



CLEANING AND MAINTENANCE MANUAL

SHANHUA CARPETS

INTRODUCTION

Your Shanhua Carpet is a textile product, as such, is subject to both soiling and wear. To keep the carpet appearance at its peak and to achieve maximum floor-life, four things are necessary:

- Product specification – correctly engineered for the purpose it is intended for
- Appropriate designs and colourations
- Expert installation
- Proper maintenance program

By the time you read this, it is likely that the carpet pattern has been designed, the specification has been determined, manufacturing is completed, and the installation is finished.

Now it is time to make sure that the maintenance procedures are properly planned and faithfully executed. Your Shanhua Carpet is of an Axminster or Wilton construction and is custom woven with either 80% wool/20% nylon or 100% wool yarns.

NORMATIVE: FOR NEW CARPETS

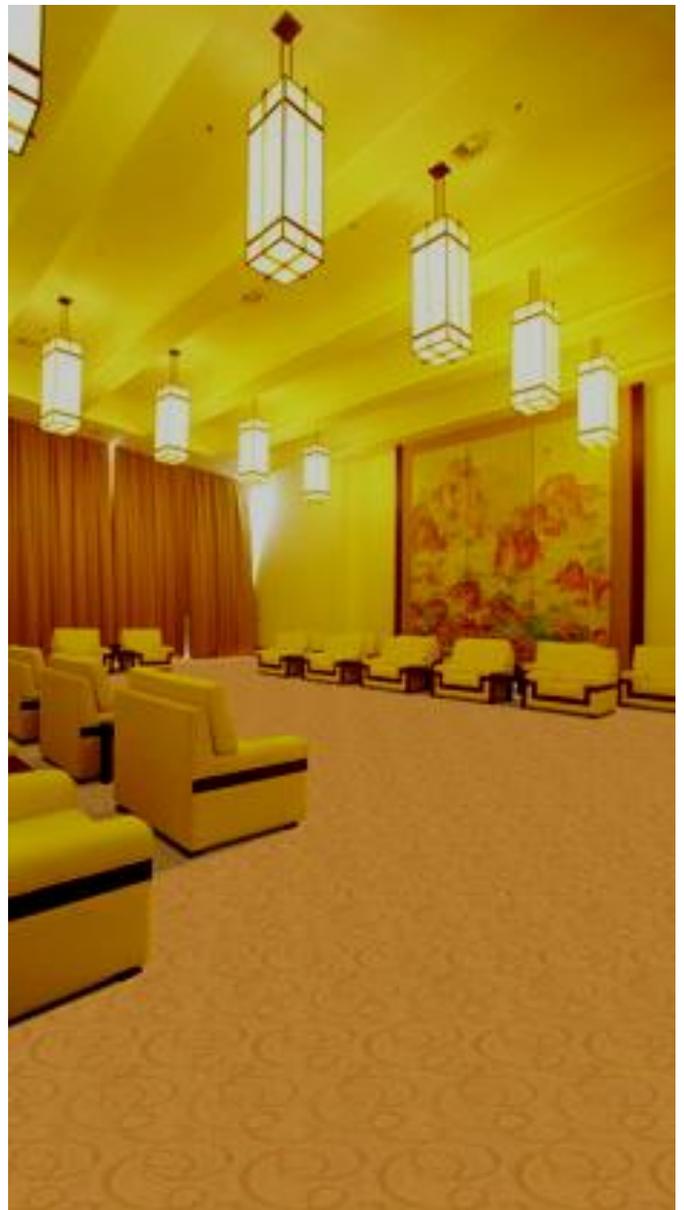
New carpets have characteristics which are to be expected.

Shedding – All carpets with spun yarn have loose “fibre ends,” resultant from the spinning process, lodged within the yarn twisting/folding. The fibre ends will “shake out” of the new carpet as it is used, and generate free fibres at the carpet’s surface. This is normal and no cause for concern. The free fibres should simply be vacuumed away. Regular vacuuming will remove the residual fibres. Make sure and check your vacuum bag is emptied and replaced when required. The bags will fill up frequently whilst the initial shedding is progressively removed.

The first “do” rule of carpet maintenance is vacuum, vacuum, vacuum.

There are four basic methods for cleaning carpet:

- Carpet Shampooing
- Dry Powder Method
- Bonnet Cleaning
- External Extraction Method





PLANNING THE MAINTENANCE PROGRAM

Failure to adequately plan and implement a proper maintenance program can severely shorten the lifespan of even the finest and best quality carpets.

