normann

COPENHAGEN

Materiality Overview

This is a live/updated document that will go over the positive attributes and clean-ability of our best-selling Normann Materiality options: Fabric, Leather, Laminates and Linoleum.

List of COVID EPA approved cleaners can be found here

Fabric:

Wool: All of our standard wools from Camira are 95% or 100% wool (exception: MLF is 70/30% Flax; (Flax is actually just as durable, and also cleanable).

Facts regarding Wool:

- WOOL HAS ANTIBACTERIAL AND ANTIMICROBIAL PROPERTIES The thin waxy coating of wool fiber contains fatty acids that inhibit the growth of mold, mildew and bacteria. The same coating repels water that can cause mildew and mold to grow. This means that woolen items do not need regular cleaning and will remain fresh after repeated use, unlike synthetic fibers.
- WOOL IS STAIN RESISTANT The waxy outer coating of wool helps to repel liquids, meaning if you spill anything on your upholstery it is most likely to roll off, and what is left is easily wiped off. Therefore: Wool does not require a chemical treatment against stains.
- WOOL IS EASY TO CARE FOR Woolen items do not need regular cleaning. Bacteria causing odor is naturally inhibited by fatty acids that coat wool fiber. Static, which attracts lint, dirt and dust, is also inhibited by this waxy coating. The scaly surface area of fiber acts to block dirt and stains from being absorbed. Instead, particles sit on top and as such are easier to remove.
- WOOL HAS NATURAL UV PROTECTION Wool has a natural UV protection factor of up to 30+!
- KEEPS YOU WARM IN WINTER AND COOL IN SUMMER Wool is renowned for its ability to regulate body temperature. In the winter, wool's insulating qualities trap dry air and warmth on the seat. In the summer, wool's coil-like shape pulls excess heat and moisture from your skin, helping the person seated to stay cooler.
- WOOL IS DURABLE Wool can withstand being bent 20,000 times without breaking. In comparison, cotton breaks after 3,000 bends, silk after 2,000, and rayon can only be bent 75 times without breaking. Its natural elasticity means that the fibers are less likely to break, and fabric made from wool less likely to tear. The ability of wool to "spring back" into shape, means that woolen upholstery tend to retain their shape better than those made from other fibers.

Cleaning and Care:

- Regular: A professional upholstery cleaner is always our recommendation. Spot Cleaning: vegetable based mild soapy water.
- COVID CARE:

Disinfection: In case of contamination, furniture upholstered with Gabriel wool fabrics should preferably be left unused for a minimum of 48 hours. If this is not an option, Gabriel wool fabrics can be disinfected with ethanol^{*}. Disinfecting wool fabrics with ethanol will, however, strip the wool of lanolin and may cause color changes and reduce the lifetime of the fabric.

Consequently, this method should only be applied if there are no other alternatives.

*Ethanol: Ethanol is used in medical wipes and most commonly in antibacterial hand sanitizer gels as an antiseptic for its bactericidal and anti-fungal effects. Ethanol kills microorganisms by dissolving their membrane lipid bilayer and denaturing their proteins and is effective against most bacteria and fungi and viruses.

Man Made Fabrics:

- Poly: City Velvet is 100% poly
- Covid: professional cleaning only
- Recycled Poly: Oceanic is a recycled Poly fabric with stretch from Camira. The Poly is recycled through a partner that scours Earths Oceans and beaches for plastic material, then recycles them. Covid: can be cleaned with Ethanol and 5% bleach solution.
- Carlow: <u>https://www.camirafabrics.com/us/fabrics/contract/carlow</u> Covid: Can be cleaned with Ethanol, or with a 10% bleach solution <u>https://www.camirafabrics.com/getmedia/8bbf457c-8880-4dfc-a86e-2a9cacd5ab77/Carlow-Colour-Fastness-to-Chlorine-April-20</u>

Leather:

Leather is a natural material and using chemicals to clean or disinfect leather will harm the leather and cause it to dry out and crack. Think of leather like skin: clean with soap, and moisturize periodically:

² Use a mild, neutral pH soap to remove. Apply the soap to a clean sponge or cloth – dampen and wipe the affected area gently. Rinse with lukewarm water and a damp cloth. Allow the leather to air dry.

<u>Polypropylene</u>

- More environmentally friendly than most other plastics. It's 100% recyclable and doesn't release as many toxins as plastics such as PVC.
- Polypropylene is easily cleanable and easy to disinfect. Major brands such as Clorox, Fantastik, 409, Lysol and others have wipes that are EPA approved to clean or disinfect if you believe they may have been exposed to the COVID virus.

Forbo Linoleum:

Naturally: Furniture Linoleum has inherent antiviral and antibacterial properties due to the natural ingredients - Linseed Oil, Rosin, Limestone, Hardwood, and Cork.

Attached are several tests.

- Cleaning agents, Forbo recommends mild soaps, detergents, and waxes.
- Avoid cleaners with high concentrations of Acetone, Ammonia, Bleach. Alkaline, Alcohol, Turpentine, or Oil-based products can damage the surface of Furniture Linoleum.
- Please see attached testing for Forbo Linoleum in Hospitals against Norovirus.

Forbo is currently working on a more comprehensive list of cleaners that are approved specifically for the Post-Covid-19 era.

Note: it is also possible to easily repair linoleum. Directions are also attached.

Fenix Laminates:

Naturally: FENIX® NTM is resistant to fungus, has improved anti- bacterial properties and is resistant to rubbing, scratching and abrasion.

Formica/Arpa is reviewing and testing as we speak due to all the interest that the Corona virus brings. We are testing to EPN N list of chemicals. The tests should be completed by June 10th. I would not go beyond what is stated in the Fenix use and care doc at this time for products to clean and sterilize Fenix materials. The highlights:

- FENIX NTM's surface is cured and therefore chemically inert.
- FENIX NTM is approved for contact with food since there is no substance migration from the material.
- The decorative surfaces are resistant to common household solvents and chemicals .
- The non-porous FENIX NTM surface and edges are easy to disinfect with hot water, steam and all types of disinfectants used in hospitals and other commercial facilities.

This data will be updated automatically periodically through dropbox and shared.