

CLEANING AND MAINTENANCE INSTRUCTIONS

Correct and regular maintenance will increase the life span of carpet, and also help maintain its good appearance. Cleaning should be proportional to the amount of soiling to which the carpet is subjected - the more dirt deposited on the carpet, the more intensive the maintenance programme required. The following are the four basic steps of an adequate maintenance programme:

- Regular vacuuming
- Intermediate surface brightening
- Periodic wet cleaning
- Removal of stains and spills

Specialised equipment is required to carry out this maintenance programme, as well as knowledge on how and when to use it.

Cleaning Schedule

Daily maintenance of a carpet consists of the removal of surface debris and dry particulate soil from the depth of the pile by means of a carpet sweeper or various types of suction machines. Periodically wet cleaning is required to remove soiling which is not removed by daily maintenance (greasy, oily and other sticky substances, accumulated dirt, which discolours and otherwise affects carpet pile.) Where the carpet can be removed (e.g. rugs, carpet squares), factory cleaning (carpet washing) is the best method of cleaning.

The type of carpet, the size of the installation, type of furnishings, accessibility and degree of soiling will decide the choice of equipment that is most suitable for speed and efficiency. It is therefore impossible to recommend a cleaning schedule that will deal effectively with all locations. Carpet cleaning is often a compromise in that the most effective technique must be chosen which causes the least damage to the floor covering. Techniques which are beneficial to the carpet may not adequately clean it. So, at least in principle, more frequent and less severe cleaning is advisable. However, in practice, carpets are all too often neglected for too long, and harsher methods to deal with the heavy soiling are then required.

Carpet Cleaning Equipment

Dirt can be removed from carpet either dry (e.g. suction cleaning) or wet (e.g. shampooing). The principal methods of dirt removal are:

Dry:

Sweeping	(A)
Beating	(B)
Suction	(C)

Wet:

Brushing with shampoo	(D)
Rinsing (with/without) chemicals)	(E)
Absorption on to fibrous pads	(F)
Absorption on to powders	
(Solvent + water + detergent impregnated)	(G)

Cleaning Chemicals

In carpet cleaning, the input of mechanical action should be very short and with low temperatures, depending on the response of the fibre and the quality of the cleaning chemical used. Mechanical action should be as low as possible proportionate with a good cleaning result to prevent pile distortion, so the choice of carpet detergent becomes of paramount importance. While there are a good choice of very satisfactory high and low foam detergents available, there are also still a number of rogue products on the market, particularly with high alkalinity.

The basic requirements of cleaning chemicals for use on wool are:

- Low alkalinity
- Non-sticky residue on drying
- Good cleaning power
- No added bleaches, dyes, etc.

The reasons for these requirements are:

- High alkalinity (often, but not always, reflected in high pH) can cause colour bleeding with dyed yarns, pigment bleeding in natural berbers, jute staining of pile surface in light coloured carpets and, in extreme cases, yellowing and weakening of the wool fibres.
- Sticky residues cause quicker resoiling.
- Poor cleaning performance necessitates excessive mechanical agitation of the pile.
- Additives can cause uneven cleaning results, bleaching or change of colours, etc.

Cleaning Product Types

High foam shampoo	X
Low foam cleaning agent	Y
Mixture of solvents, detergents, etc.	Z

The principles on which carpet cleaning machines are based can be described as follows:

Cleaning Machine Type	Uses Principle	Chemical used
Carpet sweeper	A	--
Plain suction (Vacuum) cleaner	C	--
Upright vacuum cleaner	(A+C) or (A+B+C)	--
Rotary brush shampooer	D	X
Cylindrical brush shampooer	D (sometimes + C)	X
Bonnet cleaning (1)	F	Y
Spray extraction cleaning	E (sometimes + D)	Y
Impregnated compound cleaning	G + (A + C)	Z
Factory cleaning	(B+C) + D + E + drying	X

(1) Uses a circular pad made of coarse, looped absorbent yarns fitted to rotary shampooer (in place of brush).

Recommended Cleaning Methods for Carpets

There are no hard and fast rules on which cleaning technique is the best for carpets. This depends largely on the type of carpet concerned and the degree of soiling, but much will depend too on the skill of the operator - no technique is completely foolproof.

The damage done to carpets in (wet) cleaning usually relates to over-wetting, too much mechanical action and the use of unsuitable shampoos and other chemicals (See Table 1).

Wet cleaning has both positive and negative effects on the texture of carpets. The positive effects are:

- (a) Lifting of the carpet pile (all textures)
- (b) Improvement in tuft definition (loop pile, velours)
- (c) Improved handle (all textures)

All wet processes cause some untwisting of yarn (in cut-pile carpets), depending on the amount of moisture applied, mechanical action, degree of "setting" of the yarn, etc. Brushing causes some fuzzing (shampooing, but also upright vacuum cleaner). Ridging on some long pile carpets can be caused by some spray extraction cleaning tools.

Stains and Stain Removal

Stains can be:

- Absorbed - Penetrated the fibres (e.g. coffee)
- Built up - On outside of fibres, usually stiff/hard (e.g. paint, chewing gum)
- Compound - Combination of above two (e.g. blood)

Removal methods:

- Mechanical - Scooping up, absorption in tissues
- Solvent - Shampoo or dry cleaning solvent
- Chemical - Bleach
- Digestion - Enzymes

Procedure:

- Act quickly.
- Blot or scoop up.
- Treat stain with recommended agents, small amounts at a time (check first for bleaching or colour transfer on patterned carpets).
- Work from edge of stain inwards.
- Do not rub, do not over-wet.
- Absorb stain in wad of tissues weighed down until stain is completely removed (repeat procedure if necessary).

TABLE 1:
EFFECT OF WET CLEANING AND ACCIDENTAL SPILLAGE ON WOOL CARPETS

	Damage, Effect	Caused by	Contributory Carpet Fault or Weakness
PILE	Fuzzing, fluffing, cob webbing, felting	Excessive mechanical agitation in wet cleaning (shampooing or stain removal).	Low yarn twist, coarse loose loop, long pile
SURFACE	Browning (surface)	Pigments from naturally coloured wool, jute or foam back and over-wetting of carpet.	Neutral or alkaline pH of naturally coloured wools; loose pigments in backing material
PILE MASS	Excessive yarn untwisting (pile burst)	Water-based spillage or wet cleaning	Low yarn twist, unset or insufficiently set yarn
	Colour bleeding (in multi-coloured patterned carpets)	Water spillage or wet cleaning; high pH cleaning chemicals	Dyestuffs used with insufficient wet fastness
BACKING	Shrinkage	Over-wetting during cleaning, flooding of carpets	Jute (and/or cotton)
	Delamination (tufted or foam backed carpets)	General wear	Insufficient adhesion between primary and secondary or foam backing
	Decomposition or de-formation (foam backed carpets)	Dry cleaning solvents (stain removal)	