Preventative Maintenance

The easiest way to control soiling is to prevent it from occurring. Identify high traffic or anticipated high-soiling areas and develop a plan to minimize soiling.

Daily Maintenance

Vacuum effectively, spot-clean successfully.

Interim Maintenance

Encapsulation Process

Scheduled Maintenance

Hot Water Extraction – executed correctly with the proper detergents and equipment.

PREVENTATIVE MAINTENANCE

Design and colour play significant roles in long-term appearance retention in carpet. General rules apply: medium and darker colours and heavily patterned carpets are easier to maintain, *while light or pastel* colours with very little pattern will be more difficult to maintain.

80% of dirt is walked off within the first 3.5 metres carpet.

Walk-off mats are the most effective way to reduce maintenance cost. They should be constructed with stiff bristles or fibres, to best remove soil and prevent it from being tracked into the building.

Carpeted stairways are considered very high-impact areas, and are subject to far more stress from foot-traffic than floors. To avoid premature wear, it is recommended that commercial grade stair-nosing should be used. If nosings are deemed unacceptable for any reason, then additional carpet should be retained to replace stairways as necessary.

Keep in mind that carpet, unlike hard surfaces, tends to catch and hold soil and spills. When carpet is adjacent to hard surface, be sure to use transition strips or edge mouldings to prevent soils and spills from migrating into the carpet from the hard flooring.

DAILY MAINTENANCE

VACUUM – VACUUM – VACUUM

The most important part of the maintenance program is to vacuum as much as possible. Vacuuming is by far the most practical and effective way to remove soil and to maintain the overall appearance of your carpets. The best plan is to categorize areas according to traffic exposure before determining frequency – and to review your schedule regularly to see whether any changes are needed.

For Best Results

High Traffic – Vacuum daily (extremely high traffic lanes may require vacuuming several times daily).

Medium Traffic – Vacuum two to three times weekly

Light Traffic – Vacuum Weekly

Properly functioning vacuum equipment is needed to ensure that carpets are cleaned efficiently.

For contract applications, we recommend commercial-usage vacuum cleaners, with power-driven beater brushes and/or bars, as the most effective ways of removing soil and raising pile on cut-pile carpets installed over pad underlay.

Vacuum cleaners should be maintained to perform at peak efficiency. Check belts and brushes regularly for wear. Vacuum bags should be emptied frequently and not allowed to become more than half-full. Vacuuming with a full bag is a waste of time, energy, and money.



INTERIM MAINTENANCE

Encapsulation Process

- A cleaning solution (encapsulation chemical) is sprayed lightly onto the carpet and is then agitated and distributed into the pile yarn via a dual counter rotating brush machine (without vacuum).
- The chemical is allowed to dwell in the carpet, breaking down and surrounding soils and other residues.
- The chemical dries into a hard, non-sticky crystal, encasing the soil, in about 20 minutes.
- The dried crystals can be easily removed by vacuuming.

The result is a carpet that is clean and dry in about 20 to 30 minutes. This process not only restores the carpet to a useable state quickly, but also cuts down on water and chemical usage. Interim maintenance is a key component in your carpet maintenance program; time saving, cost effective, and good for the environment.

Carpet is left clean with no chemical residue to cause re-soiling.

SCHEDULED MAINTENANCE

Deep Cleaning

The goal of scheduled maintenance is to remove deeply embedded soils and restore the appearance of the carpet as closely as possible to its original state. This is achieved through deep, restorative cleaning via hot water extraction.

Steam Cleaning or Hot Water Extraction

This method is often called "Warm Water Extraction", "Hot Water Extraction" or "Steam Cleaning".

This is the only cleaning method classified as "deep cleaning". All the others are considered "light surface cleaning" because they are incapable of removing soil deep in the pile. Also, all other methods leave large amounts of cleaning agent in the carpet after cleaning.

Shanhua Carpets **recommends** this method of cleaning, because their research shows that it delivers the best results for carpet cleaning.

The method is frequently called "steam" cleaning, due to the fine spray of water with precise quantities of detergent used to force dirt out of the carpet, which are then sucked up by the vacuum slot immediately in front of the emerging spray. Seldom is actual "steam" used.

This is done most often from a truck-mounted unit, parked outside the home with only the hose and floor tool brought inside. The residual water and soil is extracted by a powerful vacuum into an internal holding tank, fitted to the truck. A portable, system can be brought into the home or office, but its result is not as good as a truck-mounted unit.

