

Care and Cleaning of Unfinished Wood – Canadian Conservation Institute (CCI) Notes 7/1

Caution!

This Note discusses actions that will physically affect an object, as well as procedures that involve using chemicals. Exercise caution, and seek qualified assistance if in doubt.

Introduction

Cleaning bare wood surfaces is complicated by several factors. First, unfinished wood is relatively soft and can be damaged by some cleaning techniques. Wood degrades with time and use, so older wood surfaces may be even softer than new ones. Second, since bare wood readily absorbs water, wet cleaning methods are considered unsuitable, thus cleaning options are limited. Water and solvents can quickly swell wood fibres, raise the grain and cause unwanted dimensional change; they can also mobilize surface dirt, drawing it below the surface to cause staining. Finally, wood surfaces may include natural deterioration products and traces of substances that were applied or came in contact with the surface when the item was in use (these are collectively known as “patina”), which should be retained but are sometimes difficult to differentiate from dirt.

Before attempting to clean an unfinished wood surface for the purposes of conservation, it is important to evaluate the surface to determine whether or not cleaning is appropriate. Is the surface stable, or is it powdering, flaking or otherwise fragile? Is there a patina present such as the remains of a previous surface coating or residue associated with use? If the surface of the wood is unstable or if valuable historic surface deposits are suspected, cleaning should be referred to a professional conservator.

Having established if cleaning is appropriate, it is important to determine how much cleaning is necessary. Avoid patchy cleaning or overcleaning. Test cleaning methods on several inconspicuous areas of the surface before commencing in order to ensure that a consistent surface can be achieved with no hard delineations between contiguous areas.

Techniques

The following techniques (listed in order from least to most aggressive) are recommended for cleaning bare wood:

- soft brush and vacuum cleaner
- stiff brush and vacuum cleaner
- smoke or chemical sponge
- erasing compounds
- erasers
- adhesive rubber product

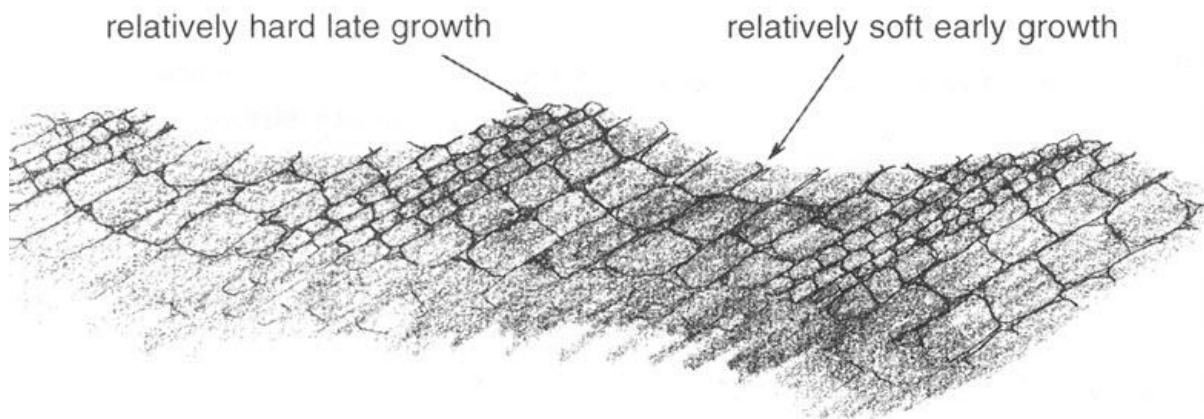
Soft brush and vacuum cleaner

Most objects with firm, stable surfaces can be safely cleaned of loose dirt using a soft paintbrush and vacuum cleaner. If the brush has a metal ferrule, ensure that it does not scratch the surface of the wood by wrapping it with masking tape or twill tape and by holding the brush perpendicular to the surface. Brush the dust from the surface with a gentle flicking motion (rather than dragging it across

the surface at a low angle) into a vacuum cleaner nozzle that is covered with a fine mesh filter (this will prevent loose or detached fragments from being accidentally taken up). A speed controller is useful for regulating suction, provided one can be used with the vacuum cleaner's motor. If an object has loose pieces, a powdery surface or delicate components, consider again whether or not cleaning will be safe. It may be possible to use a soft brush on such items, but do not use a vacuum cleaner.

