers

1. Follow all directions as called for in the Pre-Cleaning Procedures and Dry Soil Removal Sections. Read and follow label directions on all products.
2. Wool Perfect should be used as a preconditioner
  - a. For use with Pump/Electric Sprayers: Mix 4 oz. of Wool Perfect with 1 gallon hot water (1:32). For exceptionally heavy soil, mix 8 ounces of solution per gallon of water (1:16). Spray until carpet or rug is damp. Do not allow carpet or rug to dry before extraction. Agitation with a counter-rotating brush machine like Brush Pro™ (MH170 or MH200 model) with wool brushes will greatly assist the cleaning process.
  - b. For use with machine equipped with dispensing tanks and wool brushes such as Cimex®: Mix 4 oz. of Wool Perfect with 1 gallon hot water (1:32). For exceptionally heavy soil, mix 8 ounces of solution per gallon of water (1:16). Spray until carpet is damp. Extract with your normal process. Do not allow carpet to dry before extraction.
  - c. For use with Hydro-Force Sprayer: For use with regular 1-8 Hydro-Force Pro Sprayer, mix 1 part Wool Perfect to 1 to 3 parts water in five quart container. Apply evenly across carpet. Do not over-apply solution. Do not allow carpet to dry before extraction.
3. For extraction rinse, mix Wool Zone in solution tank of extraction unit according to the following directions
  - a. Portable extractor: Mix 2 ounces of solution to five gallons of water in extraction tank.
  - b. Truck mount: Mix one quart solution (32 ounces) with five gallons of water into solution container. Set solution flow meter at 3.
  - c. For natural fibers, water temperature at the carpet should be 150°F or less. Set heat on truckmount to lowest setting. 180°F at the truck usually results in 150°F or less on the fiber.
4. Cleaning fringes of cotton fiber may require special solutions and cleaning application utilizing Oxybuff Cotton Shampoo (if white or off-white fringes are desired) or Fabric Shampoo. See section on fringe cleaning.
5. Speed dry utilizing downdraft or centrifugal air movers.
6. Groom or brush as needed with Grandi-Brush. In some situations where a pile shift has occurred, use of a Brush Pro™ (MH170 or MH200 model) will assist the proper laying of the pile.
7. Consider application of Maxim Advanced Protector for Wool. See section on applying protector to rugs.



## Synthetic Rug Cleaning Procedures

### INTRODUCTION

Not all area rugs are made with natural fibers. It is common to find area rugs, even some Oriental style rugs, which are made of synthetic face yarns such as polypropylene (olefin) or nylon. When you encounter a rug made of synthetic yarns, cleaning procedure is similar to cleaning an installed carpet made of synthetic yarns. The construction of rugs will make dusting (dry soil removal) more critical.

Keep in mind that even if the face yarns are synthetic, the foundation yarns may be natural fibers. There is a potential for shrinkage or cellulosic browning. These problems can normally be prevented by extracting as much water as possible and taking steps to assure rapid and complete drying.

### On-Location Cleaning

1. Follow all directions as called for in the Pre-Cleaning and Dry Soil Removal Procedures Section.
2. Zone Perfect is the preferred preconditioner for moderately soiled synthetic rugs and carpeting. Wool Zone may also be used.