Depending upon the equipment, temperatures may range from cold tap water to boiling hot water and even super heated water over 93.33°C. Of course, with extremely high temperatures, there are dangers of scalding should a solution line break. If excessive hot water is used this may do structural damage to spun yarns.

Dry

The last step is to dry the carpet as quickly as possible, to prevent wicking and any potential for mould growth. Use carpet blowers, ceiling fans and while drying. If possible, all traffic should be prohibited.

Carpet Shampoo Method

Theory of this shampoo method is to generate a lot of foam in the carpet, allow this foam to dry, have the resulting residue attract the soil, and vacuum up all waste the next day.

Carpet shampoo products must have the following characteristics which dictate their ingredients:

- Very high foam levels to reduce wetting
- Stable foam types
- Dry to a non-sticky residue

Therefore, a carpet shampoo must contain a very foamy chemical. The most common ingredient is Sodium Lauryl Sulphate or one of its derivatives. When next taking a shower or bath, look at the ingredient statement on your hair shampoo container. It will say, "Contains Sodium Lauryl Sulphate" or some similar wording. Sodium Lauryl Sulphate (SLS) or similar, exhibit very high and very stable foam properties, but have low detergent characteristics. Research shows that SLS is non carcinogenic, but the problem is that they dry to a soft, sticky residue which will cause re-soiling.

NOTE: Because of anticipated re-soiling problems, carpet shampoos will frequently have resin additives, to minimize or reduce re-soiling.



Because shampoos are actually very poor detergents and tend to bury dirt/matter, they frequently also contain high levels of optical brighteners, which take invisible ultraviolet light and convert it to visible light, thus making the carpet appear cleaner and brighter than it really is. It will eventually give the carpet a yellow cast and the yellow cannot be removed.

Two primary types of machines are used for this process:

- Cylindrical Foam
- Rotary Shampoo

The Cylindrical Foam Shampoo machine uses an air compressor to create dry foam before the foam is applied to the carpet and the carpet is then agitated with a revolving cylindrical brush which combs the foam through carpet pile. This method will leave dirt trapped in the carpet pile. Carpet must be thoroughly vacuumed before and after cleaning.

The Rotary Shampoo method uses an ordinary rotary floor machine (the same kind used for stripping wax), sprays shampoo onto the carpet from a dispensing tank, and a rotary brush whips the detergent to a foam. Most carpet mills and carpet fibre producers discourage the use of rotary brushes on carpet because of the potential damage that can occur to the carpet pile, particularly to cut pile finish carpets. Over wetting is common with this method, which can cause jute straining, shrinkage, and odour to woven carpets.

Shampoo methods are inferior due to poor cleaning plus re-soiling problems. The Rotary Shampoo method can damage the carpet, especially cut pile (which is what most carpet is).

Carpet Absorbent Cleaners

This method is often called "dry cleaning" since virtually no water is used.

In this method, a dry absorbent compound (ac) – (containing small amounts of water, detergent, and solvent,) is sprinkled over carpet or worked into the carpet with a machine. The purpose of this cleaner is to attract and absorb soil. Mechanical agitation from a brush works the ac cleaner into the carpet.

These product types usually contain an absorbent carrier, water, detergent, and solvent. The theory is that the liquids dissolve the soil and this soil/detergent/solvent mixture is absorbed into the carrier and is then vacuumed up. They are often used with a detergent pre-spray in heavily soiled areas.

The absorbent cleaner most commonly is organic, but may also be polymers. The compound is expected to absorb the dislodged soil and is then vacuumed away. Carpet must be thoroughly vacuumed before and after cleaning.

Very thorough vacuuming should be used to ensure that most of the carrier comes out of the carpet. With the extremely fine powder types, indoor air quality maybe compromised. If a white powder starts appearing on shoes and cuffs of pants, too much was used and it was not thoroughly vacuumed up. A common problem is for this **white powder** to re-appear after wet extraction cleaning.

The cleaning method has the advantage of no drying time for interim maintenance, since little water is used. This makes for a common maintenance cleaner.

Host[®], Capture[®], Dry Magic, Arm and Hammer[®], and Air Wick Carpet Fresh[®]
would be included in this category.

The first "do not" rule of maintenance is: **DO NOT USE ROTARY SHAMPOO or SPIN BONNET ABSORBENT PADS on WOOL or WOOL/BLEND CARPETS**

Bonnet Method / "Carbonated Cleaning"

This method is sometimes called "dry cleaning", which is a misnomer, since water is used. Bonnet Shampooing is simply an adaptation of hard floor spray buffing to carpets.

