



SIGNATURE FLOORS
TECHNICAL INFORMATION
MANUAL - CARPET

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ABOUT THIS GUIDE

This guide is intended to give practical instruction for qualified installers on proven techniques, methods, and support products for the installation of a range of textile floor covering products made by Signature Floors. The purpose of this guide is to help prevent problems, maximize performance, and to complete a floor covering design strategy for the consumer.

Taking shortcuts or ignoring any portion of these instructions can have serious consequences that may not always be immediately obvious. For instance, concrete moisture can slowly eat away at textile backings for months or years before causing breakdown and installation failure. On many broadloom products, an installer's decision to short-change an installation by leaving off the seam sealer may not become obvious until the backing begins to separate or yarn begins falling out along seams or transitions.

Constant research and development into backing systems and product design aesthetics for our customers has led to an evolving menu of product choices for every flooring application.

Until now, most of these products have been derived in some fashion from petroleum-based synthetics. That too, is changing. Signature Floors commitment to environmental sustainability is leading to development of products that will help stem depletion or further contamination of earth's limited resources. As a result, many historical assumptions about carpet installation are no longer valid.



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GENERAL REQUIREMENTS

Signature Floors has adopted the AS/NZS 2455.1 & FCIA Carpet hand book for Installation of Domestic and Commercial Textile Floor Covering Materials as the basic minimum guide.

Signature Floors reserves the right to exceed the Australian Standards where more specific installation instructions are needed. Our sales team are available in every major region to help assure proper installation.

Signature Floors is dedicated to distributing the finest quality *Carpet* and backing systems available for domestic and commercial application. These *Carpets* must be installed by experienced, qualified installers using the proper tools and techniques. Unfortunately, this does not always happen and problems usually result. Signature Floors will not be responsible for problems resulting from an installer's failure to follow the specifics of these instructions or for *Carpet* that has been installed incorrectly.

Signature Floors supports the FCIA in the certification of flooring installer with Certificate III in flooring. This group is supporting the industry by training installers and making them aware of the right tools and techniques required to properly install *Carpet*. The Signature Floors After Sales team can provide onsite consultation, special training, or instruction when needed. If any questions arise regarding this information, please contact Signature Floors After Sales. Copies of all technical advisories relating to installation, maintenance, and other technical issues are also available from the After Sales Department and Signature Floors website www.signaturefloors.com.au

IMPORTANT ADVICE

These installation procedures are recommendations designed for the experienced and competent installer. Strict adherence to these procedures will result in a quality installation under most conditions. Any situation that could alter the installation procedure or jeopardize the possibility of a satisfactory installation, such as identification of defective material or unusual installation conditions, creates a responsibility for the installer to STOP the installation immediately and call Signature Floors After Sales. Signature Floors will not be responsible for substandard installation or for an installer's decision to proceed with an installation that is not resulting in a satisfactory or acceptable finished project.

CONCRETE SUBSTRATES

Moisture and pH Standards	The flooring industry has established effective guidelines for determining the chemical pH and acceptable moisture levels for concrete slabs. Moisture is constantly moving through concrete. The rate of that movement is determined by a combination of factors such as concrete porosity or the ratio of temperatures above and below the concrete subfloor. Woven carpet backings allow more moisture to pass through without obstruction. Structured or moisture resistant backings allow less moisture vapour to pass through into the air above. A build-up of condensation, on woven broadloom backings or on structured backings can lead to product damage or adhesive breakdown. An installation contractor can only determine whether the floor covering selection is appropriate for use on concrete subfloor by measuring the RH (relative humidity) level in an acclimatized environment with temperatures and humidity levels similar to those expected when the building is occupied.
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Testing Concrete Substrate Moisture	<p>Use the in situ relative humidity testing method conducted in strict compliance with ASTM Test Method F 2170. RH (relative humidity) testing indicates the moisture condition within a concrete floor and is suitable for use on normal weight and lightweight concrete floor slabs including slabs above or below grade and of various floor types, including cast-in-place (structural) floors, slabs on ground and slabs in steel deck. When testing cast-in-place structural concrete slabs, include tests directly over thick structural elements such as cast-in-place beams as well as thinner floor web areas. A relative humidity limit of 85% or less is acceptable unless otherwise specified.</p> <p>RH (relative humidity) probes can be placed in concrete floors well in advance of scheduled carpet installation.</p> <p>Periodic Relative Humidity measurements can be used to evaluate the drying progress of a concrete floor, this information can be used for scheduling and making installation decisions. Gypsum based screeds and topcoats dry in days or weeks depending on composition and thickness.</p> <p>The in situ relative humidity test is appropriate for these surfaces. Surface preparation of these screed coats and topcoats is important if the finish to be applied is to be installed using adhesive. The manufacturer of the screed should be involved when this is the case.</p>
Testing for Alkalinity	<p>Chemical pH. High alkalinity levels in concrete can cause adhesive failure. A pH range of 7-9 is acceptable. Readings outside this range require corrective measures.</p> <p>The following is the recommended procedure for testing the chemical pH of a concrete subfloor before installation of all Signature Floors carpets.</p> <ul style="list-style-type: none"> • Clean floor by lightly grinding, sanding, or bead blasting into the substrate making sure to break the surface removing any dirt, curing compound, concrete sealer or old adhesive residue (not to exceed 3mm). • Apply a small amount of testing fluid (distilled water) approximately 30mm in diameter to the area prepared for testing and let stand for 30 seconds. • Take a pH strip and touch to the area where the testing fluid was applied. Maintain contact with the water for one full second, remove the strip and hold in a level position for 15 seconds. • After 15 seconds compare the test strip to the colour chart to determine the pH level. <p>If the pH is over nine contact your Signature Floors representative or the Signature Floors Help Desk at 1800 150 454. Site testing should consist of two (2) pH tests for every 100m² of floor area.</p>

