

MANNINGTON®

Reference: Mannington Laminate Flooring

The general standard that applies to Laminate flooring for the North American market is NALFA (North American Laminate Flooring Association) LF – 01 – 2011 and LF-02-2011. The full specifications can be downloaded from the website at www.nalfa.com. Mannington laminate flooring products including Restoration and Restoration Wide Plank, meet or exceed the moderate commercial rating per NALFA LF- 01-2011. Mannington Laminate Flooring meets all or exceeds FHA/HUD requirements.

The product consists of a backing layer, a core layer, a printed décor layer and a protective wear layer. The core is commonly referred to as a HDF or MDF (high or medium density fiber) board. It is composed of wood fibers and resins, cured under heat and pressure. The surface and backing layers are a build-up of paper and resins, merged together under heat and pressure. The decorative layer is typically a paper printed with pigments that provide a stable and color fast visual. The resin system, which is water based, along with the pigments utilized in the production of laminate flooring, typically does not require solvents nor heavy metal components. The composition of the wear layer more specifically is a melamine impregnated layer containing aluminum oxide for added wear and scratch resistance.

The total thickness of the laminate product is nominally 12 mm thick or approximately ½ inch. The majority of the thickness comprised of the core board. The composition of the core board is made up of primarily cellulosic fibers. The major component in laminate flooring is wood residue streams such as saw dust, panel trimmings etc, utilized primarily in the core layer

See table listing performance criteria for Laminate Flooring. Restoration and Restoration Wide Plank meet the Moderate Commercial guidelines

		MINIMUM PERFORMANCE VALUES		
Usage Level		Residential	Moderate Commercial	Commercial
Certification Level		1	2	3
LF-01 TEST METHOD	PROPERTY			
3.1	Static Load	≥ 6 MPa (870 psi)	≥ 6 MPa (870 psi)	≥ 8 MPa (1160 psi)
3.2	Thickness Swell	≤ 20%	≤ 16%	≤ 16%
3.3	Light Resistance	No Effect	No Effect	No Effect
3.4	Cleanability/ Stain Resistance	Score < 20 No Effect	Score < 20 No Effect	Score < 20 No Effect
3.5	Large Ball Impact Resistance	> 800 mm (31.5 in)	> 1000 mm (39.4 in)	> 1400 mm (55.1 in)
3.6	Small Ball Impact Resistance	> 200 mm (7.9 in)	> 200 mm (7.9 in)	> 500 mm (19.7 in)
3.7	Wear Resistance	IP ³ 1800 cycles	IP ³ 2500 cycles	IP ³ 4000 cycles
3.8	Dimensional Tolerances (maximum)	Length: 0.50 mm (0.020 in) Width: 0.20 mm (0.008 in) Thickness: 0.50 mm (0.020 in) Squareness: 0.20 mm (0.008 in) Straightness: 0.30 mm (0.012 in)	Length: 0.50 mm (0.020 in) Width: 0.20 mm (0.008 in) Thickness: 0.50 mm (0.020 in) Squareness: 0.20 mm (0.008 in) Straightness: 0.30 mm (0.012 in)	Length: 0.50 mm (0.020 in) Width: 0.20 mm (0.008 in) Thickness: 0.50 mm (0.020 in) Squareness: 0.20 mm (0.008 in) Straightness: 0.30 mm (0.012 in)
3.9	Castor Chair Resistance	25000cycles No Effect	25000 cycles No Effect	25000 cycles No Effect

It should be noted that Mannington Laminate flooring has been tested per ASTM E-648 *Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source* and passes with a Class 1 rating (CRF Value GT or equal to 0.45 watts per sqcm) as well as per ASTM E- 662 *Test Method for Specific Optical Smoke Density of Smoke Generated by Solid Materials* (passes with value LT 450). ASTM E 648 and E-662 are the more common fire test requirements for flooring materials and what building codes normally reference.

Laminate flooring has the following attributes:

- Low VOC emission levels
 - The resins used to bind the HDF do contain small amounts of formaldehyde
 - It is generally known, trace levels of formaldehyde can exist in natural wood and timber, thus may be inherent in laminate flooring products.
 - Mannington products meet or are below even the prescribed phase 2 California Air Resources Board (CARB) emission levels.
 - All Mannington Laminate is FloorScore certified for indoor air quality
- Utilizes a large percentage of renewable resource materials, primarily in core
- No heavy metal components
- Durable long lasting flooring
- Majority of laminate floors are installed glue-less
- Utilizes large amounts of wood and paper residue streams, providing upgraded use for normal waste streams
- Underlayment minimizes surface prep work required
- 100% of Mannington Laminate Flooring is Made in the USA