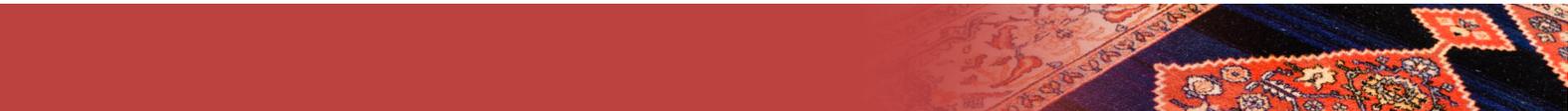
- a. For use with Pump/Electric Sprayers: Mix 4 oz. of Zone Perfect or Wool Perfect with 1 gallon hot water (1:32). For exceptionally heavy soil, mix 8 ounces of solution per gallon of water (1:16). Spray until rug fabric is damp. Do not allow carpet or fabric to dry before extraction. Agitation with a counter rotating brush machine like Brush Pro™ (MH170 or MH200 model) with wool brushes will assist cleaning process.
  - b. For use with Hydro-Force Sprayer: For use with regular 1-8 Hydro-Force Pro Sprayer, mix 1 part Wool Perfect or Zone Perfect to 1 to 3 parts water in five quart container. Apply evenly across carpet. Do not over-apply solution. Do not allow carpet to dry before extraction. Spray until rug is damp. Do not allow rug to dry before extraction. .
3. In the case of excessively soiled synthetic rugs, you may want to consider using Bridgepoint Traffic Slam as your preconditioning agent. Traffic Slam is specially formulated to remove particle soils as well as oil and grease from olefin fibers.
- a. For use with Pump/Electric Sprayers: Dilute 4 oz. Traffic Slam to 1 gal. hot water (1:32). For exceptionally heavy soil, dilute 8 oz. per gal. (1:16). Spray until damp.
  - b. For use with Hydro-Force Sprayer: Dilute 1 part Traffic Slam to 3 parts water in the 5 qt. container. The proper ready to use dilution is then achieved by the Hydro-Force, or pour concentrate into 5 qt. container without dilution and set Hydro-Force Revolution® knob at 1:32.
4. For extraction rinse, mix Wool Zone in solution tank of extraction unit according to the following directions:
- a. Portable extractor: Mix 2 ounces of Wool Zone to five gal-tons of water in extraction tank.
  - b. Truck mount: Mix one quart solution (32 ounces) of Wool Zone with five gallons of water into solution container. Set solution flow meter at 3.
5. Cleaning fringes constructed of cotton fiber may require special solutions and cleaning application using Oxybuff Cotton Shampoo (if white or off-white fringes are desired) or Fabric Shampoo. See section on fringe cleaning.
6. Speed dry utilizing downdraft or centrifugal air movers
7. Groom or brush as needed with Grandi-Brush.
8. Consider application of a carpet protector. We suggest the use of Maxim Advanced Carpet Protector.

### Basic In-Plant Cleaning Procedures/Options

When cleaning in-plant there are several options or variations for each step. This section outlines the basic steps and some of the more popular options.

- 1) Preinspection
- 2) Dry Soil Removal or Dusting/Vacuumping
  - a) Vacuuming - Both the face and the back of the rug should be vacuumed. Vacuuming the back shakes or vibrates loose soil from deeper in the pile. A beater bar can help increase this vibration. The rug can be laid over a grating that allows the dirt to fall through the grating to the floor. After the back has been vacuumed, flip over the rug and vacuum the face again. The Brush Pro is also very useful for dry soil removal.
  - b) Portable Dusting Machines such as the Rug Badger use straps that beat the back of the rug to shake loose soil. The rug can be laid over a grating that allows the dirt to fall through the grating to the floor. After the back has been dusted, flip over the rug and vacuum the face. Some delicate rugs may need to be protected from aggressive agitation. A layer of Tyvek between the rug and the dusting machine is often helpful. Be sure the dusting process does not force the rug against sharp or rough grating edges.
  - c) Compressed Air Dusting – This requires a significant volume of compressed air and the use of an air compressor and tools designed for this purpose. The most widely used compressed air dusting is part of the Auserehlian System. This is a proprietary system available to those who have been trained in its use and paid a fee to license the system.





- d) Automated Dusters – Rugs are laid face-down on a grid that is part of a conveyor system. The conveyor moves the rug through a machine that beats and shakes loose dry soil.
- 3) Dye Testing and Stabilization (if necessary)
  - a) Testing for potential dye bleed and / or crocking has been discussed earlier. When cleaning is done in-plant, more time is allowed and testing is less likely to be rushed. Be sure that areas that have been contaminated with urine are carefully tested because urine will damage and weaken dyes making them more susceptible to bleeding.
  - b) UV light can also gradually weaken dyes. Face yarns will have had more exposure to UV, from sunlight and possibly other sources, than the back of the rug. In addition to testing each color from the back. You may also wish to test color stability of the face yarns. This can be done by wetting a cotton swab (Q-Tip) with the most aggressive cleaning solution you anticipate using. Insert the swab into the pile. Allow up to several hours drying time. Check the swab for any color transfer. This method greatly reduces the possibility of the testing causing a visible color bleed.
  - c) If crocking or bleeding is possible or just as a precaution, apply Dye-Loc according to label directions. See the section on bleeding and use of Dye-Loc for additional instructions.