TIMBER SUBSTRATES

New timber suspended floors should be constructed of either tongue and groove, plywood or chipboard specifically manufactured for flooring. Spacing of the supportive joists should be in accordance with the manufacturer's recommendations in relation to the board's thickness and the NCC.

Where existing timber, plywood or particleboard subfloors are to be used as a substrate worn, rough, cupped or warped surfaces should be sanded or filled, but must retain structural adequacy. In some circumstances, it may be necessary to re-nail the old floor or to repair it by replacing the worn and unsound sections. Without good ventilation, the application of a floorcovering could lead to dry rot in the textile covering.

Most smoothing compounds are unsuitable for applying to timber bases due to the movement of the base. Seek advice from the smoothing underlayment manufacturer for the correct grade of product for your specific application.

FLOOR PREPARATION

All subfloors must be smooth and level, free of dirt, wax and old adhesives and fill in grout lines of ceramic floors if applicable. Sand or scrape ridges of old adhesives. Old cutback adhesives should be removed or flashed over with a flashing compound. Cracks or depressions should be filled with a premium grade patching compound.

Once the *Carpet* has been checked and all the necessary site preparations have been completed, lay out according to the seaming diagram and proceed with careful attention to dye lot placement and roll sequencing.

LAYOUT

Follow industry accepted methods for a conventional installation as outlined in most the recent edition AS/NZS 2455.1. Based on the floor plan and seaming diagram, start near the centre of the room and snap a chalk line between opposite walls. This will be the first seam. Ideally, all the carpet should be laid out, squared with the dominant walls, rough cut to fit and side seams trimmed before any glue is spread. Dry laying is especially critical on all patterned products. Patterned products must be sequenced according to size variation to allow for any pattern size variation.

Variation occurs to some extent in all patterned carpets. To help facilitate this sequencing, Signature Floors provides pattern measurements with most patterned products. Pattern sizes are also included on roll more tags. If these measurements are unavailable for any reason, the installer should count the number of patterns in a 3600mm length on each roll and then arrange the rolls to facilitate a pattern match.

SMOOTHEDGE

"Smoothedge" also known as "tack strip" "tackless strip", or "gripper strip" has simplified the installation of wall-to-wall carpeting, increasing the neatness of the finish at the wall. Because gripper strips are essentially the same thickness as underlay, using gripper strips yields a level and "smooth edge".

Smoothedge is a strip of wood bevelled on one edge with many small tacks protruding through from the bottom. It is placed around the perimeter of the area to be carpeted, with the bevelled edge side nearest the wall and held in place with nails or glue. The *Carpet* fits over it (held on the tacks) and is wedged into the narrow gully left between the wall and bevelled side giving a smooth edge. Smoothedge allows stretching of the *Carpet* during installation, greatly improving the appearance of the installation. Stretching can be performed with the use of a carpet stretcher and a manual knee kicker.

For all textile floor coverings where any dimension in the area to be covered is more than 7m in any direction, one row of a commercial grade carpet gripper or two rows of a domestic grade *Carpet* gripper should be used.

The smoothedge must be firmly affixed to floor using all nails provided with spacing of no more than 200mm, the smooth edge should keep a constant 6mm to 7mm from the perimeter walls.

