

Natural Linoleum Flooring

Natural linoleum is a durable resilient flooring product made from linseed oil (pressed from the flax plant), pine resin, wood flour, cork powder, limestone dust, natural pigments, and jute. Natural linoleum can be used anywhere a resilient floor is needed, as well as for countertop and desktop applications. Natural linoleum is available in tiles and sheets. Once the predominant flooring, natural linoleum has been largely displaced by less expensive vinyl flooring. However, due to its many environmental and performance advantages over vinyl flooring as well as its attractive, vibrant appearance, it is making a comeback.



PRODUCT COMPARISONS

Natural Linoleum

Made of Natural Ingredients
Offgassing From Natural Oils
Renewable and Biodegradable
Durable and Self-Healing
30-40 Year Lifespan

Vinyl Flooring

Made of Synthetic Ingredients
Offgassing From Petroleum Distillates
Production and Incineration Creates Dioxin
Lower Durability
10-20 Year Lifespan

LEED CREDITS

Using this material potentially contributes to obtaining these credits in the US Green Building Council's LEED certification program:

Materials & Resources

MR Credit 6 Rapidly Renewable Materials (linoleum is considered a rapidly renewable material because of its plant-based linseed oil and pine resin content)

LEED stands for Leadership in Energy and Environmental Design. To find out more about it, visit www.leedbuilding.org.

ENVIRONMENTAL ATTRIBUTES

Energy Performance

Natural linoleum flooring has a negligible impact on energy performance at its point of use.

Resource Impacts

The raw materials needed to make natural linoleum are minimally processed and commonly available. Because of its ingredients, linoleum is considered a rapidly renewable resource, which has environmental advantages over finite raw material and long-cycle renewable resource extraction.



Due to its durability, it has a longer use phase than similar products, reducing the amount of material that needs to be produced and landfilled. The manufacturing process is very resource efficient, and all scrap material is fed back into the production line, thereby generating no waste. In theory, linoleum can be ground up and composted at the end of its useful life.

Natural linoleum is manufactured in Europe, and the amount of energy expended for shipping is not insignificant. However, the low amount of energy expended during its manufacture keeps the total amount of energy used in production lower than any other resilient flooring except cork.

Health Considerations

Natural Linoleum contains linseed oil, an inherent anti-microbial. This makes it an ideal flooring for kitchens. However, there is some concern about the offgassing of aldehydes from the linseed oil, so it is not recommended for applications in which children would have major exposure, such as childcare centers. People with certain acute chemical sensitivities can also be affected. It is worth noting that the VOCs (volatile organic compounds) emitted from vinyl (PVC) flooring, however, are regarded as a greater threat. To find out why a growing number of governments are outlawing the use of PVC, see the Healthy Building Network's report on the subject, written by Joe Thornton, Ph.D at www.healthybuilding.net/pvc/ThorntonPVCSummary.html. As more is learned about the personal health and environmental hazards of vinyl in its use and production, natural linoleum is once again becoming a popular resilient flooring choice.

FUNCTIONAL CONSIDERATIONS

Cost

Natural linoleum is comparable in price to high-end vinyl flooring, in the vicinity of \$4.00/square foot for large installations. Annual maintenance costs are lower than vinyl flooring due to its inherent durability and reduced need for sealers or waxes to maintain its appearance. Natural linoleum has been known to last 30 or more years - many times as long as vinyl flooring.

Installation

Natural Linoleum comes in sheets or squares; the sheets need to be installed by an experienced professional. It is very important that natural linoleum acclimate for at least a week prior to installation. Each manufacturer has a recommended low- or no-VOC, water-based adhesive for application. Edges can be heat-welded, eliminating seams altogether. Kitchen and bathroom installations are appropriate if properly sealed and maintained, but natural linoleum should not be installed in basements or other locations where there is potential for moisture to come through concrete. The installer should always test the moisture content of the sub-floor, preferably after a hard rain, prior to installation.