Rugs are fed into an automated duster.

- 4) Pre-treatments - Carpets containing urine, other contaminants or odors may be pre-treated prior to cleaning. See sections on odor control and urine contamination.

5) Washing Options

- a) Wash floor – A wash floor frequently has a slight slope (about 6” for every 10’) that allows water to run off to a drain. Rugs can be continually flushed until sufficient soil and contamination are removed.
- b) Build your own wash pit – Wash pits can be constructed from 3” diameter PVC pipe or 2”x4” lumber with notches to hold pieces at right angles. Sections of different lengths can be assembled to the size needed for the rugs being cleaned. This frame is then covered with heavy plastic such as a pool liner. A sump pump may be added to circulate water or to pump dirty water to a drain. These pits can be disassembled and stored if the space is needed for other purposes.
- c) Pre-manufactured wash pit – Heavy duty plastic pits can be purchased that will be filled with air to create a berm around the perimeter. As with the self-made pits, a sump pump is a useful accessory.
- d) Installed wash pit – Permanent wash pits can also be built from concrete and block. A sloped floor is optional.



Detail of wash pit construction.



A raised wash pit constructed from lumber and lined with swimming pool liner. The floor is tilted so that water runs off one end.

6) Apply Cleaning solution – Wool Perfect

- a) Your solution of Wool Perfect can be applied using an electric sprayer, battery operated sprayer, pump-up sprayer or similar device or using the tank and spray bar of an automated system.
- b) Wool Perfect can also be mixed with water in a wash pit.



A manufactured rug washing pit can be inflated at your shop.

7) Agitation

- a) Agitation for light to moderately soiled rugs may be as simple as a brush or grooming tool such as the Grandi-Brush.
- b) Moderate to heavy soil loads can be suspended with mechanical agitation using a Brush Pro counter-rotating brush machine which can be used in up to 2” of standing water. Areas with urine, spills and stains are more effectively cleaned with mechanical agitation.
- c) Cimex 3 head scrubber or other machines may also be suitable for some situations.

- 8) Flush and rinse loosened soil from rugs. Wool Zone can be used in the rinse solution to assist in through rinsing, help make fibers softer and to reduce resoiling.

9) Fringe Cleaning

- a) Fringes are most commonly cotton but can be made of many other materials. Bear in mind that the natural color of cotton is off-white, not bright white. Some clients may expect fringes to be very white. This is accomplished using various bleaching agents and is likely to weaken the fibers, especially if done repeatedly over time. It is wise to educate your clientele about the natural coloration and the potential harm of over-whitening.
- b) Dry soil removal by vacuuming and / or brushing is the first step for fringe cleaning.
- c) Soil deposited by foot traffic is generally on the outside of the fibers. When cleaning solutions dissolve this soil, absorbent fibers such as cotton can carry the dirty cleaning solution to the interior of the fiber where it is difficult to completely remove. Many cleaners dampen fringes with clear water, even distilled water, prior to the application of any cleaner. Now that the fibers are wet, cleaning solutions and soil stay on the outside of the fiber rather than being absorbed into the fiber.

- 10) Water Removal/Extraction
  - a) Truckmount or High Performance Portable utilizing extraction tools
    - i) Stationary Extraction Tools – Subsurface :Water Claw/FlashXtractor
    - ii) Mobile Extraction Tools – Phoenix Xtreme Xtractor, Dri-Eaz Rover
  - b) Wringers
  - c) Centrifuges
- 11) Drying
  - a) Hanging/Rack System
  - b) Air Movers – Downdraft, Centrifugal, and Axial
- 12) Finish and Grooming



Heat from an E-TES unit is directed to dry a large rug quickly. Tenting with plastic helps contain the heat where it is needed.



A centrifuge spins water from rugs much the way a washing machine spins to remove water from laundry.



Rugs are lifted from the wash pit onto poles where they will be hung to dry.