UNDERLAYS

Properly specified underlays can extend the *Carpet's* life. However, excessively thick or soft underlay can cause delamination and buckling. Underlay selection should be limited to those designed for the traffic demands of the intended application. That means a maximum thickness of 10mm and a minimum density of 10-pounds.

The soft underlay shall have a service life no shorter than that of the textile floor covering in accordance with the recommendations of the underlay manufacturer and Signature Floors. The requirements for soft underlays are detailed in AS/NZS 4288.

NOTE: *Carpet* should never be laid over existing carpet and/or existing underlay as this can cause permanent damage to the new floor covering installation.

SEAMS

Seam Trimming

Loop Pile Constructions: If the *Carpet* is a straight row, level, or multi-level loop construction, insert a row finder, a screwdriver or the nose end of the underlay-back cutter (with the blades retracted) between tuft rows. Run tool the entire length of the carpet to be seamed, separating the yarn and opening a path for the cutter. Trim into the body of the *Carpet* far enough from the factory edges to obtain full-face weight and good lamination of the backing system.

This distance will vary from a minimum of 25mm to 50mm from the edge on straight row constructions to as much as a 75mm minimum on some graphic constructions. Using the underlay-back cutter, separately trim both seam edges by cutting between the tuft rows. Cut close to the main body to obtain a tight seam by trimming with the blade close to the seam edge.

Cut Pile Constructions

In order to obtain a uniform pile height on both seam sides, it may be necessary to trim in further on cut piles than on level loop construction. Depending upon pile height, this distance will range from a minimum of 25mm to 50mm into the body of the *Carpet*.

Pattern Constructions

These *Carpets* must be trimmed from the face using either a loop pile cutter (Roberts #10-152) or an underlay-back cutter. Trim into the body of the *Carpet* far enough from the factory edges to obtain full face weight and good lamination of the backing system at a point of pattern match.

Because of the shifting mechanism of pattern tufting equipment, there may be a variance of 50mm to 100mm in width after selvage edges are trimmed. To separate the rows, use a row finder, underlay-back cutter with the blades retracted or a screwdriver with the blade corners rounded off and run the tool the length of the seam.

Seam Characteristics

Regardless of the installation method, a properly constructed seam:

- Has cleanly trimmed edges properly sealed with Seam Sealer.
- Has tightly abutted edges without gaps.
- Maintains reasonable pattern match where applicable.
- Will not be invisible.

With all hot melt seams a good quality latex or acrylic seam adhesive should be applied to both edges prior to beginning the hot melt or hand sewing process. This process is known as "buttering" the seams. The latex seam sealer should be applied to cover the primary backing and secondary backings at the base of the yarn bundles on both sides of the seam, but never contact the face fibre, the sealer must be dry before making the seam.

Seam sealer can effectively prevent seam delamination and edge ravel and must be used.

Hot Melt Tape Seaming

Installers must have prior hot melt tape seam seaming experience. If proper techniques are not used, the seam will fail. It is very important to ensure that the seaming iron is equipped with a heat shield to avoid the possibility of damaging the backing and the face yarns. The installer must use the proper seam cutting tools to obtain a precision cut edge for seaming. Do not double-cut edges for seaming. Prior to beginning the hot melt tape seaming procedures, the installer must have installed the smooth edge and the separate cushion, as well as completed seam trimming operations.

Read all instructions prior to proceeding.

1. Set up seaming so all seams are made in the direction of the pile lay.

2. Stretch the carpet lengthwise at both seam edges and stay tack to hold the tension. Place the thermoplastic tape so that it is centred under the seam's edges. Align and stay nail the seam edges to straighten any trueness of edge that may be present. Any buckles formed by this procedure can be stretched-out after the seam is completed.

3. On all seams, length or cross, treat both cut edges at the proper height Seam Sealer for prevention of ravelling or fraying.

4. Move the lengths of carpet into position, slightly overlapping them by 8mm inch at the seam area. Do not hook on pins at the seam, but leave the seam area open by 150mm on each side. On each side of the seam at one end, hook one the *Carpet* lengths on pins for about 300mm and stretch lengthwise to the opposite seam end to remove buckles and slackness.

5. Centre the hot melt seam tape under the carpet seam edges. Set the heat regulator on the seaming iron at the lowest possible temperature that will still give full adhesive melt. The temperature control on seaming irons is often far from precise. To eliminate temperature deviations, either determine the proper temperature setting in the shop, or test the iron on a small piece of the *Carpet* to be installed.

