

# Commercial and Aviation - Wool Carpet Maintenance Guide

Successful carpet maintenance begins with **good housekeeping**. Commercial/ aviation carpeting represents a significant capital investment and as such deserves competent maintenance. Regular maintenance and periodic cleaning will increase the life span of a carpet and greatly contribute to retaining its good appearance. There is a difference between cleaning and maintenance:

- Cleaning is the removal of accumulated dirt and is generally carried out when needed;
- Maintenance is a planned procedure; started on the day the carpet is installed and on-going to retain a carpet's good appearance.

# **Maintenance Planning**

The importance of proper planning of a maintenance program for carpeting cannot be over-emphasized. The maintenance plan should take into account foot traffic frequencies and patterns, desired appearance levels in different areas of the building or aircraft, personnel responsible for the maintenance, available equipment, and cleaning costs. Carpet maintenance usually consists of four categories:

- Preventative
- Regular
- Interim
- Periodic

# **Preventative Maintenance**

The more carpets soil, the more difficult and expensive it becomes to clean them. By taking preventative measures such as the installation of adequate lengths of entrance mats and by good housekeeping (e.g. by preventing spillages and by putting mats in aircraft galleys, in front of drink dispensing machines, etc.), the rate at which carpets soil is reduced. Where spillages are likely to occur frequently, choose busy patterns and muted colors to disguise the appearance of stains.

# **Regular or Routine Maintenance**

This comprises **vacuum (suction) cleaning** of all regularly trafficked areas and **spot removal**, usually carried out on a daily basis. Extra care must be taken of the most heavily used areas, including entrance mats. Areas of minimal use can be vacuum cleaned at a lower frequency, for instance twice weekly.

**Spills** should be given attention as soon as possible - the older the stain, the more difficult it is to remove. **Spot removal kits** containing all the tools to tackle spills likely to occur must be available to maintenance personnel trained in their use and with access to the kits at all times. It is important to check that the chemicals in the kits are compatible with the carpet installed - applying them must not cause color bleeding, bleaching, or any other damage to the carpet. **Spot removal chemicals** must be used with proper precautions.

#### **Interim Maintenance**

Used to brighten the appearance of the carpeting by removing surface dirt and freshening the appearance of the carpet. This procedure does not necessarily remove much of the deep-seated soil in the pile. It can be accomplished by techniques such as 'dry extraction' powder cleaning, the crystallization/encapsulation method, or by 'bonnet' cleaning. Effective vacuuming after the carpet has dried is essential to prevent a build-up of unwanted chemicals.

# **Periodic (Wet) Cleaning**

It is strongly recommended that the carpet be pre-tested before starting any wet cleaning to ensure neither the chemicals (shampoos or spot removal products) nor the actual cleaning technique cause damage to the structure or color of the carpet.

With all wet cleaning techniques avoid over-wetting the carpet as this will greatly lengthen the drying time and may cause problems with shrinkage and discoloration of the pile. Brushing of the pile should also be kept to a minimum, especially with some carpet constructions.

Systems used are based on shampooing using a high foam carpet shampoo, or spray extraction cleaning using a low foam detergent. Before wet cleaning, the carpet pile is usually treated with a *pile lifter*, a twin-motor vacuum cleaner with a large cylindrical brush and powerful suction action. This opens up the pile and removes embedded grit normally left behind by vacuuming. *Shampooing* involves the use of a rotary or cylindrical brush machine which brushes a shampoo solution ("wet" shampoo) or a shampoo foam ("dry" shampoo) into the carpet pile. After this is completed, the dirt-laden shampoo is either sucked out of the pile by means of a wet pick-up machine, rinsed out using a spray extraction machine (charged with water only), or left to dry and the dried shampoo and loosened dirt particles removed by vacuuming. *Spray extraction cleaning* injects a detergent solution into the carpet pile, immediately followed by an integral wet pick-up system. The amount of solution sprayed into or onto the carpet pile varies greatly between machine models and makes. This affects both the efficiency of the "flushing" out of the dirt and the chance of inadvertently over-wetting the carpet. Cleaning efficiency can be improved by pre-spraying the carpet with the low foam shampoo 10 minutes prior to spray extraction (with water only), and by the use of rotating or oscillating brushes in the floor "wand" of the machine.

# **Cleaning Chemicals**

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

- Low alkalinity (easily neutralized) and low buffering characteristics,
- Non-sticky residue on drying,
- Good cleaning power,
- No added bleaches, optical brighteners, dyes etc.
- Safe in use and safe once applied to the carpet.

# **Recommended Maintenance Programs**

The level of maintenance required for a given location within a building depends on the severity of the traffic and the type of soiling that occurs. Most buildings and planes can be divided into four categories: light, medium, heavy and extra heavy soiling. These in turn will require corresponding levels of maintenance. Suggested maintenance programs for the different soiling categories are given in the table below. Regular spot cleaning should be performed on a regular basis and will lengthen the time between more intensive cleaning.

Soiling Level	Maintenance	Routine Cleaning			Interim Cleaning	Periodic Cleaning
		Spot	Vacuum	Full		
		Removal	Traffic	Vacuum		
			Areas			
Medium	Medium	Daily	Daily	Every 2-	6-12 Months	12-18 Months
				3 Days		
Heavy	Intense	Daily	Daily	Daily	3 Months	6-12 Months
Very Heavy	Very Intense	Daily	Daily	Daily	1-2 Months	3-6 Months

# Fluffing and Shedding

The balls of fluff, or loose fibers, found on carpet or in the vacuum cleaner bag are the normal result of fiber left in the carpet from the manufacturing process. Removing these loose fibers does not affect carpet life or appearance. Because of their large size, these fibers are too big to become airborne or to be breathed in. With proper vacuuming and using a quality vacuum cleaner, most shedding gradually disappears within the first year after installation.

# **Sprouting**

Occasionally, a yarn tuft will rise above the pile surface of a carpet. Just snip off these tufts to the level of the other tufts. DO NOT PULL THEM OUT.

# **Crushing**

Crushing is the loss of pile thickness, usually found in cut pile carpet, because of foot traffic. Crushing is not considered a manufacturing defect unless it is specifically cited in the manufacturer's warranty. Regular vacuuming may help reduce crushing resulting from traffic.

# **Topical treatments**

Topical treatments include soil retardants, stain repellents, antistatic treatments and deodorizers. The use of after-market, topical treatments without the express approval of the carpet manufacturer prior to application may void applicable warranties.