Installation instructions may be found here: [Mannington Laminate Installation Instructions](#)

Instructions for individual plank replacement may be found here: [Plank Replacement](#)

Laminate packaging and dimensional information

CONSTRUCTION	Laminate flooring with locking tongue and groove produced under license from Unilin
AVAILABLE SIZES	6.25" and 7 9/16" Nominal Widths - Style Dependent Planks are 50 1/2" long
OVERAL THICKNESS	1/2" (12 MM) nominal
COVERAGE PER CARTON	Style Dependent - 6.25" visuals - 17.4 FT ² /Carton ; 7 9/16" Visuals - 21.22 FT ² /Carton
WEIGHT PER CARTON	Style Dependent - 6.25" visuals - 41.29 LBS/Carton ; 7 9/16" Visuals - 50.88 LBS/Carton
CARTONS PER PALLET	Style Dependent - 6.25" visuals - 48 Cartons / Pallet ; 7 9/16" Visuals - 45 Cartons / Pallet
PALLETS PER TRUCKLOAD	Approximately 18 pallets per truckload
3RD PARTY CERTIFICATIONS	FloorScore; NALFA
PRODUCT SOURCE	Made in High Point, NC
HUD/FHA REQUIREMENTS	Meets / Exceeds
COEFFICIENT OF FRICTION	Meet or Exceeds Guidelines for Flat Walking Surface (0.6) ASTM-D2394
FLOORING RADIANT PANEL TEST (ASTM - E - 648)	Flooring - Greater than or equal to 45 watts /cm ² , <i>passes NFPA class 1</i>
N.B.S. SMOKE CHAMBER TEST (ASTM - E- 662)	Passes - value of LT 450
Sound Dissipation	Using Mannington Whisper - STC 54 ; IIC 59
AC Rating	All Restoration Series products are rated AC4

Storage and Handling Requirements

- Thoroughly inspect laminate panels before installation. The warranty does not cover labor for repair or replacement when a panel with visual defects is installed permanently.
- Always store flooring horizontally in the original, unopened package.
- The storage area must be climate controlled with a temperature range between 65°F and 90°F (18°C and 32°C) and a relative humidity not exceeding 65%.
- Do not stack pallets more than 3 high. Store pallets so they are protected from fork lifts or other traffic. Protect package corners during storage.
- Always handle cartons carefully. Do not puncture packaging. Cartons should not be opened until time of installation.
- Under normal conditions Laminate flooring does not need to be acclimated to the job site. If extreme temperature and humidity variations exist during storage or transportation, acclimating the laminate flooring to jobsite conditions is recommended.
- In all cases, jobsite temperature should be at least 65°F and no greater than 100°F and the relative humidity should not exceed 65%.
- The temperature and humidity must be controlled and maintained within the ranges described above for the life of the laminate flooring.

Maintenance Guidelines

A Mannington Laminate Floor is the closest thing there is to a "maintenance free" floor.

The melamine-impregnated surface with aluminum oxide makes it resistant to dirt and dust. Ordinarily vacuuming or sweeping is usually sufficient to keep the floor clean. If needed, occasionally clean with a cloth or mop (micro-fiber or terrycloth hooded) slightly moistened with a laminate specific cleaner, such as Mannington Ultra-Clean

Important Tips

- Never flood the floor with water.
- Do not use soap-based detergents, as these may leave a dull finish on your floor.
- Do not use abrasive cleaners, steel wool or scouring powder, as these may scratch your floor.
- Never wax, polish, sand or lacquer a Mannington Laminate Floor.
- Use doormats outside each entrance to your home to prevent dirt, sand, grit and other substances such as oil, asphalt and driveway sealer from being tracked onto your floor.
- For furnishings, use wide-bearing, non-staining floor protectors, such as clear, hard plastic or non-staining felt protectors, for heavy furnishings.
- Promptly remove all liquid spills, including pet urine.
- For items not covered by the following chart, call Mannington Consumer Services at 1-800-FLOOR-US (1-800-356-6787).

The overall stain resistance of Mannington Laminate floors is excellent and most spills will wipe off quickly and easily with a clean, white cloth. Removing certain substances may take a little extra effort, as outlined below:

STAIN/PROBLEM	PROCEDURE
Juice, wine, grease, chocolate	Dampen a rag with Mannington Ultra Clean and spot clean.
Cigarette burns, asphalt, shoe polish, paint, crayon, ink, dried foods, nail polish	Dampen rag with alcohol or nail polish remover and spot clean.
Candle wax, chewing gum	Allow to harden and gently scrape with a plastic scraper.

If there are additional questions that may arise, please feel free to contact your Mannington representative.

Respectfully,

John Hammel
Vice President – Hardwood and Laminate