6. Place the hot melt iron with heat shield attached under the carpet and on the tape. Move the iron slowly and continuously in the direction of the pile lay at approximately 800mm per minute. To obtain a level and tight seam, adjust and position the carpet seam directly behind the iron; this procedure must be done before the hot melt adhesive begins to cool.

7. To press the *Carpet* into the adhesive, use a 25mm x 150mm board approximately 450mm long to follow the iron and flatten the seam. This board may be weighted or knelt upon as the seaming work progresses. Avoid placing any localized pressure on the seam until the seam is completely cool. A common installer mistake may occur by pressing the hot seam with the foot or dragging a toolbox over the seamed area while the face yarns are still warm, thus causing pile depression and shading. Note: For cut pile *Carpets* do not use a spike carpet tractor as damage to the carpet pile may result.

8. Trim loose yarns from the seam and remove the stay-tacks.

9. Cut, trim and seam the additional lengths needed for the installation.

Seam Peaking

A correctly prepared hot melt tape seam will be flat and will not peak. Physics dictates that every taped seam may peak to some degree once power stretching is applied across the seam. This peaking has nothing to do with either the quality of the carpet or the quality of the installation. The use of 100mm seaming tape or thermoplastic seam sealers will minimize seam peaking complaints. Additionally, seams on level loops are more visible than on cut pile constructions, and heavier *Carpets* are more prone to show peaking vs. lighter weight carpets. Stretch the carpet tighter in the direction parallel to the seam. A lighter stretch across the seam will help in reducing seam peaking.

CONVENTIONAL INSTALLATIONS

All of the broadloom *Carpets* distributed by Signature Floors are designed to be installed by the stretch-in method.

All Signature Floors broadloom carpet being installed in a stretch-in application must be power stretched one to one-and-a-half percent in both the length and width of the carpet as outlined in AS/NZS 2455.1. Avoid simply stretching until the *Carpet* "feels tight." Instead, calculate the amount of stretch needed to get the one to one-and-a-half percent in both the length and width. That amounts to about 30mm over 2000mm carpet length and width.

Knee kickers aren't enough. Knee kickers are designed for positioning carpet and are not adequate for properly stretching carpet. A knee kicker can be helpful in nudging the *Carpet* during power stretching to prevent concentrating the stretch only around the stretcher head. To further prevent concentrating the stretch in only part of the *Carpet*, the total stretch should be broken down into several "bites" that are held in place with stay nails until the next stretch or bite with the stretcher has been completed. For example, a room that is 12m x 12m should yield 150mm of excess carpet stretched beyond the smooth-edge in both the length and width.

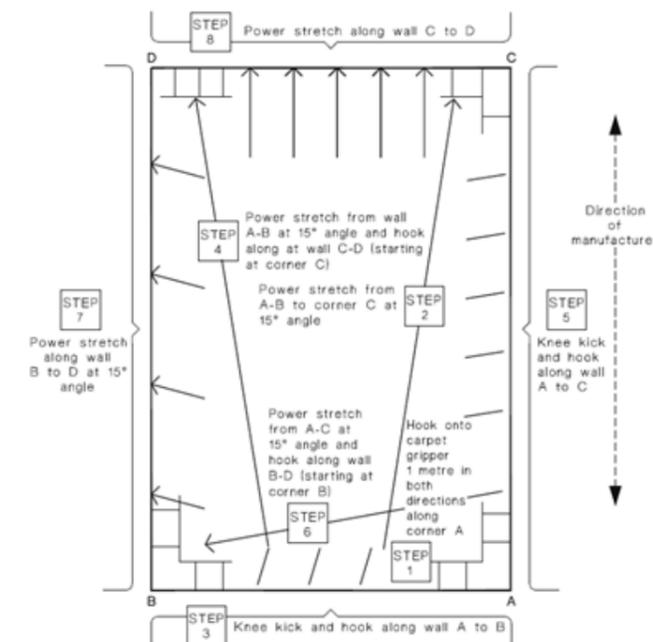


FIGURE C1 STRETCHING TUFTED CARPET

(Please refer to the chart above. Read all instructions on the next page prior to power stretching.)