Stiff brush and vacuum cleaner

If the surface is in good condition, a stiff bristle brush may be used to remove ingrained dirt. A round artist's stencil brush with a diameter of about 1 cm is ideal. This type of brush can be used as supplied or the bristles can be trimmed to increase their effectiveness. (If the bristles are shortened, they become less flexible and therefore more abrasive). In the manner described above for soft brush cleaning, use a vacuum cleaner to capture dislodged dirt. Proceed cautiously when cleaning with a stiff bristle brush. Wood is relatively soft, and the top layers of cells, particularly in degraded wood, can be easily damaged. Aggressive cleaning might exaggerate the grain pattern by wearing away softer areas (Figure 1). In furniture collections, this type of wear is most often seen in unfinished softwood pieces, such as dry sinks and rustic furnishings.



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Figure 1. The effect of abrasive cleaning on wood. Because the early growth has larger, softer cells than the later growth (which has denser, tougher cells), overcleaning can exaggerate grain patterns.

Smoke or chemical sponge

Also known as “dry cleaning or soot sponges,” these vulcanized rubber sponge products with a small quantity of added detergent can be effective at picking up dirt from a bare wood surface. The sponge is gently pressed or rolled onto the surface. It is important not to press too firmly, as too much pressure can embed loose particles in the surface. When the surface of the sponge becomes soiled, it can be cut away to reveal a fresh surface for continued cleaning.

Erasing compounds

Use of erasing compounds (also known as “eraser crumbs”) is a relatively gentle method of removing dirt from bare wood surfaces. Two effective products are Staedtler Mars Plastic and Eberhard Faber 1954 “Magic Rub” erasing compounds, available in several different grind sizes. A small amount of erasing compound is worked over the surface with a wad of absorbent cotton using a gentle, circular motion. Hard rubbing must be avoided. The erasing compound is no longer useful when it becomes grey with dirt, at which point it should be removed from the surface with a soft brush and captured by

a vacuum cleaner nozzle covered with mesh. It must be cautioned that removing eraser crumbs from the surface of bare wood after cleaning can be challenging, especially on uneven surfaces or on wood surfaces with particularly open pore structures where eraser particles can become lodged in crevices.

Erasers

A solid gum eraser (art gum) can be used to successfully clean an unfinished wood surface. Gum erasers are made of natural rubber and are milder than those made of polyvinyl chloride (PVC) or filled rubber. Remove eraser crumbs as described above.

Soft vinyl erasers are also effective for cleaning bare wood, but it is important to choose a product that is not filled with harsh abrasives. Two effective products are Staedtler Mars Plastic and Eberhard Faber 1954 "Magic Rub" block erasers (in this solid block form, they provide a more aggressive cleaning method than the compound). These erasers can be trimmed with a scalpel or knife to a point in order to clean difficult-to-reach areas. The latter product is also available in a peel-off pencil form, which is slightly harder than the block version. Again, ensure that all eraser particles are cleared from the surface with a brush and vacuum after cleaning.

Adhesive rubber

Adhesive rubber (e.g. Groom/Stick) is a kneadable natural rubber product that is very sticky and attractive to dirt. Press it gently onto the surface (do not rub). A small piece can also be wrapped onto the tip of an applicator stick and gently rolled across the surface. This technique is very effective for controlled removal of dirt in areas with limited access for larger cleaning tools. As it becomes blackened by dirt, adhesive rubber can be torn open to reveal a fresh, tacky surface to work with. Work slowly, and regularly compare the cleaned surface with the untreated areas around it. The aim is for consistency in appearance. This material is very efficient, so be careful not to overclean. Because adhesive rubber is quite tacky, it may not be suitable for some, more friable, surfaces.

Summary

Before cleaning a bare wood surface, it is essential to decide why this needs to be done and what the surface will look like afterwards. Because all cleaning techniques have the potential to damage bare wood surfaces and will inevitably alter the surface to some degree, conduct preliminary tests on unobtrusive areas and clean slowly and carefully. It is important to practise preventive conservation measures in order to limit the need for cleaning. Unfinished wood artifacts should be handled with gloves or clean, dry hands and should be covered with drop cloths while in storage to prevent further soiling.

Suppliers

Note: The following information is provided only to assist the reader. Inclusion of a company in this list does not in any way imply endorsement by the Canadian Conservation Institute.

Brushes and eraser products:

- local art and drafting supply stores

Groom/Stick:

- conservation supply companies

Bibliography

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by Robert L. Barclay
Revised by Amanda Salmon in 2015

Originally published in 2002

**Également publié en version française.
Also available in French.**

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ISSN 1928-1455