Maintenance

Natural Linoleum is easily maintained by sweeping with a broom or cleaning with a damp mop and neutral detergent. If desired, periodic polishing with a manufacturer-approved sealer will further protect the floor. Natural linoleum is inherently anti-static and therefore repels dust and dirt. If the flooring gets scratched, simply buff the area in need of repair with a soft nylon brush or nylon cleaning pad and apply a light coat of a sealer.

Other Data / Comments

Natural linoleum increases in strength over time. It resists cracking and abrasions, is self-healing, and won't melt or ignite except at very high temperatures. It is resistant to grease, oil, and



solvents. The pattern and color penetrate the thickness of the material, so they are retained as it wears. Vinyl flooring, in contrast, has a synthetic wear layer that contains the patterning — once it's gone, the floor needs replacing.

RESOURCES

Manufacturers

Armstrong World Industries

Marmorette
(800) 233-3823
www.armstrongfloors.com

Forbo Industries, Inc.

Marmoleum, Marmorette
(800) 842-7839
www.forbo-industries.com

Tarkett Inc.

Azrock Linosom
(800) 366-2689
www.domcotarkettcommercial.com

Retailers

Abbey Carpet of San Francisco

3100 Geary Blvd.
San Francisco, CA
(415) 752-6620

Linoleum Larry's Inc.

2598 Lombard St
San Francisco, CA 94123
(415) 921-4937

Anderson Carpet and Linoleum Sales

4101 Broadway
Oakland, CA 94611
(510) 652-1032

McCurley's - Shaw Floor Covering

3191-M Crow Canyon Place
San Ramon, CA 94583
(925) 866-2200
www.shawfloor.com

Berkeley Design Center

3195 Adeline St.
Berkeley, CA 94703
(510) 652-6064
www.berkeleydesigncenter.com

Shaw Carpet and Flooring Center/ Concord Discount Floors

2395-J Monument Blvd.
Concord, CA 94520
(925) 680-7538
www.shawfloor.com

Blodgett's Floorcovering

3291 Mt. Diablo Court
Lafayette, CA 94549
(925) 284-4807

Prosource

1340 Galaxy Way Suite L
Concord, CA 94520
(925) 609-9448
www.pswholesale.com
Note: Contractor membership required

Conklin Brothers

2999 Teagarden
San Leandro, CA 94577
(510) 357-1090

Prosource

3051 Teagarden
San Leandro, CA 94577
(510) 614-9435
www.pswholesale.com

Conklin Bros. of Fremont

40760 Fremont Blvd
Fremont, CA 94538
(510) 651-2166



www.conklinbrothers.com

Conklin Bros. of San Jose

2250 Almaden Expressway
San Jose, CA 95125
(800) 750-2250
www.conklinbrothers.com

Dawson Floor Coverings, Inc.

2727 Fruitvale Avenue
Oakland, CA 94601
(510) 436-0366

Floor Dimensions

1081 Eastshore Hwy
Albany, CA 94706
(800) 378-4300
www.floordimensions.com

Floor Dimensions

3571 San Pablo Dam Road
El Sobrante, California 94803
(510) 223-3300
www.floordimensions.com

Floor Dimensions

1701 Broadway
Vallejo, California 94589
(707) 552-5252
www.floordimensions.com

Lewis & Lewis Carpets

2615 N. Main St.
Walnut Creek, CA 94596
(925) 939-2145

Note: Contractor membership required

Prosource

320 Swift Avenue
S. San Francisco, CA 94080
(650) 871-9600 www.pswholesale.com
Note: Contractor membership required

Prosource

1701 Junction Court
San Jose, CA 95112
(408) 987-0500 www.pswholesale.com
Note: Contractor membership required

Prosource

3410 Industrial Drive
Santa Rosa, CA 95403
(707) 573-9117 www.pswholesale.com
Note: Contractor membership required

Sunshine Floor Covering

971 San Pablo Ave.
Pinole, CA 94564
(510) 223-4300

Superior Floor Covering

311 Sunset Dr.
Antioch, CA 94509
(925) 755-3077

Wagner Carpet Co.

400 Humboldt St.
Santa Rosa, CA 95403
(707) 542-6700

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