- Hook 450mm of *Carpet* in one corner along two walls AB and AC.
- Using a power stretcher, stretch the carpet along wall AC. Hook the carpet onto the smooth edge at the opposite wall near Corner C. Stretch uniformly. Stretch enough to achieve a firm, tight installation. This generally requires between 25-35mm of stretch for every 2000mm of carpet. Uniform stretching at proper stretch levels can be estimated by chalking a white line across the carpet at the wall to which the *Carpet* is being stretched. Measure (or estimate) the amount the carpet rides up the wall during stretching.
- Stretch from the original corner A along wall AB and hook onto the smooth edge along wall BD at corner B. Now the *Carpet* has been stretched along walls AB and AC and hooked in at corners A, B and C.
- Set in wall AC with a knee kicker at a slight angle (10° to 15°).
- Next, set in AB in the same manner. Note: it is generally easier to stretch carpet in the filling direction, so this should be done first. This also gives a tighter installation.
- Stretch from wall AB along wall BD and temporarily hook to wall CD at corner D.
- Starting from corner B, power stretch from wall AC to wall BD at a 15° angle to AC and hook in. As you approach corner D, re stretch and hook.
- Power stretch *Carpet* from wall AB to wall CD at a right angle, starting at corner C. Be sure to power stretch all areas regardless of their size in both the width and length directions. In large areas it may be necessary to stay nail the middle of the length and stretch toward one end, and then repeat on the other half so that a uniform stretch through the whole length is achieved.

If sufficient stretch is not applied, then re stretching may be necessary when the temperature or humidity increases.

DUAL BOND INSTALLATION METHOD

The textile floor covering should be installed as follows:

1	Prepare the subfloor in accordance with information previously out lined in section 6 - Floor preparation.
2	Spread the primer and adhesive by trowel, roller, brush, squeegee or spray in accordance with the manufacturer's recommendations.
3	Unless otherwise specified, soft underlay should be removed from its packaging and fully unrolled for a period of not less than 3 hours, for conditioning purposes.
4	The underlay shall be laid at 90° to the intended run of the textile floor covering. If this is not possible, ensure that parallel underlay and carpet seams do not fall within 300 mm of each other.
5	Bond the underlay firmly to the subfloor in accordance with the manufacturer's instructions with an adhesive approved by the underlay manufacturer.
6	After the underlay has been satisfactorily installed, proceed to lay the textile floor covering in accordance with AS/NZS 2455.1 3.6.3.
7	Unroll the <i>Carpet</i> with pile running in one direction.
8	Trim all selvage edges, using either a parallel cutter or similar tool, to ensure a good butt join.
9	Apply the adhesive to the underlay in accordance with the adhesive manufacturer's directions.
10	Take care to ensure that all seams and cross-joins are sealed with the recommended adhesive and a minimum 3 mm bead of adhesive is to be applied to one side.
11	Treat cross-joins in the same manner as in Step (4) above.
12	Use appropriate double bond heat bond tape for all joins.
13	Leave all work brushed clean, and remove excess materials and trimmings immediately.
14	Roll the textile floor covering in both lengthwise and widthways directions with a roller weighing 25 to 35 kg in accordance with the adhesive manufacturer's instructions.
15	Following installation, it is important that concentrated foot and wheeled traffic be avoided whilst the adhesive is curing. For commercial installations, if concentrated traffic cannot be avoided, the textile floor covering shall be covered with suitable material to avoid movement and impact damage.

NOTE: Excessive rolling should be avoided.

TRANSITIONS

Unprotected Edges

At the transition between carpet and other floor coverings, carpet edges must be protected and covered with appropriate moulding. In transition areas, the edge of the hard surface must be a minimum of 1mm higher than the carpeted flooring. Seam sealer must be applied to the edge of the carpet at the transition area.

There are many different types of transitions cover strips, ranging from aluminium, brass, steel, PVC and timber. The selection of the appropriate should be done in conjunction with the consumer, bearing in mind performance and traffic each transition would expect during its lifetime.

UNDERSTANDING PATTERN MEASUREMENTS

Pattern measurements play a critical role in understanding what should be expected when developing estimates for either materials or labour. Simply looking at a sample and assuming the pattern will be a random or "economy match" can cause *Carpet* shortages and unrealistic production schedules for the installers.

Overlooking or ignoring the potential impact of pattern size during the estimating process is a direct cause of eroded margins and often force installers to compromise quality by cutting corners to meet unrealistic schedules. Simply put, the more surprises that can be anticipated and eliminated during the estimating process, the more likely it is to deliver a quality installation, at a reasonable price and with a reasonable profit margin.

For a number of years now, Signature Floors has proactively led the industry by taking the extra effort to help installers eliminate surprises by providing extensive measurements from each production run of patterned carpet. These measurements give the installers a production road map that is essential in helping anticipate potential pattern alignment problems during preplanning or staging and to help minimize the need for stretching patterns into alignment.