### Pre-Cleaning Procedures for all Rugs

1. The preferred method for cleaning investment textile rugs is in-plant.
2. Read entire product label before using. Use only as directed.
3. Carefully pre-inspect the rug, fabric, or carpet before proceeding. Identify fiber content, construction, dye stability, shrinkage considerations, and pre-existing damage. Always test every rug for dye bleeding potential. Carefully look for conditions which could contribute to cleaning related challenges such as pre-existing pet urine, water damage, fiber deterioration, past cleaning residues, and fringe discoloration. Follow carefully the pre-inspection procedures as outlined in the Bridgepoint Rug Cleaning Procedures Guide
4. Prior to wet cleaning, remove as much dry soil as possible from the rug utilizing a vacuum (with a beater bar), portable rug dusting unit, compressed air system, or automated duster. Follow equipment manufacturer directions.

### In-Plant Cleaning Procedures

Colorfast Wool and other Natural Fibers See notes that follow on other natural fibers.

1. Follow all directions as called for in the Pre-Cleaning Procedures Section
2. Wool Perfect can be used as a preconditioner for soiled rugs, fabrics, and carpeting or as a cleaning detergent in a rug wash pit.
  - a. For use with Pump/Electric Sprayers: Mix 6 oz. of Wool Perfect with 1 gallon hot water (1: 24). For exceptionally heavy soil, mix 8 ounces of solution per gallon of water(1:16). Spray until rug is damp.
  - b. For use as a cleaning detergent in rug wash pit: Use solution in accordance with industry standards of care according to fiber content, construction, and dye stability. Mix 6 to 12 ounces of solution with each gallon of water depending upon soiling levels. Agitate with appropriate brushes either mechanically or by hand. Avoid excessive agitation. Aggressive agitation, especially when combined with excessive alkalinity and slow drying can result in felting. Microscopic scales on the wool fiber become interlocked or hooked together resulting in a matted appearance.
3. Rinse rug with clear water. For natural fibers, use warm or cold water.
4. Cleaning fringes constructed of cotton fiber may require special solutions and cleaning application utilizing Oxybuff Fringe and Fabric Cleaner. Proceed to Fringe cleaning procedures section if necessary.
5. If utilizing extractor, wringer, or centrifuge, follow machine instructions.
6. Rugs are usually dried by hanging in a room with controlled heat and humidity.
7. Groom or brush as needed.
8. Consider application of a fabric protector. See special section on applying protector to rugs.



Rinsing rugs in an automated rug washing plant.



## Cleaning Notes for other Natural Fibers

Although this guide focuses on wool rugs, you will encounter rugs made from other natural fibers including cotton, silk, jute, sisal, coire, sea grass and other fibers. You will also encounter fake silk that may be labeled as faux silk or art (for artificial) silk, viscose or frequently misidentified simply as silk. You should thoroughly understand the specialized procedures needed for cleaning these rugs before accepting that challenge.

Cotton rugs may be cleaned similar to wool. Check the construction to be sure that the cleaning method is appropriate. Silk rugs simply by virtue of being silk are likely to be expensive. When cleaning silk it is safer to dry clean (using no water) as this will prevent formation of water rings. The problem is that dry cleaning will not remove water-borne soils. The results are helpful but not always fully satisfactory. If your testing reveals that it can be safely wet cleaned, I suggest using Wool Perfect or Fabric Shampoo and treating it as upholstery. Use an upholstery tool that thoroughly flushes, does not leave the fabric over-wet, and has no burrs or rough edges that might snag or pull fibers. Clean with reduced water temperature, pressure and vacuum. Citrus Solv can be added to boost your prespray if oils are present.

Strokes of your tool and any agitation should be done in the direction of the nap or fiber lay. Agitation should be accomplished with a horse hair brush or a natural sea sponge. Rinse with Wool Zone. Dry the rug quickly. Use a soft brush or Grandi-Brush to gently brush against the nap lay to lift and separate yarns and restore the original feel. Do so before it dries. The key is to leave no visible marks in the pile.

Fringes can be cleaned similar to cotton fringe but do not scrub or agitate the fibers. Let the cleaning agent do the work. Faux silk is made from viscose rayon or a blend of rayon and mercerized cotton. The fibers are very weak when wet. They absorb moisture and may not be able to stand up under their own weight. To avoid matting or marks from cleaning tools, consider low moisture cleaning methods such as encapsulation with a Brush Pro with Encapuclean Green DS and possibly Brush Pro Dry Powder Cleaner.