The method for carpet maintenance consists of the use of a rotary or oscillating brush adapted with a stiff brush or drive block designed to rotate wet, damp or dry pads. The carpet can be sprayed with a cleaning solution and/or the pads can be soaked in the cleaning solution and squeezed lightly before placing the pad under the driving brush.

Shanhua Carpets advises **not to** use this method of cleaning, especially on cut pile carpets, due to pile distortion and face pile yarn damage that can occur. This method has very limited capability for soil removal and leaves much of the detergent in the pile since it employs no real extraction. As a result, rapid re-soiling occurs. Another disadvantage is that the spinning bonnet may distort the fibres of cut pile carpet, fuzzing the pile and leaving distinct swirl marks.

Sometimes, carbonated water is used to (in theory) give better soil suspension and bring down the pH. Companies using this method frequently use "scare" tactics to convince consumers that extraction cleaning or steam cleaning will destroy the carpet.

Check with your carpet manufacturer because many leading carpet mills recommend against this method of cleaning.

General Comments

The choice of a proper cleaning system is extremely important. Some systems leave residues which promote re-soiling and defeat the whole purpose of cleaning. Some methods actually damage the carpet fibres and shorten the life of the carpet.

Carpet Cleaning Frequency

If carpet is cleaned before it becomes too unsightly, the cleaning chore will be easier and more successful. Allowing the carpet to become overly soiled may result in irreversible damage. It is a common myth that cleaning the carpet before it is absolutely necessary will cause it to get dirty faster. This goes back to the days when shampoo methods were the most common.

Carpet in a typical household should be professionally cleaned every 12 to 18 months depending upon the number of residents, amount and type of activity, and whether the carpet is light or dark colour.

Professional Carpet Cleaning versus “Do-It-Yourself” Cleaning

We recommend professional carpet cleaning over “Do-It-Yourself” because of the potential problems that can occur from using rental equipment - such as yellowing, over wetting, fibre tip damage, severe re-soiling, overuse of detergents, etc.

Most rental units that are available do not adequately clean and may actually damage the carpet.

Cleaning and Maintenance of Carpet Tiles

Regular vacuuming is the best way to deal with everyday dust and dirt. For inevitable spills and accidents it's best to treat the area as promptly as possible. Scrape up any solids as soon as possible, working from the edges of the spill towards the centre so it doesn't spread.

Excess liquid can be soaked up by placing a thick wad of absorbent paper over the area and pressing firmly. Sponge clean if required or the tiles can even be lifted and rinsed under the tap. Normally you can use a mild detergent solution and scrub gently with a brush where necessary, but it is important to remove all traces of the detergent by rinsing. Use absorbent paper to mop up as much excess moisture as possible, and allow the tile to dry. If you lift a tile to clean it, you should make sure it is dry before you put it back. But let it dry naturally - don't put it on a radiator or other artificially hot surface as this may damage the tile.





CARPET CLEANING SPOT AND STAIN REMOVAL TIPS

General Rules for Spot Removal

- Soak up liquids with white kitchen roll, paper tissues, toilet roll, or absorbent cloth
- Scoop up, or scrape off solids
- Try to identify unknown spots prior to treatment
- BLOT the blemish, do NOT rub
- Always work from the edge of the spot inwards
- Apply small quantities at a time, applied to a cloth, NOT directly to the spot; work into the spot with a small brush or sponge
- Take care with applying solvents to bitumen-backed carpet tiles
- When using solvents always ensure there is plenty of fresh air ventilation
- Always thoroughly rinse afterwards if water-based spotters have been used
- Dry the spot, if possible, with a hair dryer

The spot removal charts contain the methods for dealing with accidental spillages and the order in which the treatments should be tried.

Easy Spots

Spots that come out relatively easily with the methods recommended below, or when the carpet is wet cleaned.