With custom make orders, pattern measurements should be attached to the wrappings of every roll of Signature Floors tufted *Carpet*. A sequence sheet will be emailed to help the installer group patterned rolls of carpet according to pattern size on an order. The installer should start the project by first installing the roll with the largest pattern size and proceed throughout the project by installing rolls with decreasing pattern sizes. This process is explained in more detail in the section on pattern elongation.

Signature Floors takes this unique concept of installation planning several steps further. There's no doubt that installing patterned *Carpet* involves more time and more money to be done correctly. The cost variable from random or non-pattern specific carpets can be as high as 30-40 percent more time in stretching to align patterns during the seam construction process.

To further focus on the potential for unexpected or hidden costs during pattern installation, this guideline has been developed so that everyone involved in the process — from selling to estimating and installation — can get a better understanding about the level of effort typically needed to install Signature Floors products by pattern size. Contrary to popular belief, it's the smaller patterns and pin-dots that usually take more time and cost more to install. Larger patterns also require care, but usually less than the effort needed for the smaller grids. This breakdown by pattern size is designed help give a better indication on how these products should be priced for installation.

CARE

Regular Vacuuming

It is important to vacuum your *Carpet* thoroughly and frequently, particularly in high traffic areas. Vacuuming not only prolongs the life of the *Carpet*, but also enhances its appearance.

After your *Carpet* is laid, vacuum lightly and frequently in the first week to remove surface lint, dust and fluff. Thereafter, continue to vacuum thoroughly at least weekly and more frequently in high traffic areas. This will remove soil and grit before

it works its way below the surface of the pile where it is far more difficult to remove and can abrade the carpet and dull its appearance.

Three vacuum passes for light traffic areas will suffice, while five to seven passes for heavy traffic areas are necessary. Vacuuming first against the natural pile direction lifts the pile helping to unsettle and remove dirt and grit while reducing matting. When finishing, vacuum in the direction of the pile to achieve a uniform finish.

To effectively clean your carpets, use only a quality vacuum cleaner. Vacuums fitted with micro filter systems ensure fine particles (such as dust mite allergens) are removed and stay in the collection bag (particularly important if you are dust sensitive). A vacuum with a rotating brush which agitates the pile and loosens the soil is best for low cut pile *Carpet*. Ensure the vacuum is kept in sound mechanical condition and brushes are cleaned and replaced when worn out. Check and adjust the height of beaters (if fitted) regularly to ensure the carpet is not damaged by excessive beating. Suction efficiency of vacuum cleaners is reduced considerably when bags are half full. Change or empty dust collection bags frequently and replace filters as recommended by the manufacturer.

Steam Cleaning

Depending on usage, *Carpet* should be professionally steam cleaned every 12 to 18 months. Oily, sticky soil and well-settled soil that vacuums don't remove causes gradual but significant dulling of the colours. To remove and revitalise your carpet, use hot water extraction cleaning (steam cleaning).

Steam cleaning should only be undertaken by a professional carpet cleaner (who is a member of a professional association) in accordance with AS/NZS 3733:1995.

Shampooing, do-it-yourself steam cleaning or dry cleaning is not recommended.

Ways to Protect Your Carpet

- **Door Mats** - Place mats at all exterior doorways and entrances to carpeted areas to trap dirt and moisture from shoes. Clean mats regularly.
- **Furniture** - Use furniture cups and occasionally rearrange furniture to alleviate pressure marks. Chair pads should be used under desk chairs with castors. The use of furniture coasters to distribute the weight of heavy items is also recommended, especially for furniture with wheels. Take care when moving furniture with wheels by putting a protective barrier between the wheels and the *Carpet*.
- **Rugs** - Use scatter rugs or carpet protectors in high traffic areas and in front of chairs to protect carpet from localised and uneven wearing. Rugs should be cleaned regularly, at which time you should clean and restore the pile of the carpet underneath. Check rugs for colourfastness before placing them on *Carpet*, as the colour in some rugs may bleed through. After cleaning, allow carpet to dry completely before replacement of rugs.
- **Sunlight** - Protect your *Carpet* from prolonged periods of direct sunlight with curtains, blinds or awnings.

Staining vs Soiling

There is often some confusion about the difference between soiling and staining. Most complaints are actually soil-related. An example of this is when spills are cleaned with a detergent solution and the affected area is not rinsed sufficiently afterwards with water. This leaves a sticky detergent residue which attracts soil from ordinary shoe traffic, resulting in a discoloured area, which then appears to be a stain. It is most important to rinse the area thoroughly with water and blot dry after removing any spill.