If faux silk is wet cleaned, it will require a significant amount of pile grooming. Do this while the fibers are still damp. Use a soft brush (or sometimes a clean cotton towel) to brush the fibers upright against the natural pile lay.

Sisal, Sea Grass, Coire, banana silk, woven bamboo and similar fibers are all moisture sensitive. Cleaning these with water can result in color change, shrinkage or other issues. It is strongly suggested that these be cleaned using Brush Pro Dry Compound. Low moisture cleaning using Encapuclean Green Double Strength is an alternative that is safe for many such rugs. Always use soft (white brushes) when cleaning natural fibers with a Brush Pro. Always test a small inconspicuous area to determine the results of the method you select.



## Synthetic Rug Cleaning Procedures

1. Follow all directions as called for in the Pre-Cleaning Procedures Section
2. Wool Perfect can be used as a preconditioner for soiled rugs, fabrics, and carpeting or as a cleaning detergent in a rug wash pit. Synthetic rugs can also be cleaned with Traffic Slam (olefin) or Zone Perfect depending upon fiber content of face yarns and backing along with consideration of type of soil and soil level.
3. For use with Pump/Electric Sprayers: Mix 6 oz. of Wool Perfect with 1 gallon hot water (1:24). For heavy soil use Traffic Slam at a dilution from 4 to 6 ounces per gallon of water (1:32 to 1:24). Spray until rug is damp. Do not allow rug to dry before extraction.
4. For use as a cleaning detergent in rug wash pit: Use solution in accordance with industry standards of care according to fiber content, construction, and dye stability. Mix 4 to 12 ounces (depending upon product and soil level) of solution with each gallon of water. Agitate with appropriate brushes either mechanically or by hand.
5. Rinse off rug with clear water. If fiber is synthetic you can use hot water to rinse. For natural fibers, use warm or cold water.
6. Cleaning fringes constructed of cotton fiber may require special solutions and cleaning application using Oxybuff Cotton Shampoo Fringe and Fabric Cleaner. Proceed to Fringe cleaning procedures section if necessary.
7. If using extractor, wringer, or centrifuge, follow machine instructions.
8. Rugs can be dried face-down on clean surface. This is a preferred method. However, space limitations usually require that rugs be hung to dry. Hang on rack according to instructions. Speed dry using air movers. Consider use of directed heat drying™ (E-TES) or dehumidification equipment along with exhaust fans based upon room temperature, humidity levels, and rug construction.
9. Groom or brush as needed.
10. Consider application of a fabric protector. See special section on applying protector to rugs.

## Additional Issues and Solutions

### Potential Bleeders

#### Use of Dye-Loc and Wool Medic

There are two basic approaches to preventing damage to rugs from fugitive dyes due to either bleeding or crocking. One approach is to prevent dyes from coming loose from the fiber. The second approach is to hold fugitive dyes in suspension, not allowing them to settle onto rug fibers where they do not belong. These two approaches are not mutually exclusive. It is possible to use both approaches if the products are compatible. Dye-Loc helps lock dyes in place as well holding any loose dyes in suspension. Most dyes used on wool and other natural fibers are more stable in an acidic environment. Among its many uses and benefits, Wool Medic provides the acidic environment necessary to stabilize dyes. The following is more detailed information about how these products work on how to use them.

DYE-LOC is a water-based fixing agent for direct and reactive dyes. It significantly improves both wash-fastness and crock-fastness of dyed cellulosic (i.e. cotton) and protein (i.e. wool, silk) fabrics and their blends. It actually locks fugitive dye-stuff at the molecular level without affecting the light fastness of the dye. Tests show that after one treatment with Dye-Loc, dye-stuff will not easily migrate at future cleanings. Dye-Loc also provides an anti-static quality to the treated textile.

#### DIRECTIONS:

Procedure for Cleaning Oriental Rugs that may bleed.