You may require repeated attempts using progressively stronger spot removers. Some stains you may find impossible to remove completely, in which case the assistance of a professional carpet cleaner may be required.

| Stain | Try 1 st | Try 2 nd | Try 3 rd |
|----------------------------|---|---|---|
| Blood | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains | Cold water |
| Burn / scorch marks | Rub with a coin | Rub gently with coarse sand paper | - |
| Butter | WOOLSAFE – approved spot remover for greasy/oily stains | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Candle wax | Absorbent paper or paper tissue and hot iron | WOOLSAFE – approved spot remover for greasy/oily stains | - |
| Chewing gum | WOOLSAFE – approved chewing gum remover (detergent, solvent or freeze type) | - | - |
| Chocolate/Cocoa | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for greasy/oily stains | WOOLSAFE – approved spot remover for water-based stains |
| Cola | Cold water | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains |
| Cream | WOOLSAFE – approved spot remover for greasy/oily stains | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Egg | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains | - |

| | | | |
|-------------------------------------|---|---|---|
| Floor wax | WOOLSAFE – approved spot remover for greasy/oily stains | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Fruit juice | Cold water | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Gravy and sauces | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains | - |
| Herbal Tea | Cold water | WOOLSAFE – approved spot remover for water-based stains | - |
| Metal polish | WOOLSAFE – approved carpet shampoo solution (diluted) | - | - |
| Mustard | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains | - |
| Oil and grease | WOOLSAFE – approved spot remover for greasy/oily stains | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Paint (water based emulsion) | Cold water | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Shoe polish | WOOLSAFE – approved spot remover for greasy/oily stains | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Tea | Cold water | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains |
| Urine (fresh stain) | Cold water | WOOLSAFE – approved carpet shampoo solution (diluted) | A - See professional treatments Page 14 |

Difficult Spots

| Stain | Try 1st | Try 2nd | Try 3rd |
|--------------------------------|---|---|---|
| Artificially coloured drinks | Cold water | WOOLSAFE – approved spot remover for water-based stains | - |
| Bleach | Cold water | C - see professional treatments Page 14 | - |
| Central heating radiator fluid | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains | B - see professional treatments Page 14 |
| Coffee | Warm water | WOOLSAFE – approved spot remover for water-based stains | - |
| Felt tip pen | WOOLSAFE – approved spot remover for greasy/oily stains, or White spirit or turpentine substitute | Surgical spirit (ethyl alcohol or ethanol) | WOOLSAFE – approved carpet shampoo solution (diluted) |
| Furniture polish | WOOLSAFE – approved spot remover for greasy/oily stains | WOOLSAFE – approved carpet shampoo solution (diluted) | - |
| Glue (plastic base) | Nail varnish remover or acetone | White spirit or turpentine substitute | - |
| Ink (fountain pen) | Cold water | WOOLSAFE – approved spot remover for water-based stains | WOOLSAFE – approved carpet shampoo solution (diluted) |
| Ink (ball point pen) | Surgical spirit (ethyl alcohol or ethanol) | - | - |
| Lipstick | WOOLSAFE – approved spot remover for greasy/oily stains | - | - |
| Milk | Warm water | WOOLSAFE – approved carpet shampoo solution (diluted) | A - see professional treatments Page 14 |
| Nail varnish | Nail varnish remover or acetone | - | - |

| | | | |
|--------------------------|---|---|--|
| Paint (oil based) | White spirit or turpentine substitute | - | - |
| Rust | B - <u>see professional treatments</u> Page 14 | - | - |
| Soot | WOOLSAFE – approved spot remover for water-based stains | WOOLSAFE – approved carpet shampoo solution (diluted) | Vacuum clean |
| Tar | WOOLSAFE – approved spot remover for greasy/oily stains | - | - |
| Urine (old stain) | WOOLSAFE – approved spot remover for water-based stains | A - <u>see professional treatments</u> Page 14 | - |
| Vomit | WOOLSAFE – approved carpet shampoo solution (diluted) | WOOLSAFE – approved spot remover for water-based stains | A - <u>see professional treatments</u> Page 14 |
| Red Wine | Blot with white kitchen roll or paper tissues | WOOLSAFE – approved spot remover for water-based stains | - |

Treatments used by professional carpet cleaners:

- A - WOOLSAFE – approved disinfectant or deodorizer available from Prochem Australia
- B - Rust remover - example -Trust Me - Professional Rust Remover for Carpet & Upholstery
- C - Carpet re-colouring kit contact Prochem Australia

Disclaimer: This SHANHUA CARPETS Cleaning and Maintenance Manual – May 2011; has been prepared for consumers who have or expecting to have wool or wool rich woven carpets installed. All information issued is for guidance purposes only. If information is incorrectly interpreted or physical application of recommended products does not rectify carpet staining or damages the installed product, then SHANHUA CARPETS or any distributor or agent of SHANHUA CARPETS cannot be held responsible. This document should not be construed as product sales literature.

SHANHUA CARPETS

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