Cleaning Treatment

Spot Cleaning Do-It-Yourself: Fast action is the key to removing general spillages. It is important to act quickly before the spillage penetrates into the carpet fibres and pile.

In the case of spills, remove the excess spillage by first scraping any solids and blotting liquids with a white cloth or paper towel. Always begin at the outer edge and work towards the centre of the stained area. This will prevent the spill from spreading. Do not rub or scrub the spill. Follow this treatment with cold water.

Apply the cold water to the stained area with a sponge to rinse out as much of the spill as possible, then blot up with a white cloth or paper towel. Again, do not rub or scrub the spill. If the stain is still present, use an appropriate stain removal solution or cleaner. Apply it to the stain, as directed on the container. Do not rub or scrub the spill. Apply water with a cloth until the carpet no longer feels soapy or sticky, then blot up thoroughly with a paper towel. Remove the excess moisture with a layer of paper towels weighted down by a book or other heavy objects. Once dry, finish up with a thorough vacuum of the *Carpet*.

We recommend that you test commercial spot cleaners on an off-cut or in an inconspicuous area for colour fastness.

Carpet Characteristics

Carpet has characteristics that are inherent features of the product but not considered to be manufacturing faults or defects. We have listed below the main *Carpet* characteristics to assist your understanding of manufacturing processes and standards.

- **Appearance Retention** - All *Carpets* will change in appearance over time, primarily due to foot traffic.
- **Matting** - Generally matting occurs as a result of pile flattening together with the entanglement of fibres tuft to tuft. It occurs in all tufted *Carpets* to some degree, but is more likely to occur in high traffic areas. This may result in the loss of sharpness of the *Carpet* pattern. Though induced by wear, it may be caused by the use of inferior *Carpet* cushions, improper maintenance, including inadequate vacuuming, or inappropriate or ineffective treatment of spots and spills.
- **Fuzzing or Blooming** - Most apparent in traffic areas or in front of chairs, fuzzing or blooming is normal and should be expected. This is caused by the tips of the fibres in a cut pile carpet losing yarn twist over time. Generally fuzzing can be corrected by shearing away the cobweb of fibres on the installed carpet, with use of a special machine.
- **Carpet Seams** - Seam peaking is normal when the joined carpet is stretched into place. Stretch forces applied to the seamed area cause the pile to open slightly in a V configuration. Lighting conditions can accentuate a *Carpet* seam and create the impression that the pile on the side closer to the light source is a lighter shade than the pile on the other side of the join. *Carpet* seams are never invisible, but should be straight, aligned and as flat as possible. Seaming boards and professional expertise should be utilised.
- **Colour Variation** - It is normal for installed *Carpet* to show minor colour variation from the selling samples or minor variations between production runs and dye lots. Signature Floors seek to minimise potential for variance and ensure any variation is within recognised textile industry standards. Colour appearance can vary, depending on the type of light under which a sample is viewed and the light sources where the *Carpet* is installed. Viewing of the sample at your residence and under as many different light conditions as possible prior to making your final decision is recommended.

Damaged or Missing Tufts

Tufts may be damaged or identified as missing following stretching of the *Carpet* during installation, damage caused by pets scratching, or the moving of furniture. In the case of loop pile *Carpets*, tufts can be pulled from the backing resulting in long, lengthwise pulls out of the *Carpet*. Sprouts, or snagged tufts, can be easily trimmed without damaging the carpet and missing or damaged tufts can be easily replaced by hand or by re-tufting. These can be readily fixed on site by a skilled installer or *Carpet* professional.

It is recommended a small piece of spare carpet be retained to provide a source of additional tufting yarn.

Design Characteristics

An effect known as phasing can occur where *Carpet* design includes the random use of contrasting colours when at times these colours can coincide in production. Similarly, in loop pile *Carpets*, shading effects of colour patterning can appear as panelling down the length of the *Carpet*. Both phasing and panelling are an accepted part of the design and in no way affect the carpet's performance.

- **Fading** - Exposing your *Carpet* to direct sunlight over a period of time will increase the risk of fading. It is recommended to limit the amount of direct sunlight by covering windows with curtains, blinds etc. and by moving furniture around periodically to expose all areas evenly. Atmospheric and ozone conditions can also effect colour change in *Carpet*. This is not considered a manufacturing fault as it is a random and unexplained effect. Ozone damage in carpet is most prevalent in coastal areas where there is a high ultra violet content. Some carpet colours are more susceptible to change than others. If you believe there may be a risk of ozone damage, please discuss your choice of *Carpet* with your retailer. Protect your carpet from intense sunlight with curtains, blinds etc. Awnings are the most effective as they cover the entire window.