1. Test rug for colorfastness. You may pretest the effectiveness of the procedure below on small section on the back of the rug before proceeding. If bleeding is not instantaneous, follow this procedure.
2. If you think rug may bleed, add 3 oz. Dye-Loc per gallon of warm water. Apply with professional sprayer. Fibers should be damp. Allow time, 2 to 5 minutes depending upon density of the fibers, for Dye-Loc to penetrate the fabric.
3. Clean rug with your preferred method.
4. Rinse and/or extract with up to 3 ounces of Dye-Loc for each gallon in your rinse water.
5. Dry quickly.

If bleeding is instantaneous:

1. Prespray with Dye-Loc (3 oz. per gallon warm/hot water). Clean using dry foam application of Bridgepoint Upholstery Shampoo, and then agitate with natural sponge. Extract with Dye-Loc as described above.

WOOL MEDIC provides the professional cleaner with a multi-purpose acidic dye stabilizer and urine neutralizing treatment. Wool Medic is specially formulated to provide a pretreatment to limit dye bleeding and/or migrating to other fibers during the wet cleaning process. In extreme cases, use of Dye-Loc will provide better protection from dyes bleeding. Both Dye-Loc and Wool Medic can be used when applied as directed. Quick drying will also limit bleeding of dyes.

#### DIRECTIONS:

1. Pretest before using. Dilute 1 part Wool Medic with 8 parts water (1:8) in pump up or trigger sprayer. Spray on front side of the rug if extracting and both sides of the rug if soaking.
2. Work solution into the fibers with a natural sea sponge, horse hair brush, soft brush or Brush Pro with brushes for use on wool.
2. Use Wool Perfect as your pre-spray and Wool Zone as your rinse for extraction. Wool Perfect is versatile enough to be used as the pre-spray for on-location or in-plant or automated rug washing.

### Urine Contamination

Urine contamination including stains, unpleasant odors and biological contamination is one of the prime drivers in clients deciding to have rugs cleaned. It is helpful to educate your client on the fact that urine is not one simple problem but rather three related complex issues – stain, odor and biological contamination. Even when pet urine was not the reason a rug is being cleaned you will find that a high percentage of rugs will be contaminated. Pets are territorial. Wool and other hair fibers will have smells of other animals that prompt pets to mark their territory. Wool Medic is an appropriate and effective pretreatment when dealing with all aspects of urine contamination.

1. For urine contamination pre-treatment and neutralizing of alkaline salts resulting from urine deposits, dilute 1 part



- solution with 4 parts water (1:4) in pump up or trigger sprayer.
- 2. Saturate contaminated areas by spraying or pouring on mixed solution. Allow to dwell 5 - 15 minutes. Gently agitate with natural sea sponge, horse hair brush or other soft brush or Brush Pro with brushes suitable for wool.
- 3. Rinse and extract with clear water. For best results, extract with Water Claw or Flash Extractor. Placing a pad or grid under the affected area, which allows for water flow, will improve the result of the flushing. Then apply Hydrocide for Wool according to label direction.



**Urine Soaking Procedure**

Some rugs will need major restoration and will need to be soaked in water. Start with constructing a temporary pit pool or using a permanent one with grids under the rug to assist flushing. Test for bleeding in urine damaged areas prior to cleaning. Make sure that before starting the procedure that the owner of the rugs has approved the process. In cases where dye stability is of great concern, pre-spray rug with Dye-Loc only. In most situations, start the process by pre-spraying generously over the rug. Add water to the point of rug saturation only. Agitate the rug with a Brush Pro unit, where motor is moisture sealed and only use wool brushes, which accelerates the breakdown of the lipids and urine salts. Add additional water to dilute the contaminants. Repeatedly flush the rug using Water Claw or Flash Extractor until waste water shows no more urine is being removed.

After the urine has been flushed out, clean using Wool Perfect with Hydrocide™ for Wool added. If further deodorization is necessary then apply enough Hydrocide for Wool to neutralize any remaining odor.

**ODOR CONTROL / DEODORIZATION**

The solution to every odor control issue begins with a thorough cleaning of the affected area. Odors will remain or return unless the source of the odor has been removed by cleaning. Because of how odor molecules travel to our noses and our increased sensitivity to odors in a humid environment, many odors will be more easily perceived or seem to be worse during and immediately after cleaning until the rug has dried and the ambient humidity returns to normal. Think about a “wet dog” odor. It was not the addition of water that created the odor. Water has no odor. But the addition of water allows us to sense an odor source that was already present.

Latex Backed Rugs may be contaminated with odors that cannot be removed by cleaning (nor by any other process of which I am aware). As discussed previously, it is best to avoid submersion cleaning of latex backed rugs. Moisture may increase odors already present. Part of your inspection of latex backed rugs should include a “sniff” test to see if any odor is present before you start to clean. I have suggested that owners return such rugs to the place of purchase. Treatment of urine odors is covered in the section on urine contamination.

Other Odors can be treated with a spray application of Hydrocide for Wool following cleaning and drying. If this does not correct the situation, attempt to find the specific cause and source of the odor. This information is needed to most effectively and efficiently address a variety of possible odors.

**BROWNING AND YELLOWING**

Browning refers specifically to cellulosic browning in which plant fibers (jute or cotton) release lignin. During the drying process this wicks to the surface of the face yarn. Browning is exacerbated by highly alkaline cleaning agents used in cleaning (either now or at some time in the past), by over-wetting and slow drying. If there are no plant materials present, it is not true cellulosic browning but rather yellowing. The treatment for both issues is similar.

Both the cause and the severity of browning or yellowing differ from case to case. The process to correct the issue will also vary. The solutions that follow are listed from the simplest and least aggressive. Start with #1 and move down the list as necessary until you get satisfactory results. Each method can be tried on a small are to see the results before attempting the process on the entire rug.

- 1. Dilute 12 oz. of Fab-Set per gallon of warm water. Mist onto rug or carpet. Allow time for the process to work.
- 2. Mix 6 oz. of citric Acid powder and 8 oz. of Fab-Set per gallon of warm water. Spray onto rug or carpet. Work solution into carpet with brush. Allow time for the process to work.
- 3. Mix 2 ounces of Bridgepoint Coffee Stain Remover per quart of warm water. Spray on rug. Work in with brush. Allow time to work. Rinse out this solution if you are proceeding to the next step.
- 4. Clean using Brush Pro and Encapuclean O2. Use soft brushes on Brush Pro.
- 5. Clean using OxyBuff Cotton Shampoo. Follow label directions.

### FRINGE CLEANING

Keep in mind and educate your client if necessary that the natural color of cotton is not pure white but off-white. The very white white is obtained by the use of bleach that can weaken the fiber if over-applied or applied too strongly. The goal of fringe washing should be to remove soil and return the fringe to the original color.



1. Vacuum fringe to remove dry soil. Dusting or dry soil removal is equally important on fringe as on the body of the rug.
2. Dampen the fringe with water. Distilled water is preferred if available. This discourages cotton fibers from absorbing cleaning solution and suspended soils. Instead soils stay on the outside of the fibers.
3. Mix OxyBuff Cotton Shampoo 3 or 4 oz. per gallon of warm water. Whip into foam.
4. Use natural sponge or soft brush to apply foam to the fringe. Work into fringe. Allow up to 20 minutes dwell time. This allows you to be cleaning fringes of several rugs at one time.
5. Rinse using Wool Zone. This can be done with an upholstery tool or at the same time the rug is being rinsed.

### CARPET PROTECTOR

Wool is an absorbent fiber that easily soaks in liquid staining material. In addition, wool has many dye sites that attract acid type dyes such as are found in artificial food color common in many foods and beverages. Unsightly stains significantly devalue a rug. The owner's only options may be to replace the rug, position the rug so that the stain is covered by a bed or sofa or simply to live with a stain.

Most rugs are not investments in the true sense of the word, even in good condition. No rug is an investment if it has a stain that cannot be removed. A protector followed by professional spotting generally means no stain, where the rug will continue to be used. For certain rugs, stain prevention also preserves its investment value.

Application of a protector that resists staining from water-carried and oily stains and also contains an acid dye resistor that provides a second level of protection against food and beverage spills is an essential protection for rugs that will be put to use. Maxim Advanced for Wool starts with Maxim Advanced base Formula and is modified with additional ingredients to assist penetration into fiber and add additional stain resistance for the additional dye sites present in wool. With a pH of 5.0, Maxim Advanced for Wool is safe and leaves the fibers at an ideal pH level.