Pattern Matching/Bowing & Skewing

Signature Floors ensures the world's best practises are utilised to minimise pattern distortion during the manufacturing process. However, some distortion due to shrinkage or stretch during and after manufacture is unavoidable. Repeating patterns may not precisely match along the length or width of carpet or from one production run to another.

Installation methods and site and storage conditions can also contribute to instability in the pattern, such that the perfect pattern match cannot be guaranteed. Installation of patterned carpet requires more time and effort which should be considered in the original labour quotation. A competent *Carpet* installer should be able to obtain a close pattern match in most circumstances. However some irregularities may still be visible. If concerned, please discuss further with your retailer and/or carpet installer. All *Carpets* are subject to some degree of bowing and/or skewing. Bowing of up to 40mm over any single width of *Carpet* is generally acceptable.

Pile Reversal Shading Temporary

Light can play strange tricks with *Carpet*. From certain angles, particular areas appear lighter or darker than others. This is caused by disturbed pile reflecting the light differently in the affected areas. This is a feature characteristic of cut-pile *Carpets* (particularly solid colour).

Temporary changes in appearance may be able to be removed or lessened by vacuuming or brushing of the pile.

Pile Reversal Shading Permanent

Permanent pile reversal shading also referred to as watermarking, pooling or puddling, is irregular shaped light and dark patches in a cut pile *Carpet*. The cause is unknown and it generally appears after some use. The phenomenon may be caused by pile yarns changing their original direct of lay and thereby changing the way light is reflected or absorbed from their surface.

Apart from the affecting appearance, it has no detrimental effect on *Carpet* performance. *Carpet* prone to permanent pile reversal shading will bear a sample label which points out the phenomenon. As this characteristic can affect the appearance of a *Carpet*, you are advised to discuss this with your retailer when considering your purchase. Further information on permanent pile reversal is also available from the *Carpet* Institute of Australia.

Shift Lines

Shift lines are parallel lines appearing on the surface of patterned loop pile *Carpets* at regular intervals due to the nature of *Carpet* construction. Lines may be more apparent with "large" designs or patterns. Colour, directional pile lay and light sources are also contributing factors. Certain light sources shining across the carpet may accentuate these lines in the form of shadowing. This is not a manufacturing defect and will not affect the *Carpets* wear or durability.

Stairs

Carpets laid on stairs will lose their appearance and flatten due to the normal pressure applied by foot traffic. This will happen to all residential carpets. It is recommended when laying *Carpet* on stairs to have additional *Carpet* supplied at the time of the original purchase. This can be used after a period to re-invigorate your stairs.

It will be even more apparent where the rows of *Carpet* tufts open when wrapped around the stair nosing.

Shedding

Shedding is the release of small lengths of fibre from the carpet yarn due to foot traffic. Shedding is a normal characteristic of cut-pile *Carpets*, particularly staple or spun yarn products. It is caused by some of the outside fibres of yarn bundles becoming detached during early carpet wear stages.

Regular cleaning with a vacuum fitted with a beater bar will remove most of the loose fibres during the first year. As *Carpet* settles, shedding becomes less.

Wrinkling & Rucking

This may occur after installation due to a number of reasons, including but not limited to, fluctuation in relative humidity, excessive humidity, sub-floor variations, inadequate carpet cushion, or not using the recommended installation procedures, especially relative to *Carpet* tensioning.

Buckling

Proper power stretching reduces the potential for the carpet to later buckle or wrinkle during shifts in humidity levels. Buckling is not considered a manufacturing defect and can usually be traced to inadequate stretching during the initial installation. Buckling can create a tripping hazard as well as accelerate *Carpet* wear and cause the backings to separate or delaminate. Power stretching and proper underlay selection reduces the potential for buckling.

Re stretches

When *Carpet* buckles, the only certain means of correction is to remove all furniture and literally re-install the *Carpet* with proper power stretching techniques described here. Using a knee kicker to make the wrinkles lay flat is only a temporary fix and the *Carpet* is likely to buckle again with the next rise in humidity. A proper re stretch means that the *Carpet* will be stretched past corners and doorways, creating the need for plugs. In all likelihood, seams will have to be opened and remade.

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The logo for Signature Floors features the word "Signature" in a large, elegant, white cursive script. Below it, the word "signaturefloors" is written in a smaller, clean, white sans-serif font. A registered trademark symbol (®) is positioned to the upper right of the word "signaturefloors".