### TEA WASH OR SIMILAR TREATMENTS

A brown tea colored dye, often called tea wash, may have been applied to a rug in order to mute bold or bright colors and make the rug's palette more suitable for current consumer's tastes. A tea wash is also used to age a rug or to hide flaws. This tea wash is water soluble and will be removed by any wet cleaning process. Look for a golden brown coloration. The added brown color can often be most easily seen in the outer part of cotton fringes. Looking closely at the fringe, you can discover that the center of the fiber is still natural color (off-white). The color of the face yarns may vary from the color seen when viewing yarn deeper in the pile.

Be sure to note the presence of tea wash on your inspection form and be sure your client is aware of this condition.

An herbal or tea wash has been used to mute the bright colors of this rug. The fringes show this water soluble dye on the outside. Looking at the inside threads of the fringes would show they are still their original color.



"Grinning" open the pile shows that a tea wash has added brown coloration to the surface but that yarns deeper in the pile are not affected.





RTU pH: 8-8.4  
Dilution Ratios: 1:16, 1:32

## Wool Perfect

- Extremely Concentrated - Dilutions from 1-16 to 1-32
- Balanced – blend of various types of cleaning agents to work on diverse soils found in wool rugs
- Versatile – works like typical prespray and has enough lubrication to work like shampoo in pit or bath washing applications
- “Wool Safe” Approved
- Refined – new superior chemical technology not available five years ago



RTU pH - 3.0-3.5  
Dilution Ratio: 1:4 - 1:6

## Wool Medic – Dye Stabilizer - Urine Rinse

- Sets Dyes – Proper balance of acid needed to set most dyes prior to cleaning. Use Dye-Loc for extreme bleeders
- Assist Flushing of Urine - special surfactant, solvents and rinse additive combines with acid to help neutralize urine salts, break down lipids and assist the flushing of the rug with the Water Claw, Flash Extractor or immersion techniques



RTU pH - 3.0-3.5  
Dilution Ratio: 1:320

## Wool Zone

- Unique - uses a proprietary acidic rinse agent that has been used to scour raw wool in the early stages of wool processing
- Limits Residue – proprietary rinse agent helps remove more soil than acids alone. The anionic hydrotope also hardens remaining residue making it more brittle and easier to vacuum away
- Limited Wetting – uses an anionic hydrotope to provide enough wetting to follow the prespray into the carpet to perform the rinse function effectively



RTU pH: 7  
Dilution Ratio: 1:32 - 1:42

## Oxybuff Cotton Shampoo - Fringe Cleaner

- Easy to Mix - powder blend of Boost All, Buff All and Fabric Shampoo. No longer any need to mix up three ingredients in a special recipe. Measure out 3 to 4 ounces with gallon of hot water in bucket
- Easy to Apply - Apply foam to fringe with soft brush. Some areas may need extra agitation with a hard brush
- Efficient with System – Apply to fringes of several rugs at a time. After sufficient dwell time, extract rugs and fringes at same time with Wool Zone



## Dye-Loc

This unique, patented formula prevents both color bleeding and color crocking in multi-colored upholstery. Use as a pre or post spray at 3 oz./Gallon.

RTU pH: 5.5  
Dilution Ratio: 1:320



RTU pH: 5  
Dilution Ratio: 1:16

## Hydrocide for Wool – Odor Neutralizer

- Starts with Hydrocide Base Formula – modified with additional ingredients to enhance penetration into the foundation of wool rugs, especially those with a depressed warp, and to neutralize any sticky residue remaining from the odor elimination process
- Final Step – spray on flushed areas to remove any final odors. Can reapply if necessary



## Maxim Advanced for Wool – Stain Resistance

- Starts with Maxim Advanced Base Formula - modified with additional ingredients to assist penetration into fiber and add additional stain resistance for wool
- Protects Investment - Most rugs are not investments in the true sense of the word, even in good condition. No rug is an investment if it has a stain that cannot be removed. A protector followed by professional spotting generally means no stain, even where the rug will continue to be used. For certain rugs, stain prevention also preserves its investment value.

RTU pH: 5.0-5.2 Dilution Ratio: 1:2



Featuring Bridgepoint Wool Rug Cleaning Products